

Sensing and Shaping

The emotive-kinetic grounding of meaning. A cross-disciplinary analysis of Indian Dance Theatre

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Doctoral Thesis

**Sensing and Shaping – the emotive-kinetic
grounding of meaning. A cross-disciplinary
analysis of Indian Dance Theatre.**

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Abstract

Indian dance theatre is known for its extensive and differentiated use of corporeal means to depict any given narrative content in the context of a performance. Its theory (Nāṭyaśāstra, Bharata, ca. 3BC- 5AD) and practise reveal thereby what can be defined as two approaches to meaning, one as evoked through the gestures of the hands, and the other by way of emotive expression, which is also corporeal and gestural, but pertaining to emotional states. These two approaches together offer a comprehensive notion on meaning that leads from linguistic to emotive meaning, and from conceptual to embodied meaning-making processes. And in doing so, they point to the very notion of embodied meaning grounded in movement-based experiences. In particular, meaning evoked by emotional states is given a central place, pointing to a fundamentality of movement-based experiences grounded in emotions for meaning.

Pursuing this question of movement-based experiences grounded in emotions thus indicated from the performing arts perspective is of particular interest, considering it offers insights into the role of both emotions and movement in enabling meaning. Of further interest is how understanding embodied meaning as grounded in movement-based experiences connects and thus contributes to studies addressing this question, such as Linguistic Gestures Studies, Cognitive Linguistics, Cognitive Science and Neuroscience. In particular the form-based linguistic approach to gestural meaning (Müller, 1998, 2009, 2010a/b, 2013), the cognitive linguistic approach to embodied meaning-making (Johnson, 1987, 2007) and brain research on emotions (Damasio, 1999, 2003, 2010) reveal correspondences to the understanding of meaning and its corporeal dimension in the theory and practise of Indian performing arts. These will be laid out in this study. Whereas the role of emotions and movement are referred to in many of these studies, they are not pursued in terms of the movement itself that is considered central. As the perspective provided by a corporeal tradition such as Indian performing arts with its two-fold notion of meaning reveals, movement is a complex theme and needs to be approached in its own terms. Therefore the study aims to take a movement-based approach to address the notion of an embodied meaning and its grounding in embodied experiences. For instance, in instantiating the relevance of movement, also for emotive meaning to emerge, it enables looking beyond the sensorimotor notion of embodied experiences discussed, in particular, in the cognitive take on embodied meaning. At the same time examining the role of felt quality, also discussed thereby, is enabled directly, when looking at actual executed movement.

The study is, thus, a cross-disciplinary empirical analysis of both gestural and emotive meaning based on analysing how these need to be brought forth in movement terms. In doing so it draws from data collected over several years in class, where a movement-analytic approach was applied for teaching the dance theatre tradition of Bharatanatyam. Teaching this in the West triggered the initial interest to delve deeply into the fundamentals of human movement itself. Insights provided by the study of Laban Movement Analysis, Bartenieff Fundamentals and current research on fascia have been used. These enable not only observation and analysis, but also movement facilitation, which in turn supports the analysis of actual executed movement. The fundamentally movement-based approach, in as much, has implications for Embodiment Studies, Gesture Studies, Cognitive Linguistics, Dance Studies, Movement Studies, Neuroscience Research and finally Cultural Studies. It instantiates, in this sense, how a dialogue between these can take place.

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0 Introduction


Meaning and Embodiment – a performing arts perspective

The theory and practise of Indian dance theatre offers what can be defined as two approaches to meaning, one as evoked through the gestures of the hands, and the other by way of emotive expression, which is also corporeal and gestural, but pertaining to emotional states. I will call them simply gestural and emotive meaning. These two approaches together offer, as this study aims to examine from a cross-disciplinary perspective, a comprehensive notion on meaning that leads from conceptual to embodied meaning-making processes, from linguistic to emotive-kinetic processes and finally to an understanding of the very fundamental movement-based experiences that must inform meaning. It thus connects to several current fields of research that discuss an embodied notion of meaning, such as Linguistic Gesture Studies (Kendon, 2004, 2013; McNeill, 1992, 2005, 2013; Müller, 1998, 2009, 2010a/b, 2013; Müller, Bressemer and Ladewig, 2013), Cognitive Linguistics (Langacker, 1991; Croft & Cruse, 2004; Johnson, 1987, 2005, 2007; Lakoff and Johnson, 1999; Hampe, 2005), in the framework of which Gesture Studies are also discussed (Müller, *ibid.*; Mittelberg, 2008, 2010b, 2013; Mittelberg & Waugh, 2009), Cognitive Science (Gibbs, 2005a/b) and Cognitive Neuroscience, here specifically Damasio's (1999, 2003, 2010) brain research on emotions.

Considering gestures first, the hands can carry meaning and are thus used in explicit ways, and extensively in Indian performing arts, specifically in dance theatre and dance. Hands used thus have been conventionalised and are called *hastas*. Yet, even if they have a specific shape or form each, *hastas* are not to be understood as static or even iconic signs, with each carrying any single meaning, or referring to any single entity in only an iconic sense. A *hasta* is thus not a gesture *per se*, evident from the term itself – it means just hand. As Part I of this study will lay out, gestural meaning is conceived rather, with each *hasta* taking on several meanings in various ways. There are, however, usages recommended for each *hasta* (Ramesh, 2013), that are followed in dance theatre styles in rich and creative ways. They can thus be recruited to depict anything from objects, actions and events to emotions, devised, to put it in Kendon's (2004) terms, as visual utterances, just like spontaneous co-speech gestures people use that have been observed in Linguistic Gestures Studies as accompanying speech. One may call *hastas* in this sense, stylised forms of such utterances, specifically devised to narrate or ornament non-narrative dance movements. An initial analysis of gestural usage in the dance

theatre form Bharatanatyam from the perspective of Linguistic Gesture Studies, illustrated how such a usage follows linguistic conceptual processes (Ramesh, 2013:306-320). Here, the *hastas* were, for instance, seen to convey meaning by either representing objects by way of their properties, or enacting various kinds of actions, reflecting what Müller (1998, 2009) calls Acting and Representing Modes of Mimesis.

The conceptual processes underlying such gestural meaning construction are, however, even more far-reaching, as this study proposes to analyse. When applying one of the current analytic conventions developed by Müller and colleagues (2010b, 2013) in the interdisciplinary research project ‘Towards a grammar of gestures’, the usage of hands in Indian dance theatre reflects the same linguistic principles such as mimetic and cognitive semiotic conceptual processes that have been identified and put forward for co-speech gestures by both Müller (1998, 2009, 2010a/b, 2013) and Mittelberg (2008, 2010b, 2013; Mittelberg & Waugh, 2009). Firstly, gestural meaning construction is by way of the same hand parameters as observed in spontaneous co-speech gestures, namely hand form, orientation, movement and position of hands in what is called gesture space by McNeill (1992). They semantically relate directly to shapes, spatial aspects, position, or movement of the referred entities, as an initial brief analysis below will illuminate. The gesture is illustrated in Figure 2 of Chapter 1 Part I, where a detailed analysis will be presented. The examples presented for the gestural analysis in this study are from video footage collected in class sessions, where students of Bharatanatyam are being taught the usage of hand gestures in depicting meaning.

In the gesture example a conventionalised hand shape called *catura*  is placed near the eyes and moved outwards with palms facing towards the body. While the *hasta* in the practise of the dance theatre form Bharathanayam, is recommended for denoting eyes, the meaning, namely a reference to the shape of the eyes in this specific example, is constructed by the outward movement that traces the contours of the eyes. The hands take on the meaning both by way of shape, movement and placement near the eyes, the palm orientation itself adding to the fact that the eyes are meant to be depicted here.

Secondly, such an analysis of form features unveils mimetic and cognitive semiotic conceptual processes. The gesture is in a tracing Mode of Mimesis, where tracing is a subcategory of the two Modes mentioned above. And in tracing the shape of the eyes, it

brings forth an object property, which is in cognitive semiotic terms, a metonymic abstraction of object features. The hand position near the eyes, with palm orientation towards them, establishes, also in cognitive semiotic terms, and by way of establishing an object-sign relationship, an outer contiguity relation. The gesture is thus indexical, revealing what Mittelberg (2013:772-774) defines as HAND-TRACE INDEX as well as HAND-BODY INDEX. We see here how, the hand shape, though appearing iconic, is being used as an index. These differences from a linguistic perspective will become more apparent in the course of the analysis in Chapter 1. Mimetic/cognitive conceptual processes thus tell us about *how* meaning is constructed in referring to the object or entity to be depicted, and what guides this. The hand could, thus, take on the characteristic shape or movement pattern, a spatial aspect like position, relative position or orientation to other entities or to the gesturer. In as much the gesture can have iconic and indexical functions. The gesture analysed above has both, with similarity and contiguity operations, the two fundamental semiotic modes, as guiding the process of meaning construction.

Thirdly, the four parameters tell us *what* meaning gestures take on. Further analyses reveal how specific and exact configurations given by these four parameters matter for meaning. They are the means by which hands take on meaning. Any change in these changes the meaning being referred to, as observed in spontaneous co-speech gestures as well. In the specific gestures of dance theatre being analysed here, meaning to be depicted is constructed explicitly by taking advantage of these parameters. They are stylised to precision, so that whatever they refer to as meaning gets depicted and conveyed, if necessary even without verbal accompaniment. Yet the correspondences, as the study will analyse, reveal they have to be presented like spontaneous gestures finally. The form parameters may appear most obvious. But have implications for understanding how we make sense of the world. As we will see in Chapter I of Part I, gestures, in doing so, refer, to a great extent, to objects, events, actions and so forth of the physical world. They, in as much, reflect a conceptualisation of reality, as Müller (2010a:183) puts it. And given the entities are referred to by way of their physical properties, there is specifically a conceptualisation of reality in terms of physical properties of entities, such as shapes, spatial aspects and movement. Thus, object properties, in the example above, the shape of eyes, are seen to become meaningful in a basic way.

Finally, Müller's (2010b) notion of basic and secondary meaning becomes evident here. These properties become meaningful even if the meaning intended is not as concrete as in the

above example, but is more of an abstract nature, such as a metaphor. Depicting eyes in the above example, as will be analysed in Chapter 1, has a secondary intended meaning. But that the intended object is depicted by way of shape reflects a primary meaning that shape is given. It is in this sense, a meaningful element, to put it in Müller's (1998:125) terms, that thus gets abstracted from the perceived world and transformed into visual objects, reflecting thereby a „rudimentary“ ability to analyse form as seen in fine arts. This, as one can discern, is the case in performing arts as well. It reflects a basic meaning that entails what Müller formulates as basic structures like geometric shapes, everyday actions or spatial configurations. Even if in an explicit gesture as used in the context of dance theatre the meaning that is intended defines form, at the basic level form itself defines meaning. Form leads to meaning. Gestural meaning here points in as much also to *why* meaning. There is, on the one hand, the most obvious reason why hands convey this or that meaning, that has to do with meaning in narrative or verbal content being referred to. But as this gesture analysis exposes, there is also the question of why they convey meaning as they do, given the meaning they take on consistently refers to basic structures reflected in physical properties. Form itself has meaningful connotations. A notion that the further course of analysis and examination in the study will come back to.

There is, however, a further essential feature, that the analysis of such an explicit construction of meaning in dance gestures enables. The analysis of teaching gestural meaning enables examining what goes into the actual execution of gestures in movement terms in order for referred meaning to get established. In analysing what I would like to call a kinetic conceptualisation of meaning, it will be illustrated how form and meaning come together in and through movement. This will be presented based on examples at the end of Chapter 1. Meaning given in gestural configurations as seen above, namely in terms of physical properties, is finally a matter of a kinetic conceptualisation. Form parameters are, thus, also movement parameters. Movement in this sense is both meaningful in its own right, and an essential feature for the meaningful elements to be conveyed as meaning. It is through movement that shapes and spatial aspects emerge, as integral features of movement itself (cf. Ramesh 2014). This may appear quite obvious. But as teaching gestural meaning reveals, students have to attend to their movement. It is in movement that these meaningful properties in a basic sense, reveal themselves, not only to the onlooker, but to the gesturer as well. The analysis discusses, based on some interesting examples from class sessions, how students become aware of inherent properties such as spatial aspects, only when they *emerge* in and

through movement. Gestural meaning construction thus not only takes advantage of the forming ability of the hand, and the movement ability of the body to depict meaning, as Müller (2010a) defines it. It furthermore exposes how movement guides conceptual processes. The hitherto evident mimetic and cognitive semiotic processes are primarily defined by movement. Similarity or contiguity relations are established by way of movement. Furthermore, awareness itself, like for a spatial aspect, comes when it finally emerges forth in movement, revealing how knowing and thus enabling meaning is tied to movement in a bodily way.

Essentially form and meaning that constitute meaning, as most evident in a gesture, come together in movement, enabled by it, taking us a step further in tracing the relevance of embodied meaning that gestures are seen to reflect. Meaning is, as seen above, literally ‘shaped and construed’, to take up Langacker’s (1991:2) definition from a cognitive semantic perspective on meaning and conceptualisation. The analysis of a kinetic conceptualisation of meaning reveals how the gesturer, who is essentially a mover, becomes aware of a meaningful element only when it is, so to say shaped and thus construed with the help of the movement possibilities of the hand. The property, in effect, lends itself to attention, echoing the notion of cognitive abilities underlying conceptualisation as discussed from a cognitive semantic/cognitive linguistic perspective. As Croft and Cruse (2004:3.2) define it, natural properties of perceived phenomena, in lending themselves to attention, enhance the salience of such phenomena to our attention. The analysis of gestural meaning depiction in Chapter 1 thus brings up the very notion of meaning and conceptualisation, bringing the discussion to cognitive conceptual processes defined in Cognitive Linguistics, and in doing so to the notion of embodied experiences underlying meaning. Langacker equates meaning to conceptualisation, with “subtly different images structuring the same conceived situation” (1991:13). It is a matter of cognitive construal operations, of conceptualising experience to be communicated. Croft and Cruse (2004) place these operations in relation to basic human cognitive abilities. While the explicit gestural meaning depiction being analysed here as practised in Indian dance theatre, reflects how all the construal operations that Langacker (1991:5-12) lists can be applied to them, the analysis to be presented in Chapter 2 reveals certain central operations to be most relevant. As will be discussed there, gestures shed light on what Croft and Cruse (2004) discuss as a universal tendency to structure, an important proposition, considering this defines a dynamic construal of meaning.

The metonymic abstraction of object features evident in gestural meaning also points to profile-base relations, that according to Langacker (1991:35, 61) is the most significant among construal operations. Then, there is no concept that is independent; it is always related to some form of general knowledge of the world. Every word or concept thus presupposes a base, frame or domain of knowledge it is profile against, and thus necessitates to be understood. Placed in this context, gestural meaning depiction at its basic level as a conceptualisation of reality in terms of physical properties such as spatial aspects, shapes or characteristic movement, reveals concepts that are profiled against domains of knowledge, which in their hierarchical structures finally “bottom out, when we reach directly embodied human experience” (Croft and Cruse, 2004:2.4.3, 412). If meaning is a conceptualisation of experience to be communicated, gestures in bringing forth meaning and revealing a universal tendency to structure, reflect a structuring of experience, specifically a structuring of embodied experience underlying the kind of meaning they depict.

As will be further analysed in Chapter 2 of Part I, gestures essentially reveal basic level concepts such as spatial relations or gestalt perception (Lakoff and Johnson, 1999), which according to Johnson (1987) are formulated by image schemas. In cognitive linguistic understanding image schemas structure experience, both bodily and non-bodily (cf. Hampe, 2005). Croft and Cruse (2004:3.1:687) define them as arising as schematic versions of images of embodied experiences. Johnson (1987, 2005, 2007) fleshes out this notion. As recurring patterns, they arise “at the level of our bodily movements, our manipulation of objects and our perceptual interactions” (Johnson, 1987:29), and as gestalt structures give experience structure and coherence. They essentially organise the experiences arising from interacting with the environment (1987:48) and get recruited for meaning construction, as language exposes. Meaning as conceptualisation of experience to be communicated is at the most basic level thus, a structuring of embodied experiences, with image schemas playing the central role.

Applying a further criterion coined Motivation of Form from the form-based linguistic analytic convention being used here, the form features of the examples being analysed in this study will be traced to the image schematic structures they reveal, taking the discussion forward in terms of arriving at an embodied notion of meaning-making. These gestures in revealing basic image schemas, shed light in a direct manner on the bodily and perceptual experiences these structures arise from. Let me illustrate this with one example here. For instance, an upward movement in a gesture to denote climbing on to a tree, as illustrated in

Figure 5 in Chapter 1 Part I reflects a PATHS schema or a SOURCE-PATH-GOAL schema, and a spatial relations concept *onto*¹. The hand starts somewhere, traverses a trajectory in a specific direction and ends at a destination, as this schema is defined (Lakoff and Johnson, 1999: 33). This basic level image schema also formulates spatial relations, such as the one seen in this gesture. Thus, there is an ONTO image schema involved. If the climb is depicted as a jump, it would also entail a propulsion, indicating a PROPULSION schema as well. The bodily grounding of the PATHS schema is defined as arising from structures recurrent in the paths one physically traverses everyday or experiences perceptually (Johnson, 1987:113). Basic level concepts like the spatial relations are specifically defined as projections from the bodily (Lakoff and Johnson, 1999), stemming from perceptual experiences that project the perspective enabled by the body's three-dimensionality and stance. PROPULSION, for instance, a force dynamic schema, has structures that stem from visceral experiences of moving the body (Johnson, 1987:73-85).

The gestural form parameters in the above gesture example, such as the upward movement of the hand with a specific trajectory, directly reflect the structuring of an experience of climbing on to a tree, namely as an ascending or upward path that ends at a specific location. The upward trajectory is the structure that arises, in other words, from experiencing a jump, giving it structure and coherence. In this sense, all shapes, spatial aspects and movement, the physical properties of worldly entities, reflected in gestures as basic structures, are structurally enabled meaningful elements. There is thus a structural meaning evident in gestures. And yet, as Johnson (1987:25) rightly concedes, considering only structural aspects leads to the erroneous assumption that there are only visual experiences underlying image schemas, undermining other aspects such as felt qualities. Given the understanding of bodily experiences underlying meaning discussed here, the above gesture is conceived based on either a visual perceptual one of seeing someone climb on to a tree, or as a bodily experience, or bodily knowing, of climbing on to a tree oneself. As the gesture analysis exposes, while the upward trajectory can easily be accounted for as a visual experience, a bodily experience that a force dynamic schema is defined as entailing, or for that matter, whether the hand movement actually entails a dynamic force, can only be assumed. Also, as the analysis of actual learning of gestural meaning depiction, as an analysis of kinetic conceptualisation to be introduced in Chapter 1, reveals, a bodily knowing that is not only visual matters for gestures to be executed with the necessary configurations.

¹ In Cognitive Linguistic Research, the upper case is used to denote both domains and image schemas, and the lower case italics for concepts .

Johnson (2007) in later discussions approaches the question of the nature of bodily experiences from which image schemas arise and the notion of an „embodied“ or „*immanent meaning*“ (2007:11, emphasis in original) by drawing from different studies. This is the understanding of meaning that stems from levels below consciousness. The accounts range from a neural grounding of image schemas based on computational models, neuroimaging and neurobiological studies, to defining the role of movement and emotions in providing a felt quality of experience. These are then traced to image schemas and the meaning they enable in linguistic terms. All conclusions drawn discuss these experiences to be grounded finally in ongoing and everyday sensorimotor experiences, that arise from dynamic body-brain-world interactions, defining thus the very notion of embodiment. Gibbs (2005a) also discusses embodiment in a similar vein from the perspective of Cognitive Science.

Initial theories based on computational models (Lakoff and Johnson, 1999: 40f, 573-581), discuss image schematic structures as arising from neural structures related to sensorimotor experiences in the brain. The bodily grounding of spatial concepts and motor patterns are traced here to the neural structures that already exist in the visual perceptual system and motor control programs respectively. This would account for meaning in spatial terms to be grounded in visual experiences. And given motor-control schemas organise and perform complex movements by activating the simple movements in the body, motor actions depicted as meaning in gestures must be an overt activation of such schemas. This would, however, account for the bodily basis in body-brain interactions. They don't tell us about the sensorimotor experiences per se, and even less about movement-based bodily experiences.

Based on neurobiological and neuroimaging studies, Johnson (2007:130-136) discusses how brains have evolved to map structures that correlate to structures in the external world, such as spatial aspects, shapes, sizes, distances, directions, motion, and so forth, in fairly direct analogs. And defines image schemas to be just these neural structures, arising from ongoing sensorimotor experiences in relation to the organism's need to survive in its environment. As activated neural connections, they are seen to thus define the contours of the world one inhabits, enabling organisms to make sense of it and deal with it. As bodily and mental structures at the same time, the meaning they enable grounded in fundamental processes linking body, brain and world/environment, and finally linking experiences to conceptualisation and language. Putting it this way, attending to the physical properties that

are seen to be meaningful in gestures, has apparently a primordial meaningful function for organisms, and knowing the shapes and sizes, distances or orientation would thus be of *existential* importance. The brain has evolved to assess them, or appraise what is needed, and this in structural terms. Looking at the basic structures that gestures reveal from this image schematic perspective, would in effect account for the conceptualisation of reality in terms of physical properties evident in gestural meaning, to something basic and meaningful.

The question that now arises is to define what the so-called sensorimotor experiences are, that account for this basic notion of meaning-making itself. As the analysis of image schematic structures in gestures will reveal, it is hard to tell whether it is through visual sensory experiences or bodily experiences, that spatial aspects and shapes are given to us as meaningful elements. In particular, given the kinetic conceptualisation of meaning in gestures, and how it is in and through movement that shapes, spatial aspects, actions or other meaningful properties are emergent, coming into awareness and lending themselves in the first place, the discussion in Chapter 2 continues to examine the cognitive take on movement. Both Johnson (2007) and Gibbs (2005a/b) discuss the notion of movement from the perspective of actions or motor actions and their centrality for perception. Gibbs' account also discusses studies pertaining to gestures. Neuroimaging studies and mental tasks, for instance, are cited as evidence for a tight link between gesture and speech (2005a:167f). Both Gibbs and Johnson (2007) also cite studies that discuss how the same brain areas get activated whether perceiving, imagining or actually executing an action. Gibbs sees these as an indication for a recruiting of motor elements.

These findings, yet again indicate, that gestures may be the overt activation of such neural activation. Or an embodied simulation of bodily experiences, given Gibbs (2005b:115) formulates such a simulation with reference to recruiting image schemas for meaning. Also, in discussing the role of actions and how they matter even for perceptions, Gibbs (2005a:157) postulates, for instance, that actions, both past and current, are to be understood as central for reasoning.

Chapter 2 at this point presents a further analysis of the gesture examples to illustrate how even when depicting actions, students need to attend to the movement itself, in particular when these actions are not known to them. Just imagining and perceiving the action does not prove to be helpful in executing the form configurations needed to bring forth the intended

meaning. As opposed to a known everyday action that is executed with ease, an action one is not familiar with requires a talking through in specific movement terms to understand and reason about it, revealing how a bodily knowing matters. Through the analysis of the actual learning of meaning depiction through gestures, one discerns how there is something dynamically embodied in bringing forth meaning. This approach reveals not only *how* gestures bring forth meaning, but also that, whereas knowing in a bodily way matters, how such a bodily knowing is enabled in and through movement. And, while illustrating, yet again, how through movement something becomes known, the analysis also tells us that actions do not define movement. It is rather movement that defines actions. Thus, discussing actions, as is common in the cognitive take, does not resolve the question of how movement matters for experiences.

The only notable reference to movement that both the accounts make, is to Sheets-Johnstone's (1999) four dynamic movement qualities, the notion of a primal sensing that movement enables, and how it is basic to meaning, placing this discussion, as also a discussion on emotions from Damasio's brain research in the context of conscious experience or consciousness. Johnson (2007:19-24) briefly discusses how the four dynamic movement qualities underlie different aspects of our meaning-making. And continues on to discuss other studies, stating that the phenomenological account enables insights into felt conscious experience, but that meaningful processes occur below the levels of consciousness, and much before such experiences surface. The aim is to discuss immanent meaning and where meaningful structures arise and are operative already at the level of the „*cognitive unconscious*“ (Johnson, 2007:139, Lakoff and Johnson, 1999:9ff, emphasis in originals).

Sheets-Johnstone's (2009, 2011) understanding, however, is about a bodily sensing that is always given in movement, and can be experienced if paying attention to it. This is what the analysis of gestural meaning construction, in particular of what goes into learning it, unveils. Then, the detailed analyses presented in Chapters 1 and 2 of the kinetic conceptualisation of meaning in gestures, even if addressing the structural aspects of meaning from a linguistic perspective, indicate how a bodily sensate knowing is evident, that surfaces with executed movement, and whether the gesturer becomes consciously aware of it or not, guiding movement execution. Thus, while the analysis from a cognitive take has been insightful in arriving at the notion of meaning, conceptualisation and finally the embodied grounding of such meaning, it also points to the need to go further down from where these studies are, to

look into the bodily grounding of meaning in movement terms. What is required, as gestural meaning indicates, is not a focusing on the “phenomenology of human body in action” as Gibbs (2005b:116) postulates, but of the body in movement.

Chapter 3 presents a further analysis that illustrates with the help of additional analytic methodologies, how Sheets-Johnstone’s four dynamic qualities of movement can be analysed. Specifically, the movement analytic system of Laban Movement Analysis (LMA) is applied in addition to the form-based linguistic analysis, to yet again analyse the gesture examples, thus exposing in what ways these qualities may inform gestural meaning. Laban Movement Analysis, based on the insights on movement by Rudolf von Laban (1966, 1975²), and Bartenieff Fundamentals developed by Irmgard Bartenieff (Bartenieff and Lewis, 1980; Hackney, 1998), together referred to as LMA/BF³, build a large and quite exhaustive movement studies system that looks at movement in terms of four major principles that define it according to Laban, namely, Body, Effort, Shape and Space. This movement analytic approach will be applied in the further course of the study as well, and will be defined again later.

If as Sheets-Johnstone (2009, 2011) notes, the dynamic qualities of movement are there, if one would attend to movement, Laban Movement Analysts do just this while observing and analysing movement. Every analysis requires executing the observed movement oneself. Applying this practise⁴, the analysis illustrates how felt qualities of movement are intrinsically tied to the affective connotation gestural meaning holds, over and beyond the structural features analysed hitherto. It exposes what Sheets-Johnstone calls an affective/tactile-kinesthetic nature of movement. Here emotions and movement concurrently provide experiences of a basic bodily kind, calling for a probe into how they together must inform meaning and meaning-making processes. The analysis sets the stage for approaching the second notion of meaning that the theory and practise of Indian performing arts offers, namely, the emotive meaning.

Part II takes up this notion, by first presenting a reading of meaning as defined in the Nāṭyaśāstra, (Bharata, ca. 3rd C BC – 5th C AD, Translations by Board of Scholars, Ghosh,

2 See also Hodgson, 2001 for a comprehensive insight into life and work of Laban.

3 In the further course of the book, this abbreviation will be used when discussing it.

4 Being a Certified Movement Analyst and a practitioner of Bharatanatyam, this method is used by myself as both movement observer and executor, and will be applied while analysing the dance gestures as required here.

2007)⁵⁶, the ancient Indian treatise on performing arts. Nāṭya, the term evident in the title of the treatise, denotes performing arts in its entirety to include dance, spoken theatre and music, being staged together. The treatise has continued to be the theoretical basis for all current practised traditions in India. Today's dance theatre forms like Bharatanatyam use all the aspects, except spoken theatre in its strict sense. In this sense, the terms performing arts and dance theatre are used interchangeably, as is the case in this book as well. The abbreviation NS will be used in the rest of the book when referring to this treatise.

Meaning is defined in the NS as getting established in a performance when emotions associated with the idea/theme to be communicated get expressed and experienced. Even if attributed to a mental experience, it is defined as stemming from corporeally expressing emotional states, specifically to a felt quality enabled by the portrayal of physical manifestations of emotional states. The notion of meaning equates experience becomes apparent here. While this is surely a perspective on meaning as aesthetic experience given in the context of performing arts, the descriptions of these physical manifestations in detailed movement terms clearly give indication that meaning understood here must be ascribed to movement-based experiences stemming from emotions. There is an *experientially* emergent notion of meaning here, that is grounded in the corporeal, whereby both emotions and movement matter.

As Chapter 1 Part II will lay out, the descriptions of the term *bhāva* defined in the context of what establishes meaning, reveal an in-depth understanding of emotional states, their causative factors and how they are physically manifested. When *bhāva* gets established it leads to the experience of *rasa*, which is defined in turn as a relish that is necessary for meaning. *Rasa* is further defined as an experience that pervades the body and in which all *bhāvas* are rooted. The descriptions shed light on essentially various stages of *bhāva* becoming what can be defined as emotional experience, with several emotional states classified hierarchically enabling this. The progression is indicated in how transient states called *vyabhicāri-bhāvas*, that lead to dominant states or *sthayibhāva* lead finally to the experience of *rasa*. *Sāttvika-bhāva,s* translated as conceptual states, also find mention.

5 Even if the date of the treatise is debated among scholars, it reveals insights that are historically ancient, but of relevance even today, as this study will discuss. For some insights cf. Vatsyayan, 1996, Moacinin, 2002.

6 Translations being referred to indicate date only for Ghosh (date of reprint – s. note at end of chapter).

The chapter also lays out how the different emotional states are described in terms of their determinants (*vibhāvas*) and consequents (*anubhāvas*), the causative factors and physical manifestations so to say. Even the *rasas* are defined thus, indicating they can also be evoked by these directly. Table 1 is an example as to how the descriptions in the NS will first be systematically analysed. It illustrates with just two examples for now, how *rasas* and the permanent states they arise from (column on the left) are defined in terms of the *vibhāvas* or determinants (middle column), and the *anubhāvas* or consequents (column on the right) they relate to. These are, as discernible, the bodily manifestations of emotions, essentially the bodily changes, as will be analysed in detail. One also discerns how the descriptions for the permanent states and corresponding *rasas* are almost similar.

<p><i>Karuna</i> - pathos arising from <i>soka</i>-sorrow at sight of death or adverse impact of unpleasant words. Also the result of activity in Raudra – the ferocious.</p>	<p>Curse, affliction, distress, calamity, separation from near and dear ones, loss of wealth, misfortune, murder, death/of beloved person, imprisonment, flight, accidents and other misfortunes, hearing unpleasant, adverse words.</p>	<p>Shedding tears, weeping loudly, fainting, sighs, or striking body, lamentation, parched throat and mouth, change of colour or pale face, drooping limbs, gasping, loss of memory/sense, etc.</p> <p>In addition for <i>soka</i>-sorrow: Death, madness/insanity, change/loss of voice, writhing and squirming. Three types of crying: out of joy, distress and jealousy.</p>
<p><i>Raudra</i> – ferocious arising from <i>krodha</i>-anger, connected to haughty human beings and <i>rakshasas</i>⁷, with regular battle as immediate cause.</p>	<p>Anger, violation of modesty/rape, abuse, insult, false allegations or harsh utterances, animosities, battle, quarrel, dispute/ threatening revengefulness, jealousy, etc. Here actions are mentioned in addition, such as beating, striking/breaking/cutting, crushing, tearing, maiming and mutilating, drawing of blood (during battles).</p>	<p>Making eyes red, knitting eyebrows and widening them, perspiring profusely, defiance, clapping hands, grinding teeth, biting lips, throbbing cheeks, hitting palm with fist, hurling missiles, frightening and terrible utterances, chopping off head, arms and trunks.</p> <p>Listed for <i>krodha</i>-anger are more details like swelling of nostrils, or haughty</p>

⁷ Characters in ancient narratives representing destructive tendencies.

	<p>Listed for <i>krodha</i>-anger: Heated arguments, adverse remarks, abusive words. Anger, violation of modesty/rape, abuse, insult, false allegations or harsh utterances, animosities, battle, quarrel, dispute/threatening revengefulness, jealousy, etc. Here actions are mentioned in addition, such as beating, striking/breaking/cutting, crushing, tearing, maiming and mutilating, drawing of blood (during battles).</p>	<p>upturned eyes and distinctions as well.</p>
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Table 1

Specific situations, events or actions define the causative factors. Notable is that the consequents described are what performers need, or those well-versed in the performing arts use for corporeal depictions of emotions, as NS states. And contextually seen, the descriptions belong, given the time period of the treatise, to another period in history. The treatise also constantly mentions that these are known from practises from the past. Thus the practices themselves are even older. Also, the states illustrated here are strong emotions having very overt bodily states, that in the context of performance were apparently over-emphasized. Today's aesthetics of depiction have changed, particularly as evident in dance theatre forms like Bharatanatyam. These reflect later chapters in the NS, also indicating the general understanding that the treatise as known today is a compiled version from different stages in history, as the date given to it suggests.

In general, as the examination of the detailed descriptions of all stages will expose, the reason for states to be coined as such has to do with their understanding in the context of performing arts. In the notion of *bhāva*, and it's essentially described stages, one discerns descriptions of emotions in their complexity, relating the physical with the mental and with experience as such. Also, and of interest, the function of *bhāva* as source, process and product is indicated in what may be an embodied process of meaning-making, to use Johnson's (1987, 2007) term. The treatise NS together with the practised traditions thus provides resource material for

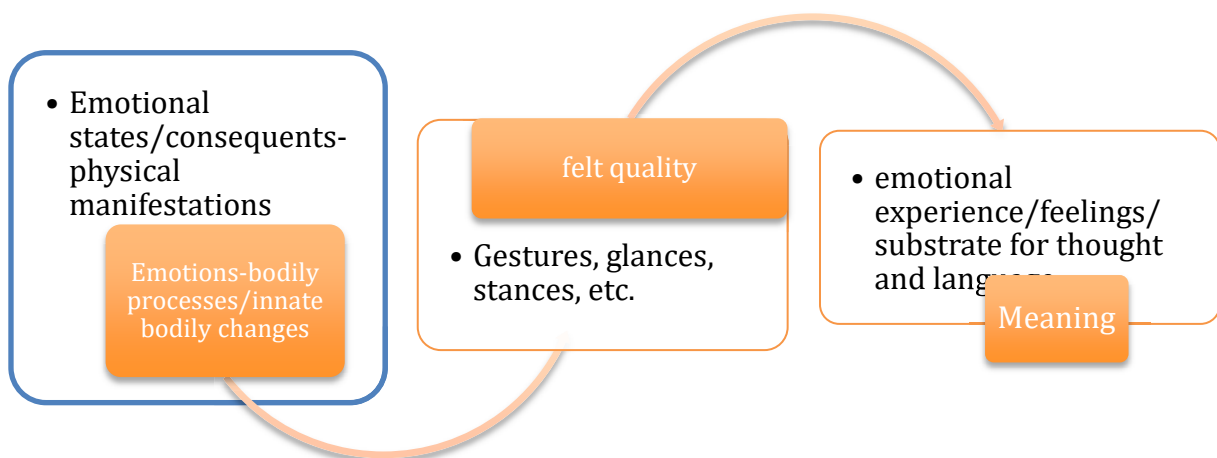
examining both emotions and the movement they enable, to then assess bottom-up, how they may relate in providing meaningful experience fundamental for meaning.

Chapter 2 of Part II takes up an in-depth analysis of emotions, taking forward an earlier analysis in my Masters thesis (2010), namely how the explications in the NS compare with Damasio's (1999, 2003, 2010) findings from brain research on emotions. Of importance thereby are correspondences the insights in NS reveal to Damasio's notion of emotions and feelings. Emotions on Damasio's account, based on their biological and evolutionary history, range from simple biological processes that regulate and maintain life automatically by way of reflexes, immune responses or metabolism, to their manifestation or appearance as the 'emotions proper' (Damasio, 2003:32). These are classified into background, primary and social emotions. The definitions of these emotions compare to the transient and permanent states in NS. Thus several of the background and social emotions are reflected in the transient states. And all the primary emotions are listed under permanent states. There is a hierarchy in Damasio's classification of emotions, that is of importance, given it is based on how they manifest themselves in physically different ways. They range from quality of movement that is not prominent and identifiable as outward behaviour to 'physical traits' of how an individual presents oneself (2003:48), revealing themselves finally as stances, glances, facial expressions, typical behaviour patterns, etc.

Of further importance is that the bodily manifestations emotions entail are processes of primordial body-brain interactions. According to Damasio (2003, 2010), emotions start with an emotionally charged stimuli (ecs). These could relate to inner physiological processes that need regulation or external stimuli that gain a need-based value, as will be discussed further. Damasio describes the process that is an emotion from the moment the ecs gets represented in the brain as mapping, to the actual bodily changes that run off automatically, to their representation in the brain again as feelings. Changes, depending upon the ecs, could be in the musculo-skeletal system, thus bringing changes in stances, gaits, etc. Or gestures and facial expressions. One sees in these descriptions the notion of determinants and consequents defined in the NS. Finally, feelings constitute the experience of emotions at the mental level, when bodily states of being in an emotional state get mapped in the brain to become images. They are also considered to build the substrate for thought and language. At the same time, the notion of images here, that clearly stems from bodily states, points to the images of embodied experiences defined for image schemas. Damasio's explications are grounded in the

notion of the bodily basis of all maps and thus images, and the fact that feelings accompany every mapping. Of relevance in this context is the discussion on the two-fold understanding of feelings as emotional and primordial, one related to the changes occurring during emotions, and the other reflecting the base-line bodily state that underlies all feelings.

Damasio’s body of research provides insights into the primordial function of emotions, defining thereby clearly their role in physical-mental dimensions of experience. Of particular interest is the bodily grounded approach, and the fact that definitions and descriptions in the NS of the stages of *bhāvas* and their leading to *rasas* compare with these explications in pertinent ways, as will be laid out in detail in this study. Finally, an important outcome of, or better perhaps, revelation from this discussion, as will be laid out in Chapter 2 as well, is how Damasio’s (2003, 2010) explications of feelings as experiences that stem from bodily states that are emotions, and furthermore, the specific notion of a two-fold nature of feelings, find echo in the *bhāva-rasa* dimension of experience indicated in the NS. The following Graphic 1 illustrates the relations that are evident between NS and Damasio’s explications.



Graphic 1

Finally, it is the bodily dimension of emotions itself, as both perspectives illuminate, that is of relevance here. They are the basis of feelings/felt quality in both perspectives. On Damasio’s account, there is the notion of innate bodily changes that define emotions and finally feelings. According to NS, physical manifestations and bringing them to corporeal expression is what enables a felt quality and thus meaning as experience to emerge. This has important repercussions in unveiling the primordial nature of experience and its role in informing meaning, as will be exemplified through further analysis of just these manifestations in

specific movement analytic terms. Chapter 3 of Part II takes up an in-depth analysis of emotive movement itself. The explicitly elaborated descriptions of bodily manifestations that NS provides are examined systematically. Importantly, the detailed examination that will be presented will lay out how they range from behaviour patterns to specific gestures and facial expressions. Thus we see in knitted eyebrows or swelling nostrils, gestures of facial parts and also facial expressions. In crying, lamenting, squirming, etc. typical behaviour patterns. Drooping limbs reflects a stance, haughty eyes a glance and so forth. And there are the different symptomatic states like change in colour, parched throat and the like. Here we see specific and non-specific references to movement, depending upon the kind of manifestation. As the detailed examination will reveal, bodily changes get more and more defined towards the state that is relevant for establishing *bhāva* and thus meaning as experience, essentially the permanent states, but as also the *rasas* as well. This is an observation relevant for identifying the role of movement for experience that is meaningful.

This becomes even more pronounced in the next analysis to be presented of the detailed description of different kinds of corporeal modes of expression to depict these physical manifestations. They tell us in detailed movement terms how gestures of limbs and facial expressions relate to emotional states, thus providing empirical material for a detailed movement analysis of these to identify the nature of movement underlying the kind of experiences NS discusses as instilling meaning. The detailed explications of emotive gestures all the way up to the finest movements of eyelids and pupils, enable assessing the progression of refinement of movement descriptions towards where *bhāva* gets established. Descriptions of movements such as curving of eyelashes or hollowing of belly reflect how minute or specific and innate, these bodily manifestations can be, indicating, in particular, how felt qualities must be inherent to the very execution of such inner subtle movement. In particular, the separate descriptions for glances or the gaze for all stages expose the central role emergent changes play in emotional states. Also, the descriptions of these gestures in terms such as widening, bulging, narrowing and so forth relate to those used in defining changes in shape in the Shape Category of LMA/BF. The detailed analysis of their execution fleshes out the nature of movement that should be relevant for meaningful experience.

LMA/BF was used briefly for an earlier analysis in Part I. Amongst the four categories that define movement, my analysis of emotive movement, based on observation on self and trying out with students in teaching sessions and workshops, indicates the relevance of the factors

described under Body and Shape for the kind of emotive expression that needs to be brought forth in the Indian dance theatre traditions. The analysis to be presented draws, thus, yet again, from class sessions, here of experimental sessions using movement analytic observations and assessment as stated above to teach emotive expression. In what students need to bring forth in movement terms for emotive expression to emerge, just the kind of movement is discernible at the emergent minute level, that is defined in Shape Flow Support (Hackney, 1993, 1998)⁸, as also revealed in the detailed gesture descriptions in NS. It denotes the baseline change in growing and shrinking related to internal processes, and which occurs in the three spatial dimensions vertical, horizontal and sagittal, as Kestenberg (Amighi et al, 1999) defines it, in unipolar and bipolar shape flow. Such movement is observed in the analysis in different body parts as simultaneous reciprocal changes, revealing it underlies the neuro-muscular connectivity patterns that organise movement in terms of Patterns of Total Body Connectivity and discussed in the Body Category of LMA/BF (Hackney, 1998). As will be discussed in detail, the kind of movement analysed underscores the internal bodily changes associated with emotions. I see evident therein, what can be described as *primary movement emergent inner to outer in emotive-kinetic processes*. As also becomes evident, the non-Indian background of the student does not seem to matter, reflecting the fundamentality of emotive movement applicable across cultures.

At the same time, the dual method of analysing movement principles through self-execution and applying same on others, enables an analysis of felt aspects of movement. Chapter 3 also presents the observations of reactions, but also verbal and written feedback received in such sessions, to approach the notion of a felt quality that is associated with the bodily states of emotions. As will be argued, it is the kind of movement emergent in emotive expression that is central for the felt quality. It reflects what I call a *Sensing and Shaping*, that correspond to felt and structural aspects inherent concurrently to such movement. Then the very notion of shapes and spatial aspects being inherent to movement is evidenced in the Shape Flow Factors identifiable in the subtle emergent movement inner to outer in emotive expression. Finally, the findings of the analysis are substantiated by the correspondences, as this study in particular instantiates, to insights from current fascia research (Guimberteau, 2005; Myers, 2010, 2014; Paoletti, 2011; Schultz and Feitis, 1996; Schleip, 2003, 2012; Schleip et al, 2012;

⁸ And personal correspondence.

Schwind, 2014; Upledger, 2002; Ginter⁹), that provides insights into the very innate structures called fasciae. They give form based on the functioning of the body at all levels, shedding light on where movement resides and is emergent at micro-levels of the body. Felt sensate experience is also rooted in these structures, given innervation is for the most part in therein.

What the theory and practise of Indian performing arts, here specifically analysed from the perspective of dance theatre and using movement analytic conventions, unveils, is the identification of embodied experiences as movement-based experiences rooted in just the kind of *primary movement, emergent inner to outer in emotive-kinetic processes* identified thereby, that reveals *Sensing and Shaping* as its inherently concurrent characteristics. Finally, having thus laid out the expressive, functional and structural nature of movement at its innate levels, Chapter 4, goes back to tracing this movement to both the notions of meaning discussed in the study – the structurally defined gestural meaning which reveals linguistic-conceptual processes, and the experientially defined emotive meaning that reveals emotive-kinetic processes. Furthering the notion of inner movement by looking at how this is explained at the neurological, developmental level in the works of Judith Kestenberg (Amighi, et al., 1999) and Bonnie Bainbridge Cohen (1993/2012), the two-fold notion of experience leading to meaning as defined in the NS, namely the *bhāva to rasa* experience, will be first discussed. This traces the discussion back to the correspondences with Damasio's two-fold notion of feelings.

In the wake of this discussion, the differentiated sensate qualities that movement in relation to emotive processes entail will be examined yet again. The experiences it provides in terms of shape flow and tension flow, terms defined by Kestenberg, are, as I will argue, what give the differentiated experience related to emotions, leading to the deeper experience attributed to *rasa* in what can be understood as *bhāva-rasa* continuum. These explications are, in my opinion, substantiated by the analysis of the movement defined in the NS for emotive expression, as well as the correspondences revealed to Damasio's two-fold notion of feelings, namely emotional feelings and primordial feelings. Just as *bhāvas* are defined as both giving rise to and rooted in *rasas*, emotional feelings arise from and are rooted in primordial feelings as defined by Damasio.

⁹ Ginter, Anita, physician/MD, fascia researcher and Laban Movement Analyst. All references to Ginter made here are based on personal correspondence and class notes while studying fasciae and movement under her.

Meaning as associated with the *bhāva-rasa* experiences is in this sense primordial, given the primordial need-based value that emotions give objects, events, situations, etc. on Damasio's account, which leads to the kind of changes occurring in the body. These changes are in turn responsible for meaning as experience, underscoring the emotive-kinetic notion of meaning postulated there and the relevance given to it as primary meaning. This must lie in the kind of experience enabled by the very kind of movement identified here, which is at the micro-levels of the body, and reflects the notion of the „microworlds of form and function“, that Damasio (2010:263, emphasis added) postulates in relation to primordial feelings. Emotive movement is the movement that takes one to that level, given the shape flow factors identified.

Further, I will argue how just these insights provided in Part II enable accounting for the kind of embodied meaning-making in structural terms that was evident from the mimetic/cognitive semiotic and cognitive-conceptual processes unveiled in the analysis of gestural meaning in Part I. There is a conceptualisation of reality in physical terms that becomes evident in gestural meaning when approached from the perspective of Linguistic Gesture Studies as Chapter 1 there discusses, and that underlying this is an image schematic construal rooted in embodied sensorimotor experiences, when discussed from a Cognitive Linguistic perspective on meaning and embodiment in Chapter 2. We had also seen how Johnson (1987, 2007) traces image schematic structures, which are understood as schematic versions of images arising from embodied experiences that manifest in imagination, meaning and reasoning, to the neural structures that arise from sensorimotor experiences. Damasio's (2010) account on maps, which will be discussed in Chapter 2 Part II explains in a most lucid manner, I think, why the conceptualisation of reality in physical terms reveals structural aspects such as shapes, spatial aspects or other meaningful elements that movement itself was seen to produce, and also why these must be meaningful or how the cognitive linguistic understanding of structuring of experience, evident as bodily experience in gestural meaning, must operate. Damasio discusses how maps the brain produces incessantly are of everything internal from the viscera and internal milieu of the body, and everything external that sensory organs provide as signals. Given such a mapping is defined as occurring in the „setting of movement“ (Damasio, 2010:64), there is reason to believe, based on the findings in this study, that it is occurring in the kind of innate movement identified here. Structural and felt aspects evidenced in meaning must be the outcome of the very movement occurring in shape flow and seen to be, *primary movement, emergent inner to outer in emotive-kinetic processes* with *Sensing and Shaping* as its inherently concurrent characteristics.

Essentially, the study reveals how emotional experience defines embodied experience, the bottom-line being movement itself that is *emergent inner to outer* as change in emotions that are to be understood in the broad range that Damasio postulates, but also evidenced in the descriptions in NS. The nature of such movement is a baseline change in shape flow underlying all other change, notions put forward by Kestenberg (Amighi, et al., 1999) and echoed in Hackney's (1993, 1998, personal correspondence) definitions. It is *primary* movement at the innate micro-levels of the body, giving it form based on function, as current fascia research underscores. *Sensing and Shaping* are the inherent felt and structural characteristics of such movement, enabling defining how meaning, both structural as evident in gestures, and emotive, as evident in the theory and practise of Indian performing arts, is the outcome of such movement-based experiences grounded in *emotive-kinetic processes*. The study will be finally concluded with a further analysis of the explicit use of gestures in Indian dance theatre, by drawing again from the examples collected from teaching sessions. The aim is to illustrate how both the structural aspects of conceptualising the world in physical terms and the felt aspects accorded to these through emotions, inform meaning depiction simultaneously. And it is finally the kinetic conceptualisation that takes both into consideration, that enables both dimensions of meaning to manifest.

The study, presented as a cross-disciplinary analysis of the theory and practise of Indian performing arts is an approach to a two-fold notion of embodied meaning evident therein, examining thereby the role of movement and movement-based embodied experiences in informing such meaning. It is an empirical analysis based on actual practised tradition of dance theatre, whereby the conclusions are drawn from what the actual bringing forth of both the notions of embodied meaning reveal in terms of movement. The examples for analysis are drawn from video material that has been collected in class sessions while teaching students both gestural meaning depiction as well as emotive expression as practised in the dance theatre form called Bharatanatyam. While continuing to refer to the treatise NS as its basis, this style has evolved over the last two to three centuries¹⁰, laying emphasis on the notion of a natural emotive expression.

There is also one more approach in this study, given it dwells on practised traditions in order to look at movement in movement terms. Several references are made to personal

¹⁰ For references to its historicity and practise today, see Kothari (ed.), 1979

correspondences, given practitioners who have contributed profoundly in any specific field being drawn for this study, have provided valuable inputs thus. Not all have published work for references. This is also the case with traditional scholars of Indian scriptures, who carry forth the oral tradition of interpreting them. If there are unpublished references, these have been mentioned in the bibliography. With regard to NS, two English translations of the Sanskrit treatise are used, one by the Board of Scholars and the other by Manomohan Ghosh. Neither indicates the dates of publication. The latter is a reprint in 2007. The preface for the second edition mentions 1967. References will generally only indicate chapter numbers and where applicable, verse numbers, as given in the treatise itself. When quoting any specific translation, the source and page numbers will be indicated. Thus, it is not by name, date and page number, as is the usual convention, but will be, for instance, (Ch.7), (Ch.6:17), (Ghosh:119) or (Ch. 7:1-3, Board of Scholars:86).

Finally, the study has been triggered by several years of facilitating movement on learners, particularly on learners of non-Indian origin, and the observations made thereby, which lead to the study of the very basic movement principles of the human body, coupled with the questions that arose upon placing the insights the performing arts tradition reveals in correspondence with the different fields of research addressed here. Of interest have been correspondences to current research on gestures, embodiment, emotions and movement. In integrating the insights from Linguistic Gesture Studies, it presents new analytic possibilities as well as insights, for taking forward the understanding of a primary role gestures play for meaning and embodiment. In going to the bottom-line of embodied experiences, it presents ways of looking into the embodied grounding of meaning in movement terms, given movement is understood to be basic to it, as Johnson (1987, 2007) as well as Gibbs (2005a) discuss. By drawing from insights provided by Johnson (2007) regarding the notion of an embodied or immanent meaning, and perspectives provided by Damasio's neurocognitive research on emotions, it also introduces possibilities on how a cognitive take and a fundamental body-brain take can be integrated to further the discussion on embodied meaning and cognition. In discussing how understanding movement may apply to also an understanding of the structuring function of the brain, it calls for furthering this study, also from the perspective of fascia research.

It provides insights for movement studies itself, by identifying and establishing the nature and relevance of inner movement in terms of shape flow as baseline for all other movement. For

the understanding of Indian performing arts, here particularly dance and dance theatre, the study provides several insights that will help practitioners to a refined practise of same, simultaneously, exposing its potential for practise at a global level. The practise and theory of Indian performing arts reflect, essentially, the sum of a continued long-standing tradition. Yet, placing the practise itself, by way of what it reveals in its basic corporeal dimension, in other words by way of its form exemplified here in terms of Bharatanatyam, in the light of current research insights, also exposes something primary and essential about embodiment, that goes beyond cultural and historical notions. There are also several other implications that the study unveils regarding the potential performing arts in general, but Indian performing arts in particular, as a movement tradition holds, in providing resource material for other fields of research, when examining not only embodied cognition, but also notions of self, mind and consciousness, that Damasio's research addresses as well. Though not further discussed in this study, as it is beyond its scope, the Indian worldview in which the performing arts tradition is embedded in, discusses same, as brief references to Vatsyayan (1996), Kak (2004) and other Indian scholars point.

The fundamentally movement-based approach, in as much, has implications for Embodiment Studies, Gesture Studies, Cognitive Linguistics, Dance Studies, Movement Studies, Neuroscience Research and finally Cultural Studies. It instantiates, in this sense, how a dialogue between these can take place, however it is labelled, between art and science, trans-cultural, or other.

The book has two parts, the structuring of which will be summed here. Part 1 places the notion of gestural meaning in Indian performing arts in the perspective of Linguistic Gesture Studies. Chapter 1 here presents the form-based linguistic analysis of several gesture examples, tracing the basic meaning they reveal as well as the mimetic/cognitive semiotic and kinetic conceptual processes underlying such meaning. Chapter 2 analyses the cognitive conceptual processes gestural meaning indicates from the perspective of Cognitive Semantics and Cognitive Linguistics, leading finally to a discussion on the notion of an embodied meaning-making reflected therein based on the explications by Johnson (1987, 2007) and Gibbs (2005a/b). The concluding Chapter 3 in this part of the study presents a further analysis using other analytic conventions to illustrate how gestural meaning is also informed by the kind of dynamic movement qualities that Sheets-Johnstone (2011) discusses. This opens the study for looking into the relevance of movement and emotions for meaning, which is

indicated in the second aspect of meaning in Indian performing arts.

Chapter 1 of Part II lays out a reading of the notion of meaning in the NS and the classification of emotions given therein, discussing the notion of meaning as experience. Chapter 2 places these insights in the context of emotions and feelings as explicated from a brain research perspective by Damasio (2003, 2010), given they reveal parallels. Based on these findings, Chapter 3 provides an in-depth examination and finally analysis of emotive movement as indicated in the explicit and detailed descriptions of bodily states of emotions and their gestural manifestations in the NS. The analysis is substantiated by looking at actually emergent movement in emotive expressions, applying LMA/BF. The chapter finishes with a discussion on how the movement and its factors thus identified relate to the behaviour of fascia as discussed in current fascia research. Chapter 4 finally puts these findings together, arguing how both notions of meaning discussed in this study are grounded in the *Sensing and Shaping of primary movement emergent in emotive-kinetic processes*. The discussion finishes with the relevance this movement-based approach to embodied experiences underlying meaning has for several studies addressed here. In the Appendix an illustration of the hand forms called *hastas* being analysed in this study, detailed tables of insights from NS, and a detailed report of a workshop session will be attached.

Part I - Meaning embodied – gestural

Hands are seen to carry meaning and are used extensively and in an explicit way in Indian performing arts, particularly in the dance and dance theatre traditions. Various hand forms called *hastas* are used for this purpose. These have been conventionalised through practise and are mentioned in ancient treatises of dance. Meaning when approached from the perspective of hand gestures, brings us to the linguistic notion of meaning, thus, providing insight into and furthering discussion on meaning and embodied cognition, as I will discuss in the chapters of Part I.

An earlier analysis of how gestures are used to convey an intended meaning (Ramesh, 2013:306-320) in the dance theatre form Bharatanatyam revealed certain linguistic mechanisms underlying meaning construction. The observations made generally in the linguistic study of spontaneous co-speech gestures – the hands convey meaning and either represent objects or enact actions they want to execute (Kendon, 2004, 2013; McNeill, 1992, 2005, 2013; Müller, 1998, 2009, 2010a/b, 2013; Müller et al., 2013) – were seen to also hold good for gestural meaning construction in the performing arts context. Thus, the *hastas*, specifically defined hand forms that have become conventionalised due to practise, are used for depicting objects, actions and events. The *hasta* called *hamsāsya*, for instance, could be used to represent small objects, such as pearls or flowers, however, in an acting mode, depict the actual action of plucking a flower (Ramesh, 2013:316). It can at the same time also depict abstract concepts such as truth or time, when movement configurations of the hand in the same *hasta* are adapted in accordance to depict meaning. Gestures not only reflect what constitutes meaning at a basic corporeal level, but also how it is constructed. Most importantly, however, the gestural analysis reveals something more essential. The hand form itself is not the gesture and meaning. Meaning is constructed by way of specific configurations of the hands, such as their placement or spatial relationships. This points to, in linguistic terms, conceptual processes underlying meaning; specifically, to a *bodily* basis of what Johnson (1987, 2005, 2007) defines as embodied meaning-making processes. I exemplify this through a more detailed linguistic probe into gestural meaning in Part 1 of this thesis.

One of the current analytic conventions in Linguistic Gesture Studies, namely the form-based linguistic analysis of gestures developed by Müller et al. in the interdisciplinary research project ‘Towards a grammar of gestures’ (ToGoG), looks at several criteria that provide information about not only the fact *that* a gesture takes on meaning, but also *how* it does so, and what the conceptual structures are that lead to meaning (Müller, 1998/2009/2010a/b, Müller et al., 2013). Three of these criteria: Description of Form, Modes of Mimesis/Paraphrasing of Meaning and Motivation of Form, look at the gestural form itself, thus, taking an essentially bodily stance towards understanding the mechanisms underlying meaning construction.

Using these three criteria, I will present a detailed analysis of the form features of hand configurations in examples of an explicit construction of gestural meaning in the performing arts context in the following chapters. In Chapter 1, the first two criteria establish the basis for a discussion on *what* meaning and *how* constructed from a linguistic perspective. A disambiguation of gestures, as in the form-based linguistic analysis of co-speech gestures, is not the purpose of this analysis. It serves more to examine how gestural form features in contributing to meaning, and sheds light on basic meaning itself and its underlying conceptual structures.

Examining the motivation of form, presented in Chapter 2, carries the discussion forward in cognitive linguistic terms (Langacker, 1991; Croft and Cruse 2004; Lakoff and Johnson, 1999; Johnson, 1987, 2007). Relating the conceptual structures evident in gestural meaning construction to image schematic structures triggers a discussion on embodied processes of meaning-making. In Chapter 3, an additional analysis will be presented, in which both the notion of dynamic movement qualities as defined by Sheets-Johnstone (2011) and referred to by Johnson (2007), as well as a movement analytic approach in terms of LMA/BF, the movement analytic system that will be used in this study and was briefly described in the introduction, will be used. The analysis exposes the need to look at the role of emotions and felt quality in enabling meaning, at the same time, calling for a fleshing out of both emotions and movement from a detailed movement perspective. It, in effect, sets the stage for the second aspect of meaning defined in the theory and practise of Indian performing arts, namely the emotive, in Part 2 of the study.

1 Meaning in gestures – a form-based linguistic analysis

The chapter begins with an analysis of how meaning is constructed explicitly by means of manual gestures in the conventions of the dance theatre form *Bharatanatyam*, a style that today integrates the repertoire that evolved in the temples and courts of South India in the last centuries. Gesture examples are taken from video data collected in class sessions, where students were learning to execute gestures with the precision required to bring forth the semantic content that refers to the words and phrases, and in a larger context to the narrative content, in a verse that is part of a classical composition created for the Bharatanatyam repertoire, called *shabdam*. Considering the communicative abilities are essentially in the upper body and forelimbs, the initial training takes place with students squatting on the floor, as the video footage illustrates. The verse is translated in its original syntax to English as follows¹¹.

As the lotus-eyed play in water, at this very moment, that you came, (their) brocade saris stealthily taking away, onto a tree climbing and watching, is this proper conduct?

The verse refers to an episode from the classical narratives about young Krishna and the pranks he plays on the cowherd maidens of his village; here he steals their saris while they play in the Yamuna river. Krishna is being addressed in the second person.

It may be added here that, just as the analysis is not about a disambiguation of gestures, it is also not about examining the cultural or religious *contents* and traditions in which the classical Indian dance or dance theatre has been historically embedded and often discussed. However, selecting this classical composition and these particular classroom sessions for the analysis has a unique relevance. Firstly, the precision that students need to learn while executing the gestures related to the aesthetics practised in Bharatanatyam enables insight into what goes into meaning in terms of *form*. Secondly, the fact that non-Indian students are learning some culturally specific narratives and corresponding gestures adds to the discussion on meaning and embodied experiences, as further analyses will continue to reveal. It is also interesting in the context of further analysis that a verse like the one selected traditionally

¹¹ Translation by author of this book, who is a native speaker of Telugu, the language in the verse.

offers various possible ways in which its words, phrases and content are interpreted and find articulation by way of varied gestural configurations. Simultaneously, it is important to hold in mind that such varied forms are, in actual practise, handed down from teacher to student until a mature dancer creates own interpretations. They, thus, vary with each dance teacher, dance school and, finally, dancer.

The gestures in the specific examples selected for the initial analysis here and illustrated in Figures 1-6 are in temporal semantic synchrony with some of the words and phrases of the verse. As mentioned above, the analysis in this chapter takes advantage of the first two analytic steps of a form-based linguistic analysis: Description of Gestural Form and Modes of Mimesis. The former is a fine-grained approach of looking initially at the form parameters of the hands. Table 1 presents the four parameters, and spells out the abbreviations and symbols used in this convention. Modes of Mimesis, on the other hand, stem from the notion of gestural mimesis (Müller, 2009, 2010a), where the hands are seen to convey meaning in what Müller differentiates as representing and acting; hands either depict objects by way of their shapes or contours, or enact actions they would execute themselves, which could also include actions on objects or actions with objects (Müller, 1998:123, 2009:514, 2010a/b). The term ‘representing’ is used by Müller in Bühler’s sense of depiction ‘*Darstellung*’ (cf. also Müller, 2013, 2014). Kendon (2004, 2013), on the other hand, uses the term enaction, which is linked to his understanding that gestures are the outcome of actions. I use terms such as referring, depiction and enaction when describing the gestures in my analysis, as they appear appropriate in any given context.

The notation follows conventions set by McNeill (1992:378; 2005:273-275) for specifying right or left handedness, orientation and gesture space, adapting them, as necessary, for the analysis being used here. The notation is illustrated in Table 1. Since specific hand forms used in Indian dance theatre are being analysed, I use the specified nomenclature for the *hastas* or hand forms¹², rather than spelling out the hand shape as is convention in the form-based gesture analysis. An illustration of the *hastas* being analysed here with their description is provided in Appendix 1.

¹² This is based on Abhinayadarpana (Nandikesvara, ca. 11 C), translated into English by Ghosh, Manomohan (1975). See also Ramesh (1982, 2013) for further descriptions and analyses.







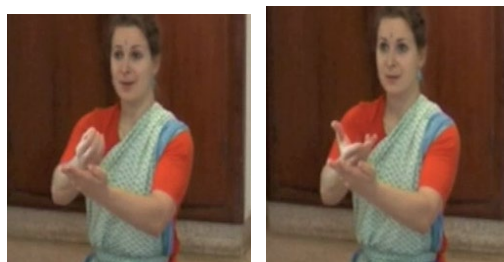
Hand shape/fingers – here <i>hastas</i> , Handedness – right/left	Hand orientation	Hand position – gesture space	Movement range of hands
<i>Patāka</i>  <i>Mukula</i>  <i>Alapadma</i>  <i>Chatura</i>  <i>Tripatāka</i>  <i>Kaṭakāmukha</i>  RH = right hand, LH = left hand, BH = both hands	PU = palm up PD = palm down PL = palm lateral PTB = palm towards body PAB = palm away from body V = fingertips pointing up or down (vertical) H = fingertips pointing to right or left (horizontal) S = fingertips pointing forward or backward (sagittal)	CC = center-center C = centre P = periphery EP = extreme periphery UP = upper LW = lower RT = right LT = left UR = upper right UL = upper left LR = lower right LL = lower left F = front B = back	> = change in location or orientation

Table 2


 Fig. 1: *lotus*

Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
RH <i>mukula</i> to <i>alapadma</i>	PU V	CC, medium reach on LH	Fingers opening and spreading out until stretched	Representing lotus flower
LH <i>patāka</i>	PU H		None	Representing leaf

In order to convey the meaning *lotus*, the hand form of the RH is first used with the *hasta* called *mukula*, meaning literally bud, with the fingers closed at their fingertips, as illustrated in the left-hand picture. The fingers then open, as seen in the right-hand picture, into the *alapadma-hasta*, reflecting the spreading or opening of the petals into a fully blossomed lotus flower, which is, incidentally, also the meaning of the word *alapadma*. The orientation, which always refers to that of the palm, is upwards. The placement of the RH on the flat LH, also with palm facing up, depicts the flower as it is seen in nature, on a leaf. The gesture is, thus, in a representing Mode of Mimesis.



Fig. 2: *eyed*

Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
BH <i>catūra</i>	PTB V	P-UP, near reach	Outwards along lower rim of eyes	Representing eyes by tracing them with the fingertips

Here BH in *catūra-hasta* represent the eyes. Their outward movement traces the contours of the eyes to add to the meaning referred to here, namely their shape, which, as the phrase *lotus-eyed* denotes, is compared to lotus flowers.



Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
BH <i>catūra</i>	PU H > PAB V > PD/PU H	C-LW, near reach	BH downward outward from navel, then outward circular movement with inward spiralling at wrists, ending at navel RH PD, LH PU touching at fingertips	Firstly, representing the brocade border of sari. Then enacting draping around waist.

Fig. 3: *brocade saris*

The phrase *brocade saris* is depicted through a series of hand configurations. The placement of BH at the waist, their orientation from PU to PAB and the downward and outward movement in the first two pictures refer to *brocade*, here by specifically signifying the shape and orientation of the brocade border as it fans out at the waist when the sari is draped in a particular way. The other three pictures, with the hands continuing to move in an outward circular movement, depict the act of draping the sari around the waist. The hand shape *catūra* is used here to depict gold, thus, conveying the added meaning of a gold brocade border. The

hands are in a representing mode to convey the meaning *brocade*, overlapped by an acting mode to convey the meaning *saris*.

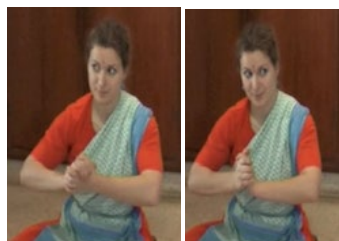
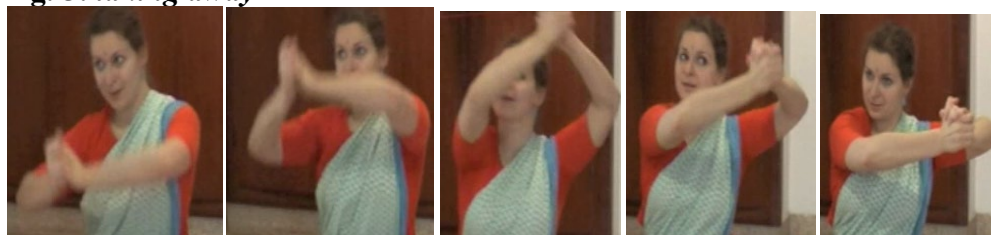


Fig. 4: *stealthily*

Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
BH clasping each other fingers enclosed	PL	CC, near reach	Fingers change their direction.	Representing stealth.

Fig. 5: *taking away*



Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
BH clasping each other	PL	CC, near reach > P-UL, medium reach	Arc-like movement CC > P-UR > EP-UP > P-UL	Representing the act of taking away

Both the pictures in Figure 4 illustrate how the meaning *stealthily* in the phrase *stealthily taking away* is conveyed by gestural means. The manual gesture shows how BH clasp each other near the chest. This is followed by an upward arc-like movement of BH from right to left, as seen in the series of pictures of Figure 5, depicting *taking away*. Here, one sees both the gestural constructions in representing mode; the first representing stealth and the second, the act of taking away, already reflective of the meaning in the next phrase. There is no acting mode in the latter gesture, that reflects the definition of hands carrying out an action they normally perform.

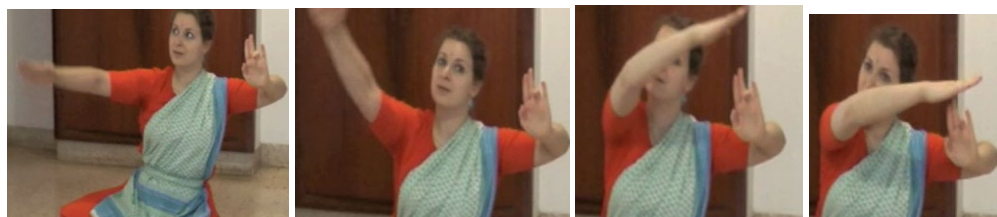


Fig. 6: *onto tree climbing*

Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
LH <i>tripatāka</i>	PAB V,	P-UL, medium reach	None	Representing a tree
RH <i>patāka</i>	PU > PD H	EP-RT, far reach > P-UL, medium reach	Arc-like EP-RT > EP-UP > P-UL arriving on fingertips of LH	Representing the act of climbing and sitting on a tree

Figure 6 illustrates how the tree referred to in the phrase is depicted in a representation mode, with the LH positioned as defined in the table in *tripatāka-hasta*. The arc-like movement of the RH in the picture series, with the palm facing up in *patāka-hasta*, represents the act of climbing onto a tree. The final placement of the RH on the fingertips of the LH with a downward orientation depicts the final goal of the climb: sitting on the tree.

This initial form-based analysis of some gesture examples thus looks at the actual form parameters of the hand configurations and in what Modes of Mimesis they refer to meaning. In doing so it exposes correspondences to linguistic functionality in the usage of hands to convey meaning. Linguistic Gesture Studies unveil a broad spectrum of such functionality, which has led to several approaches to linguistic classifications (cf. Kendon, 2004/2013). As I will lay out in the following sections, the above gestures reflect, in particular, Müller's (2009, 2010a, 2010b, 2013) notion of gestural mimesis, with which not only *what* meaning, but also *how* meaning is constructed can be examined. With the help of the central findings of these studies, I will take the discussion further regarding meaning, conceptualisation and meaning-making processes from a bodily and movement perspective.

1.1 Gestural meaning is mimetic

The gestures analysed above reveal how there is, in an Aristotelian sense as Müller (2009, 2010a) defines, the imitation of something through something else in different ways in conveying meaning. The same three aspects of mimesis described in Aristotle's mimesis in arts: mimetic material, mimetic object and mimetic mode, find application in gestures.

Gestures are essentially a mimetic medium and the hands are the primary mimetic material. They enable a wide range of meanings, given their formability, movement range and ability to imitate different kinds of mimetic objects (2010a:154f). Müller (1998, 2009, 2010a, 2013) further characterizes mimetic objects in terms of representation, expression and appeal, the three functions of language postulated in Karl Bühler's (1934) functional theory of language. The term "representation" is used here in the sense of Bühler's "*Darstellung*" or depiction (Müller, Bressemer, and Ladewig, 2013:712). I will use the terms 'representation' or 'depiction' interchangeably in my discussions. Finally, the mimetic modes or gestural modes of representation coined Modes of Mimesis (Müller, 1998:114-125, 2009:514f, 2010a), tell us, as has already been seen in the analysis, how hands transform into gestural meaning, broadly classifiable as acting and representing. In the following, I will examine these notions in the gestures analysed above to subsequently arrive at insights in terms of meaning.

1.1.1 What gestures mean – Mimetic Objects as concrete entities

The hands are seen to depict referred objects in the gesture examples above, such as the lotus flower, eyes, brocade saris or a tree. One also sees the acts of taking away, climbing onto the tree or the opening of the flower being depicted. These reflect objects, actions and events that constitute, according to Müller (2010a), the mimetic objects when hands take on meaning in a representational function. Thus depicted, they have the goal of communicating information or enabling an understanding thereof. The hand gestures in the performing arts context, as evidenced, are specifically used to communicate information in any given context, which has to do with a narrative or dramatic content. They, thus, communicate the meaning in such a context, however, in a bodily way, as we will continue to see, pointing to relevance given to what can be understood as embodied meaning.

The gestures above, while depicting the objects, actions and events described in the verse, essentially reveal what Kendon calls the "referential meaning" (2004:158) of an utterance, in this case, the accompanying verse functions as the utterance. They are, as the term denotes, referential gestures. Müller (1998) classifies these as a further subdivision of gestures in representation function, the other two being performative and discursive gestures. These classifications stem, as mentioned earlier, from linguistic analyses of meanings taken on by gestures. I will not go further into all the linguistic classifications here, but will focus on the

referential aspect, since the gestures analysed above reveal these. Nevertheless, the other classifications carry some interesting implications which I will discuss briefly further below.

The notion of a referential meaning is of specific interest at this point, because gestures apparently consistently refer to objects, events and actions which, as Müller (1998:110-119) observes, pertain to the world. At the same time, spontaneous co-speech manual gestures are seen to not only refer to these in a concrete sense, but also an abstract sense, i.e. to whatever the final meaning intended is, such as thoughts, ideas, arguments or metaphoric images. A speaker's gesture, in one instance, is seen to depict the contours of a picture frame, while referring to the picture itself in the accompanying verbal expression, whereas in another instance, the same gesture was seen to be used to convey the notion of a theoretical framework, with the picture frame functioning as a metaphor. In other examples, a wiping away action of the hands is used to convey the concrete meaning of wiping away crumbs or milk, or, in a more abstract sense, of doing away with proposals for negotiation. Events, such as the flowing of water, have also been observed to be depicted in a gesture referring to the actual movement of water in a concrete sense or the flowing of millions of dollars in a metaphoric sense. Co-speech gestures themselves reveal even more abstracted versions of referential gestures. The size and shapes of entities, such as boxes and crates, observed as concrete referential meaning by Kendon (2004), have been recorded by Mittelberg (2008:126-129) as referring to grammatical phenomena, such as verbs during an academic discourse. Gestures are also seen to refer to imaginary objects, lines or locations, even if the accompanying verbal expression was not "per se metaphoric" (Mittelberg, 2008:147).

Müller, therefore, calls these referential gestures with different levels of meaning, or, one may say, dimensions, as I will discuss later. McNeill differentiates between iconics that embody images of concrete entities and/or actions as "picturable aspects" (2005:39), and metaphorics that provide "imagery to the non-imageable" (2005:45). As we will see below, iconicity is not about meaning itself, but how meaning is conveyed in a gesture. Without going into linguistic theories on metaphors, it suffices to say at this point that, whatever the final intended meaning in any given context, the gestures themselves are seen to refer to mimetic objects in terms of some concrete object, action or event. In compositions created for dance in the Indian performing arts context, as the sample verse above illustrates, the phrases already refer to concrete entities, even when they refer finally to abstract ideas. In the gesture for *lotus* (Fig. 1), the flower is not being referred to, because it is the intended meaning. It stands more in

conjunction with the gesture for eyes, to represent lotus eyes, and, finally, to someone being referred to as *lotus-eyed*, or having eyes like a lotus flower. While the phrase itself does not tell us who these are, the total context in which the verse is embedded tells us they are the cowherd maidens described in a classical narrative. In a more abstract sense, likening their eyes to a lotus flower refers to their beauty.

Here, the concrete aspect of the meaning is already referred to in the accompanying phrase. At times, the hands refer to aspects of concrete entities to convey meaning, even if this is not evident from the accompanying text. In the gestures for *brocade saris* in Figure 3, for instance, the use of the *catura* hands indicates that the gold material of the brocade border is being represented, in conjunction with a movement of the hands that depicts how it appears when the sari is draped in a certain way. These two concrete entities together, the material aspect of the border and the action of draping, convey the meaning in the phrase *brocade saris*.

That gestures are, thus, seen to refer to some form of concrete entity will also be illuminated further as we continue to examine the gestures from the perspective of other criteria that tell us *how* gestures take on meaning. As is evident, this analysis naturally holds for gestures in the referential representation function. Even if investigating the linguistic classifications of gestures as in *Linguistic Gestures Studies* is not the purpose of this study, it may be of interest for the question at hand about meaning in terms of concrete entities and the larger scope of this study to look briefly at Müller's notion of performative and discursive gestures.

Gestures with the performative function (Müller, 1998:111-112, 116, 2009:512) are not about referential meaning, but rather the speaker's attitude towards it; in Kendon's words, "the interpretative framework in terms of which this meaning should be treated" (2004:158). Kendon calls them pragmatic gestures. They also reveal actions or objects like referential gestures, but for qualifying an act of speech, as Müller specifies. Acts of speech are illocutionary acts that assert, question, deny, order, greet, warn, dismiss, and so forth, and are understood to be entailed in every linguistic communication (Searle, 1969/1996). Müller illustrates how in a gesture, there could be a dismissal of something with the wave of a hand or a dismissal of an argument with the wiping away movement cited above, reflecting a negative connotation towards the argument. Alternatively, an argument could be presented as precise, with the gesture taking on a so-called 'precision grip'. Here again, while the gestures themselves are seen to be in the concrete sense of representing or acting, there is not a

referential but performative meaning. Such gestural functionality is, incidentally, also evident in Bharatanatyam, as *lokadharmi* gestures, or gestures taken directly from the world, as opposed to *natyadharmi* or dance gestures (cf. Ramesh, 2013). The latter can be understood as stylized gestures.

The meaning that one normally observes in discursive gestures is of a more abstract kind. These gestures could structure, organise or group together the verbal expression. Rhythmic movements, that McNeill (1992:16) calls “beats”, highlight, for instance, aspects of the accompanying speech. Repetitive gestures could bring cohesion into the discourse (McNeill, 1992:16; Müller, 1998:112). Both performative and discursive gestures are used in Bharatanatyam as well, though they are not always manual. These will not be further analysed or discussed in this study, the focus being on representational gestures, which is the function most widely used.

Thus, it seems that the representational function of gestures, both in the context of spontaneous co-speech gestures and performing arts, is a basic and relevant function, with the referential function making up for a major chunk of meanings. However, taking into consideration that there are three functions: representation, expression and appeal, as cited above, Müller (1998:89f/109, 2009:510, 2010a, 2013) observes, based on Bühler’s account, that these are not necessarily mutually exclusive. They are seen to be present in all gestures, with each gesture having one or the other in a dominant function. Meaning characterized by the expression function, namely, inner states, emotions and feelings in “subjective” (1998:90) situations, is evident when hands express these by, for instance, revealing a quality of movement. In the appealing function, gestures, as the term denotes, appeal to the behaviour of others or regulate the participative status during a discourse, or are directed towards the persons addressed in a primarily social organisational function. Kendon (2004:159) also lists interactive and interpersonal functions of gestures, which, from his brief description, seem to relate to the gestures with an addressing or regulating function that fall under Müller’s appeal function.

It must be added here that Linguistic Gesture Studies have hitherto primarily examined the representation function in gestures, analysing the kind of linguistic meanings they take on in terms of referential, discursive and performative gestures. The form-based linguistic analytic convention, in as much, does not provide a methodology to look into, for instance, movement

qualities that would provide insights into an expressive function in the gestures. Gestures used in the Indian performing arts context essentially include all three functions at any given time, which goes beyond the usage of manual gestures only. The expression function is particularly well-defined. I will return to this in Chapter 3 of Part I and Part II of the study, looking into methods of identifying movement qualities.

At this point, based on the discussion on mimetic objects, i.e. what meaning gestures take on or what hands as mimetic material ‘imitate’, I will advance the observation that there is a referential representation function in gestures where, apparently, objects, actions and events discernible as entities of the concrete world build the basis for gestural meaning. As will be seen in the course of the discussion in this part of the study, examining the representation function in gestures enables insight into the notion of a basic meaning as structural meaning. Looking at this function in the Bharatanatyam gestures analysed above at this point, even if they are more than just in the representation function, enables examining how and, finally, why these entities may, thus, become meaningful.

1.1.2 How gestures take on meaning – Modes of Mimesis

The other aspect that becomes evident in the form-based analysis of Bharatanatyam gestures above is *how* gestures take on meaning, subsumed under what Müller (1998: 114-125, 2009, 2010a/b, 2013) defines as mimetic modes. From the perspective of gestural mimesis, these are the means or modes by which something, here a mimetic object, is imitated through something else, here the hand. As was briefly analysed at the outset, gestures are seen to convey intended meaning by depicting the objects of reference in terms of either representing them or acting. These are, in Müller’s definition, mimetic modes that guide the transformative process of hand to gesture (2009:514). Hands, thus, take on meaning and become a gesture by either representing an object or acting as they would normally do themselves. Müller distinguishes between four kinds of modes: representing, tracing, moulding and acting, all of which are seen in the gestures analysed above, as exemplified in the following.

- In the gesture for *lotus*, we saw how the RH initially has all the fingers together in the *mukula-hasta* and then opens and spreads them out to *alapadma-hasta*, to depict the lotus flower. These two hand configurations depict the bud and the fully blossomed lotus flower, which are, incidentally, the meanings of the terms *mukula* and *alapadma*,

respectively, in the nomenclature given to hand forms in Indian performing arts. Based on Müller's definitions, the hands here are in the representing mode, becoming the object by transforming themselves into a "sculpture" (1998:120). Speakers have been observed in co-speech gestures, for instance, to use an open stretched palm for paper or a picture frame and the outstretched index finger for a pencil. The open stretched palm was also seen in a stylized form in the left *patāka* hand in the gesture for lotus flower, here depicting a leaf. The hand in the representing mode, thus, takes on the characteristic shape of an object (1998:123) or is, as Kendon defines, "modelling", or a 'model for some object' (2004:160, emphasis in original), taking on some resemblance to the referred object.

- In the gesture for *eyes* (Fig. 2), BH in *catura-hasta* are seen to move outwards along the contours of the eyes. Both the hands in the same hand form are seen to move downwards and outwards in the gesture for *brocade*, (first two pictures of Fig. 3). These gestures are in a tracing mode, given that the hands trace/sketch the contours of the objects being referred to, the eyes and the brocade border, respectively, in their two-dimensional shape. Such a tracing of object shapes with the tips of index fingers have been recorded by Müller (1998: 119), Kendon (2004:166) and McNeill (2005: 241) in co-speech gestures as well. As Müller (2010b) lists, hands can, for instance trace a picture frame, the path of a river or the direction of a path (2010a:161). The *pataka* hand depicting *onto a tree climbing* (Fig. 6) would, in this sense, be tracing the path onto the tree.
- In depicting the fully blossomed lotus flower, fingers are seen to open/spread, as evident in Figure 1. The hand configurations can be understood as moulding the three-dimensional shape of the flower. This is what Müller defines as voluminously moving around an imaginary object, such as in a round picture frame example (1998:119), creating fleeting sculptures in the air (1998, 2010b). Kendon records how the two flat hands are seen to "delimit the boundaries of something" like a box (2004:167, emphasis in original), which would, in a sense, also be in the moulding mode.
- The *catura* hands representing the saris are seen to make an outward circular movement, which depicts the act of draping the sari, as in Figure 3. In another example I will present in Section 1.4 below, *stealthily taking away* is depicted as an act of gathering the saris to take them away. An acting mode is given here; considering Müller's account (1998:115f), the hands reveal an imagined action by imitating actions they would execute themselves, which also include those on or with an object.

One sees above how the four mimetic modes are the means by which the hands depict different mimetic objects that were discussed in the previous section as objects, actions and events of the concrete world. Many different ways of referring to these objects become evident in this method of conveying meaning.

In the representing mode, the hands are depicting what were seen earlier as concrete objects of the world by becoming the object. In the acting mode, as the definition indicates, the hands only depict the actions of the hands, which include actions on or with objects. There are the other two modes in between: tracing and moulding gestures. Here there is, on the one hand, a representation of objects, but not by becoming a ‘sculpture’ as in the representing mode, but by tracing the imaginary contours of the same thing with the hands or fingertips, or voluminously moulding them. On the other hand, as Müller records, hands are also seen to trace paths in various contexts, such as a path along which one strolls or the path or flow of water. In the last an event in the world is traced. There are, thus, different kinds of mimetic objects and also different kinds of depictions of these in the tracing and moulding modes. When applying these modes in the Bharatanatyam gestures, one sees how there is the tracing of a path, in this case that of the climb onto the tree, which is essentially an action, but of the whole body.

As is evident, many gestures reveal an overlapping of modes. The lotus flower was seen to be conveyed by the hand becoming the object, which is, thus, a representing mode. However, the referred meaning, the shape, is conveyed with an opening/spreading of the fingers, depicting the opening or blossoming of the flower, an event pertaining to the world. The finger movements and the hand shape reflect an activity of voluminously enfolding the flower with the hand, as if holding the flower, when applying the definition of moulding. The representing and moulding modes in this gesture, therefore, overlap in presenting the shape of the flower. This can be said about the *catura* hands representing the shape of the eyes as analysed above and illustrated in Figure 2. The hands while revealing a tracing mode, represent the shape of the eyes.

There are other instances of overlapping as well, such as in the gestures for *brocade saris* illustrated in Figure 3. While the *catura* hands represent the gold material of the brocade, they also depict the shape of the border, by tracing how it appears when the sari is draped in a

certain way. It is as if the hands are going over the brocade border, however, with a stylized hand form. In this sense, the hands would be both representing and tracing; here, however, the hand shape represents its material and the tracing movement its shape. Subsequently, the same *catura* hands depict the act of draping the sari, which is, incidentally, an action of the hands, and, thus, by definition, in an acting mode. I again see an overlapping here. The hands still depict the gold brocade border in a representing mode, while acting like draping the sari is in an acting mode. It may be interesting to note for those who do not know how a sari is draped, that the border is mostly the edge of the sari along its length, and it is here that the sari is held when being draped. It is a characteristic action with an object.

The rich gestural meaning construction, as a tradition practised in Indian dance theatre, reveals several such instances of the four modes overlapping, as one will see in further gesture examples presented for analysis below. An example from co-speech gestures that illustrates this overlapping is evident in Müller's record of the hand depicting a picture frame (1998:120). The flat hand that becomes the object is also executing a downward movement to depict its falling, which would here be a tracing mode. The four modes can, thus, be understood as means by which hands are used to depict a given mimetic object by referring to different aspects or features of the same object in a single gesture, as in the lotus flower or brocade gesture. While this is depicted in a single gesture of the flat hand tracing a downward path, in the phrase *brocade saris* where both brocade and saris are meanings to be conveyed, a series of hand configurations in different modes becomes apparent. The four mimetic modes, therefore, tell us how hands transform to meaning in various ways that often overlap and, in doing so, depict mimetic objects in different ways, and by way of different aspects that pertain to them. This is the kind of paraphrasing of meaning, as this criterion to analyse gestures in the form-based analysis is also called, sheds light on. In effect, the modes, in enabling such differentiated ways of referring to mimetic objects, account for the wide spectrum of gestures in the representational function.

1.1.3 Gestural meaning – a question of acting and representing modes

While a fine-grained differentiation is enabled by the four modes cited above, gestures are essentially understood by Müller to reveal either an acting or representing mode. This is supported by another stream of research which introduces evidence from neurological studies that both representing and acting modes must be a question of inherent processes in the brain.

Lausberg/Kita (2003; Lausberg et al., 2013) observe how body part as object for representing and pantomime for acting modes are produced by the LH and RH, respectively. Given the contra-lateral connection of the body to left- and right-brain hemispheres, gestures in revealing actions of the hand, which are instrumental by nature, such as tool use, in RH movements, reflect an activity of the left hemisphere. And the representing of objects by way of a shape, indicates image production in the right hemisphere. Acting and representing Modes of Mimesis could, thus, be understood as the two primary inherent modes by means of which gestures take on meaning, and the most general statement one can make about how gestures take on meaning. Müller (2009:516) also observes how these modes are shared features with sign languages. They constitute the initial process that guides sign formation.

In the case of tracing and moulding gestures, while these were considered earlier to be representing gestures (Müller, 1998), given that they refer to objects, other than actions of the hands, Müller et al. (2013:714), drawing from Streeck's (2009) praxeological perspective, consider both as belonging in a strict sense to the acting mode. The hands here are understood as reflecting their own actions, such as sketching, moving hands around, holding or manipulating objects. It is observed in the interdisciplinary research project ToGoG that holding, showing or moving objects is also a common mode of gesturing in non-human primates (Müller et al., 2013:714). It is, therefore, concluded that the acting mode must be an earlier development in evolutionary terms, indicating simultaneously from a praxeological perspective, why hands convey meaning in gestures the way they do (cf. also Kendon, 2013).

This means that hands avail themselves of the actions they naturally perform in conveying meaning. In other words, hands, as mimetic material, imitate something, here mimetic objects, by means of mimetic modes that stem from their own actions, and these are actions they execute on or with objects, i.e. manipulative actions.

Let us see how this description holds good in various kinds of gestures referring, as seen above, to various kinds of meaning by means of the four modes identified by Müller. Gestures classified under acting mode, the fourth category above, are the gestures that fulfil the definition best. In these gestures, the hands, by definition, imitate their own actions on or with objects. However, in the gestures mentioned under the first category above as representing gestures, the hand configurations reveal how the gestures are taking on the characteristic shape of a referred object such as a sculpture. Here there is no action of the hand, as such,

involved. The hand is just making a shape, but not executing or imitating any kind of an action of its own, unless there is an overlapping of modes. One could call them purely representational gestures that avail essentially of the hand's forming ability, rather than its actions. The understanding above that gestures stem from actions hands execute, does not seem to hold for such gestures. Putting it the other way, the praxeological perspective does not account for why hands take on a shape.

It becomes more complex in the gestures in tracing or moulding modes, particularly when classifying these modes under acting modes. We have seen the overlapping of these modes with representing objects above. The hands, in the strict sense of an action they would execute themselves, are seen in the gestures that trace or mould shapes, given such a tracing or moulding reflect actions of the hands. In the lotus gesture, the open fingers and the hand shape reveal an activity of voluminously enfolding the flower with the hand, as if holding it, when applying the definition of moulding. Such a gesture would, in this sense, fulfil the definition of moulding as an acting mode. And yet the hand is representing the flower. This may be said of BH tracing the contours of the eyes as well. In a tracing action of the hands, the shape of the eyes is represented.

Gestures, however, are also seen to trace various kinds of paths, such as that of water, as Müller cited earlier observes, or the path entailed in climbing onto the tree, when applying the same understanding to the configurations of the corresponding Bharatanatyam gesture illustrated in Figure 6. In referring to these entities, which are events, such as a flow of water, or actions of the whole body, in the climbing gesture, the gestures might reflect some form of tracing activity of the hand, but such a tracing does not stem from the hand's own actions or manipulative actions on objects, namely here, the hand acting on water as object, nor from its own action in the climbing gesture. One discerns that it is more about tracing a movement that is entailed in each of these referred mimetic objects. These are, in effect, examples of tracing gestures that do not fulfil the notion of acting defined above, neither in depicting actions as such, nor in terms of accounting for gestures. The hands, one may say, are rather using their movement range, to use Müller's term cited earlier.

Let me illustrate another gesture example used to refer to the narrative in the verse presented for analysis in this chapter, but not analysed here, where it perhaps becomes evident that there can be a difference between hands acting on water and hands tracing the movement of water.

In an elaboration of the phrase *As the lotus-eyed play in water*, firstly ‘water’ and then ‘play’ can be portrayed in various ways through gestures of the hands and the body to make a narrative out of it. *Patāka* hands, for instance, palms facing down, moving horizontally outwards from the C and executing wave-like movements are used to depict water movement and, thus, convey the meaning of the river in which the cowherd maidens are understood to be playing. The same *patāka* hands with a downward orientation of palms moving forward and out in circular movements could depict entering into the water with movements that resemble swimming, an action of the body. The first gesture obviously traces the movement of water. The second gesture is acting on the water with hands reflecting their own action, the action of moving through water, pushing it aside.

The examples reveal that placing three of the four mimetic modes under the category acting, in the strict sense of imitating natural instances of actions of the hands, as put forward by Linguistic Gesture Studies from the praxeological perspective, might account for certain gestures, but not all. The tracing mode is not always an acting mode in the strict sense. To account for the various ways in which different mimetic objects are referred to here, it seems to function as representing mode as well in certain instances. There is apparently a representing of the movement of water or the act of climbing in tracing water or the path onto the tree, respectively: in Kendon’s terms, a case of ‘*enactment*’ (2004:160, emphasis in original) of an action, or a ‘stylized extraction or abstraction’ (2004:169) from an action, that is not necessarily the action of the hand, but the enaction of an action; the movement or action of water, or in the case of the climbing gestures, an action of the whole body. The mimetic object, specifically the action of Krishna’s climbing referred in the verse, if not falling under acting in the strict sense, must then be an enacting or representing mode for such an action.

With reference to the right and left hand taking on meaning as observed from Lausberg’s research, the conventions of gestural meaning construction in Bharatanatyam reveal instances of using the hands in a similar manner (cf. Ramesh, 2013:306-320). However, even here, the right-hand depictions are not necessarily restricted to actions of the hands only. As illustrated in Figure 6, the LH depicts the object tree, by becoming the tree, here in a stylized dance gesture. The RH reveals an upward movement to depict the climbing onto the tree, as seen above, an action of the body as a whole in relation to the object tree.

The gestures, thus, reveal what, by definition, may be purely representing and acting modes, but also modes where these seem to be in flux, particularly in the intriguing tracing modes. Nonetheless, we have generally seen that in any given mode, whether classified under acting or representing, there is either a shape and/or what is definable more appropriately as *movement* being depicted. The latter could be actions the hands execute themselves, but also actions of the body as a whole, or movement of events in the world. Essentially, therefore, whether in acting and/or representing modes, the four Modes of Mimesis reveal a transformation of hands to meaning that reflect a ‘characteristic shape or movement’ (Müller, 1998:123) of a referred mimetic object, be it object, event or any kind of action. Let us look at this more closely.

1.1.4 Gestural meaning – a question of characteristic shapes and movement

A characteristic shape is seen in both how the hand takes on a shape, like a sculpture, or in how the hand traces or moulds such a shape schematically. Such a shape is evidently that of the concrete object being referred to. Thus, we discern in the hand configurations, the characteristic shape of the lotus as seen in nature, or the typical shape of the tree or brocade border, or the shape of the eyes. Or, in the case of co-speech gestures, how hands transform to become the flat shape of paper or a picture frame. Such examples are plenty, both in the case of manual gestures in Indian performing arts (Ramesh, *ibid*) and spontaneous co-speech gestures, as evident from observations in Linguistic Gesture Studies.

Characteristic movement of an action the hand executes itself, with an object in this case, is evident in the draping gesture. The hand executes the typical movement involved in tying the sari around the waist. One also sees a characteristic movement in the opening and spreading of fingers, as in the lotus gesture, however, of an event in nature, namely of the blossoming of the lotus by way of petals spreading out. A characteristic movement of sketching is seen when the hands or fingers trace shapes, or even paths, like the contours of the eyes in the gesture analysed for the phrase *lotus-eyed*, or in the co-speech gestures cited above. In yet others, such as the tracing of water, one discerns the characteristic movement of water, as its perceived flow. The hand tracing the path, in referring to the action of climbing onto a tree, traces the characteristic ascending movement involved herein. Or elsewhere executes a characteristic descending movement of a falling picture frame. In all these gestures, the hands

are, either by way of acting or representing modes, transformed into some form of specific movements that situations, events or actions entail.

Let us stretch this discussion a little. Looking beyond the gestures with representation function, the larger spectrum of functions, i.e. appealing or expressing functions, also reveal some transformation of the hands to a gesture, as one sees from Müller's description of co-speech gestures. In gestures with appeal function, a typical gesture with palms held together for pleading (1998:109,111), the regulatory moving of hands ,downward to calm a public', a 'waving' to ask someone to come closer, or the extended index finger on the lips to quieten someone (2009:511, 2013:212f), reflect, one could say, a movement that is characteristic of the hand's own actions in such situations. Even if there is no correspondence to tools or actions performed on or with objects, these are actions a hand performs nonetheless. Similarly, the joyful clapping of hands or "moving the fist downwards", "raising the hands towards the sky" or "covering the face" for expressions of anger, happiness and grief, respectively, in the expression function, that are defined as symbolic body movements by Müller (2009: 510-511; 2013:211), can also be considered as the body's own characteristic movement or action in an emotional state.

The gestures in the appealing and expression function may, thus, not be depicting anything external as such, but the hands are executing actions they are seen to execute themselves in such situations. Even in Indian dance theatre, gestures in the expression and appealing functions reveal similar movements. These are worldly forms of depiction, or depictions that draw from how such actions are seen in the world. We will see some examples of gestures in emotive expression in Part II of the study.

In bringing forth meaning, that are objects, events/situations and actions, gestures, as evident, reveal in a consistent manner, a reference to characteristic shapes and movement related to these. This is seen to be the case across linguistic functions, whatever the function that characterizes mimetic objects. When applying the notion of characteristic shapes and movement in mimetic modes, hand configurations indicate they refer in one way or other either to objects, events and situations that pertain to the *external* world, or various kinds of actions the body performs, and in that sense, concrete entities as well.

The linguistic approach to analysing gestures, discussed so far based on Müller's gestural mimesis, sheds light on some general principles that are seen to hold good when gestures take on meaning, both in telling us what meaning and how such meaning is conveyed. And in this regard, the gestures used in Indian dance theatre reveal parallels to spontaneously produced co-speech gestures. Firstly, we see how the concrete world of objects, events and actions, that Müller defines as mimetic objects, build the basis for gestural meaning. From a co-speech context, it is seen that gestures refer to these even if the meaning intended is not necessarily about these concrete entities, but of an abstract nature as well. Secondly there are specific modes, classified broadly as acting and representing, that tell us how gestures primarily and inherently take on meaning. These two modes are the most general statement one can make about how gestures take on meaning. Attributing what Müller differentiates as representing, tracing, moulding or acting modes to these primary modes remains a question in flux. This lies in the very nature of how these modes are seen to constitute the way meaning is conveyed. They constitute varied means by way of which any given mimetic object gets depicted, enabling a rich array of possibilities in depiction. And one sees more than the kind of actions of the hands currently discussed in Linguistic Gesture Studies as guiding principles of these modes.

Finally, and importantly, in telling us how meaning is conveyed, the four different modes also shed light in a clear manner, as to what becomes meaningful about any given mimetic object, namely its characteristic shape and/or movement. That gestures convey meaning thus is apparently consistent across several gesture types and levels, immaterial, on the one hand, of the linguistic functions and meanings observed in gestural meaning construction, or, on the other hand, the context in which gestures occur or are used.

This is an important observation to carry forth at this point. If objects, actions and events of the concrete world find depiction in gestures and constitute the meaning conveyed, it is so, because specific aspects or properties of these, definable at this point as characteristic shapes and movement, carry meaning. Gestures also reveal, as is particularly evident in the explicit meaning construction through manual gestures in the Indian dance theatre traditions, that how they convey meaning as they do is tied to the mimetic material hand itself, with all its resources. As Müller observes, they are formability and movement range of the hands. This is best discernible from the form parameters described in the analysis at the beginning of the

chapter. As will be presented in following section, examining these in detail sheds light on meaning in even more differentiated and exacting terms.

1.2 Meaning in form parameters of hands

We saw at the beginning of this chapter that one of first steps in the form-based linguistic analysis of gestures is the description of gestural form. It is a fine-grained description that looks at the form parameters of the hands themselves. Based on how hands as mimetic material take on meaning, these parameters have been identified to be hand form/shape, orientation, position and finally movement, as was laid out in Table 1. In the following I lay out how these four form parameters relate semantically to object features, exposing thereby the range of specific properties that become meaningful. Handedness, that is included along with hand shape, is I think a parameter that tells us about something more basic, about why gestures may convey meaning thus. I will come back to this briefly at the end of the following analysis.

1.2.1 *Hand shape relates to the shape of an object*

In the form-based analysis, the parameter shape takes into account the shape of the palm and the shape and positioning of the fingers, such as whether they are stretched, flexed and so forth. In the gesture for *lotus* analysed as illustrated in Figure 1, the fingers are first held together and then opened out in a spreading movement in what is called the *mukula-hasta* and *alapadma-hasta*, respectively. These hand configurations reflect the specific shapes which we relate to the lotus flower in a direct way. In fact, these two conventionalised hand forms are coined as such in the nomenclature for gestures in Indian performing arts, literally meaning bud and fully blossomed lotus, because they resemble the flower's characteristic shapes. While such conventionalised hand shapes can take on different meanings in different contexts, here, they take on their most obvious and, thus, related meaning. The opening movement from the bud additionally highlights a round shape, and by forming it, refers to what the phrase *lotus-eyed* here denotes, namely the round-eyed cowherd maidens the larger context of the verse refers to.

The hand form of the LH in the same gesture, called the *pataka-hasta*, has a flat palm with fingers held together and stretched. It depicts the leaf on which the lotus flower is seen by

way of its shape, adding a detail to the meaning conveyed. In co-speech gestures this is observed as more details adding more meaning. The detail here, while depicting the lotus flower as a whole as it is perceived, also helps highlighting the round shape of the flower. In the gesture for tree, on the other hand, where another conventionalised hand form *tripataka* is used, the hand form reveals no direct visible relation to the shape of the tree, but conveys this meaning in a more stylized manner, the hand form itself, together with the vertical orientation of the fingers reflecting the shape.

That hand shapes refer to the shapes of objects both in a concrete and abstract sense is also a recurring observance in spontaneous co-speech gestures. Thus, speakers refer to a picture frame or a sheet of paper with an open hand with a flat palm and stretched fingers held together in Müller's examples (2010a:163/1998:120), which is similar to the *pataka* hand above, a hand shape that is used extensively in Indian performing arts for a number of meanings. The more abstract meaning such a shape denotes was seen in Müller's example cited earlier, where it is not the picture frame as a concrete entity, but rather an abstract notion of a theoretical framework, that is referred to metaphorically by way of such a shape.

McNeill records a hand shape with fingers and thumb spread out in a "kind of open basket shape" (2005:90). The fingers here are actually bent and spread out, similar to the *alapadma-hasta*, creating a bounded or enclosed space between them. Based on the context in the verbal expression, McNeill opines that the hand "creates an interior space" (2005:23), with its shape referring to the notion of interiority and hollowness. The hand, in effect, voluminously shapes or moulds such a hollow interiority. Mittelberg (2008:129) also records a similar hand shape for a more abstract meaning. In this account, the hand shape, seen to be used by a speaker teaching grammar, is interpreted as the shape of a container in which one has to infer the verb as "sitting". These examples are also evidently in purely representing modes that denote characteristic shapes, even when referring to spatial forms such as hollowness or abstract concepts.

The parameter hand shape is a widely spread gestural form feature, whether in spontaneously produced co-speech gestures, or explicitly constructed, as in the performing arts context. While it relates to the shape of the objects being directly referred to in a concrete sense, it can also relate to a shape, with the help of which abstract extended meaning is conveyed. The semantic value of the hand shape is the shape itself.

1.2.2 *Hand orientation refers to spatial orientation of referred objects*

Meaning is seen to reside in the orientation of the palm. The palms of both the hands in the lotus gesture are oriented upwards. Here, the orientation of the palms reflects the upward orientation of the flower sitting on the upward oriented surface of the leaf. In the gesture for denoting the climb onto the tree, illustrated in Figure 6, there is an upward orientation of the flat *patāka-hasta* as it traces the path on to the tree as was discussed earlier. Here, the palm denotes the spatial upward orientation which constitutes the climb. Its orientation downwards at the end of the movement and when placed on the fingertips of the *tripatāka-hasta* for the tree, depicts the act of sitting on the tree referred to in the verse. Essentially, the downward orientation of a sitting movement is reflected here. In the gesture depicting eyes illustrated in Figure 2, the orientation towards the body of the palms of BH reveals that the reference is to the eyes. It is often observed in teaching sessions, that when students do not get the orientation right, the hand seems to convey no relation to the eyes, and the movement could be any movement. The orientation away from the body of the same *catura* hand shape in the gesture for brocade border in Figure 3 reflects the orientation of the brocade border, namely how the gold surface of the border is shown when the sari is thus draped.

In one of Müller's gesture examples cited earlier, depicting the picture frame, the speaker executes a downward movement with the palm also orienting downwards. Interestingly, the palm orientation in depicting the falling of the picture indicates not only the direction in which it is falling, but also how, namely on its flat side. The same flat hand denoting the picture frame as being held with the palm facing away from body denotes, one could say, both how the picture is hanging with its flat side on the wall, and the spatial relationship of this surface to the wall by way of contact. Other examples from the co-speech context reflect other meanings for the palm orientation. Kendon (2004:166) describes how a speaker refers to the shape and size of a box with two flat hands, palms laterally facing each other. In denoting the shape, the palm orientation in conjunction with its flat shape thus refers to two of the interior surfaces of a box. In a similar vein, one could say that where the hand is observed to sculpt the contours of an object in moulding gestures, the insides of the palms refer to the outer surfaces of the objects the hands appear to manipulate. In McNeill's basket-shaped hand, conversely, given the interpretation of the shape of the hand, it reflects a moulding of the interior space of the drainpipe to which the speaker is verbally referring. The palm orientation, in a concrete sense, would also relate to the internal surface of the pipe or the

contours of the hollow space it entails. The upward facing palm reflects an ascent inside the drainpipe, again a spatial orientation.

The orientation of the palm in all these examples carries meaning that stands in direct semantic relationship to some form of spatial orientation, such as the direction of an object or its movement; of surfaces, interior or exterior; or a surface that stands in proximal, adjacent or contact relation to another surface. As seen in the gesture of the eyes, the hand orientation can also mean denoting what is being referred to – a pointing function, as we will see below. In short, palm orientations refer to spatial orientations, exposing how spatial features become meaningful when depicting mimetic objects.

1.2.3 *Hand positions are relative positions of objects*

In the gesture for *onto a tree climbing* illustrated in Figure 6, one sees how the LH depicting the tree is placed in the upper left in peripheral gesture space, giving the tree an imaginary location as if saying ‘there’. The high placement also indicates the tallness or height of the tree. In the lotus gesture, the RH denoting the lotus flower placed on the LH for leaf, brings forth the meaning that the flower stands in such a proximal relation to the leaf. Another kind of reference to the location of a referred object is seen in the gestures for *brocade saris*. The hands are placed in close proximity to the waist, reflecting, firstly, as mentioned already, where the brocade border is seen to fan out when the sari is draped in a certain way. Secondly, the position also reflects where on the body the sari is tied when draping it. In other words, the hands depict the relative position of the referred object to the body, not so much to tell us its relation to the gesturer, but to denote where the object is normally located on the body. In Figure 2 for the gesture depicting the eyes, the proximity of the hands to the eyes tells us, just as their orientation, that the eyes are being referred to.

The concrete reference to spatial aspects such as locations in these gestures is, of course, not about the immediate concrete surroundings of the gesturer. The position of the hands in what McNeill calls gesture space (1992:378) reflects what is defined in Gesture Studies as the imaginary spatial placement of the objects of reference in relation to the speaker, in relation to space or to another entity of reference. In Kendon’s terms they are ‘*location establishing*’ (Kendon, 2004:168, emphasis in original). In the picture frame gesture cited above, for instance, Müller describes how the hand is placed at about an arm’s distance to the left side

and above the level of the speaker's head. This reflects a localizing of the picture's position up there on an imaginary wall. Or as in Kendon's stone shelf example (2004:168f), the position of the hand could also refer to the relative position of something within an enclosed area that is being referred to. Kendon records how the speaker's RH placed below his waist level depicts the relative position and surface of a stone shelf in a cellar.

Thus, the placement of hands in relating directly to locations or positions are seen to shed light on the relevance of spatial aspects in terms of the location of mimetic objects or their spatial relations for meaning.

1.2.4 *Hand Movement* relates to actions, motion, shapes or spatial aspects of objects

Movement is seen to be an essential feature in gestures. In the gestures analysed above, the movement parameter is seen to be used explicitly, as in the characteristic movement entailed in the act of draping a sari. There is the outward movement going around the waist, as analysed in Figure 3, in conjunction with an inward circular movement of the wrists. An upward movement of the RH from extreme right to left side up depicts the movement trajectory of the upward action of the body involved in climbing onto a tree in the gesture in Figure 6. In Müller's (2010a:163/161) examples, there is the hand moving downwards to depict the falling of the picture frame mentioned above, or diametrically upward to depict a steep path. The gestures here represent or, better said, enact the actual movement configurations and spatial aspects involved in the act of climbing or falling, or depict the spatial aspect as with the path.

The *catura* hands placed at the eyes in Figure 2 are seen to execute an outward movement along the lower lids, tracing the contours of the eyes. The movement parameter here is used to denote their shape. The fingers move in an opening spreading fashion to denote the event of opening or blossoming of the lotus flower in Figure 1. At the same time, one could say, the movement here is establishing relative spatial positions of the petals of the lotus flower, before and after blossoming. Movement to depict spatial locations is also evident in an example Kendon describes. The speaker extends the arms and holds the hands slightly below the waist and moves them in a "short, rapid but abruptly terminated movement, which is repeated several times" (2004:167f) to denote how the cheese are placed in the crate. The hand in the position described in Kendon's stone shelf example cited above is moved with

palm facing down in a horizontal backward-forward movement to denote, as described, how the shelf runs along the right side of the cellar. Here, one discerns, how movement also depicts the flat surfaced shape of the shelf. These gestures reflect, as Müller (2010a:164) observes, that localizing is often combined with movement. Or, as we see, tracing a shape is also a question of movement.

There are other gestures with such a location-establishing function denoted through movement, revealing also different levels of meaning. For instance, the conventional hand form called *hamsāsyā* is used to convey meaning such as living or residing at a particular place by drawing a vertical line downward with the tips of the index finger and thumb held together, and palm orientation away from body or lateral. The same gestural configurations are used to depict time, as in saying ‘now’, that is illustrated in an earlier analysis (Ramesh, 2013:316). It is generally also used for the phrase *at this moment* in the verse example being used for analysis here. Gestures referring to time are seen in co-speech gestures as well. The hand is directed towards the space behind the body in referring to the past in gestures recorded by Müller (1998:111), or when BH moulding a rectangular object refer to a segment of time (2013:209).

What becomes evident here is that the gesturing hands, in bringing forth meaning, reveal movement configurations that relate not only to movement such as 1) movement of one’s own body in general, namely, actions in a broader sense, and 2) movement or motion of objects and events in the world being referred to. They also relate to 3) spatial aspects such as trajectories and locations that could be actual, imaginary, relative or referring to abstract meaning, and 4) shapes of objects. Just as with the other form parameters, movement is, thus, a parameter that carries a semantic value relating to movement as meaning. At the same time it is basis for the range of meanings analysed above, whether actions, spatial aspects or shapes, their emergence as meaning defined by movement and relative to the movement configurations of the gesturing hands. As McNeill, for instance, observes, when “upness” is materialised with an upward movement of the hand (2005:58), it is to be understood that upness constitutes the basic meaning. This is how the gesture for *climbing on to a tree* in the analysed examples above, denotes meaning. Of interest is, however, that upness as a spatial aspect that constitutes meaning, is an outcome of movement. I will come back to a detailed examination of this centrality of movement for meaning depicted in gestures further below.

The analysis above of the form parameters for their semantic relevance reveals how gesturing hands build, to put it in Kendon's terms, "a core of visible bodily phenomena", getting their semantic value based on their constellations (2004:16). These constellations reveal various object features. And this in a fairly illustrative and a most direct possible manner. They refer, for instance, to ascent or climbing with an upward movement, to the flat shape of an object, like the leaf, with the flat shape of the hand, to a round shape, like the flower, with a corresponding tracing or voluminous moulding movement, to a steep path with a diametrically upward movement, to an enclosed hollow space with fingers bent and spreading, to an action of wiping away executed as if the hand were actually wiping away something, to the sari by way of how it is draped, and so forth.

The hand configurations in thus bringing forth in an illustrative way the semantic value to be conveyed, reveal not only the potential the hands have as mimetic material. They also shed light on a wide spectrum of features, thus specifying in exacting and more differentiated terms what the characteristic shapes and/or movement are, by way of which, as identified in the analysis of the Modes of Mimesis, mimetic objects are depicted. Form features relate to shapes, various movement trajectories and directions, orientation in space, spatial locations, surfaces, different kinds of movement or motion, and so forth; broadly speaking, shapes, various spatial aspects and movement. If the concrete world of objects, actions and events build the basis for meaning, this is by way of specific features, which are, as evident, essentially physical properties.

That these specific object features or properties are relevant for meaning is evident in the often elaborated depictions of these in the practise of Indian dance theatre. In the creative medium it is, meaning is depicted, as evident from the examples analysed here, by way of varying but also overlapping form parameters, just as a varying and overlapping of the four mimetic modes was analysed in the previous section. They reveal what Kendon, echoing Müller's postulations, defines as "various *techniques of representation* which appear to be quite general and in widespread use" (2004: 359, emphasis in original). These techniques also reveal how meaning, finally, is consistently in terms of certain physical features, indicating a central relevance of these for meaning. These features are the means by way of which not only mimetic objects get referred to in the concrete notion of meaning, but also in an extended abstract sense as well, as has been evident particularly from the examples of co-speech gestures. This points to something more fundamental about the meaning gestures reveal,

reflecting what Müller (2010b) formulates as two levels of meaning, at the basis of which is a conceptualisation of reality.

At the same time, coming back to the notion of handedness as a form feature, it is a parameter that looks into what the RH and LH are revealing. I had noted earlier that the gestural depictions in Bharatanatyam analysed above, reveal such a handedness. Even in further variations, as for example in depicting *lotus-eyed*, one finds configurations where LH is held in the *alapadma*-hand while the RH traces the shape of the eyes in an acting mode. Or elsewhere, in depicting wind, a tree is depicted as in the analysed gesture above with the LH, while the RH shows the motion of wind with *patāka*-hand (cf. also Ramesh, 2013). Even here, one discerns how the LH depicts a characteristic shape in a purely representing mode, whereas the RH reveals a characteristic movement, which in turn denotes several aspects related to movement, which could be the tracing action of the hand, the movement or motion of something, or as was seen earlier, the act of climbing on to a tree, or simply the spatial aspect of ascent. I had also cited Lausberg's (2003) research with regard to acting and representing modes evident in right and left hand, and that this is seen to be related to how the brain functions. This points not only to something intrinsic about thus depicting meaning with differentiated handedness, but yet again to a fundamentality of the physical properties thus depicted for meaning.

1.2.5 Form to meaning – a conceptualisation of reality in physical terms

It was mentioned earlier that the idea behind the form-based linguistic method of gesture analysis developed by Müller and colleagues (2010b; Müller, Bressemer, and Ladewig, 2013) for studying co-speech gestures, is to look at the form first, wherefrom inferences are drawn as to the meaning that may be conveyed, *before* considering the accompanying speech. As the analysis so far illuminates, whether gestural meaning refers to concrete entities or abstract notions, the gestures always refer to physical aspects of concrete entities. Given this, Müller (2010b) sees a basic level of meaning in the hands' form features, thus, postulating two levels of meaning: the local, contextual or intended meaning, and the basic. While the former is given in the accompanying verbal expression, shapes, actions and so forth, revealed in the gestural form features, point to a basic level meaning. Such a basic meaning can be albeit the contextual meaning or intended meaning, and presented independent from given spoken contexts.

Müller (2010b, also 1998) cites several examples of co-speech gestures to exemplify this notion. Hands tracing a round shape, for instance, are seen in gestures referring to a round picture frame in a concrete sense or a family gathering. While both gestures reveal the same basic meaning given in the round shape, the latter use is indicative of the gathering being harmonious, reflecting a local meaning, which is in an abstract sense round. In the wiping away examples cited earlier in section 1.1.1, the same action of wiping away, evident in the gestural form as an enacted movement reminiscent of this (1998:116), was seen to refer to different meanings, both concrete and abstract. There can be different local or final meanings, in as much, which could be either concrete or abstract. But the a round shape or a wiping away action themselves, as evident in the movement configurations or form features in the gestures, reflect a basic meaning. While these could, seemingly, not be related to the verbal accompaniment, they are related in the sense that, to bring forth a local or intended meaning that is more abstract, the properties of the concrete world are being recruited. And this in terms of basic structures, or structural aspects such as everyday motor actions or movement patterns, geometric patterns and gestalts (2010b).

That this is the case, is evident in the Bharatanatyam gestures analysed above. Here specifically, the verse itself, composed for corporeal depiction, refers to concrete entities for denoting abstract meanings. This was addressed above while discussing the referential function. The notion of beauty of the cowherd maidens is described in terms of their eyes, likening them to a lotus flower, and finding reference in the phrase *lotus-eyed*, the local meaning intended in the phrase. The lotus itself is depicted in the hand gesture by means of its shape, revealing a property of the flower, and in doing so the property to which the eyes are likened in the intended meaning. While depicting the lotus flower, thus, does not refer to the flower itself as such, but the local meaning, namely the eyes, the shape denoted in the hand relating to the flower, reflects a basic meaning that nevertheless stands in relation to the local meaning, given the context. Interestingly here, in terms of intended meaning, we need to differentiate even between local and contextual meaning. Only the larger context of the narrative enables us to know that it is the cowherd maidens that are being referred to with the phrase *lotus-eyed*.

The formulation of depicted meaning being independent of given spoken contexts could be, thus, misleading here. There is, nevertheless, I think, no independent meaning as such, that a

gesture brings forth, that is not in some relation to the local meaning. One rather sees that there are physical properties evident in a gesture that need not always refer to a mimetic object in a concrete sense, but stand in some relationship to the intended meaning being presented, and in the process constituting meaning in a basic sense. One can perhaps understand the two levels of meaning as informing each other in any given gesture, as evident from the explicit construction of meaning in the performing arts context. The local meaning determines what the gesture brings forth in its form features, given the fact that they are being produced in order to refer to the local, intended and/or contextual meaning. And yet, there is something basic about how this is effected, that reveals wherefrom meaning is derived in the first place. It is derived from certain properties, identified as shapes, various spatial aspects and movement.

Given gestural meaning reveals basic forms or basic structures as basis for meaning construction, as Müller postulates, it tells us what motivates meaning in the first place and how they are meaningful in their own right. Meaning in as much emerges on this account relative to form, as revealed in the gestural form features. Every change in their constellations leads to a change in meaning and in this sense, form leads to meaning. These basic structures are, as discernible, the defining characteristics of objects, events and actions; essentially the defining structural characteristics of their shapes, spatial aspects and movement. Then gestural form features in bringing forth a round shape or an upward movement trajectory, are essentially bringing forth a geometric shape or movement pattern related to these properties. One discerns how a local or contextual meaning is given form and shape in gestures by way of these essentially basic physical properties.

Given these insights, gestural meaning can be understood as revealing how specific physical properties become meaningful in not only a consistent but also basic way, in a basic structural way, to be precise. Basic meaning as a matter of basic structures is essentially meaning that is derived from these properties by way of which meaning is not only communicated; they are the meaning-giving aspects so to say. In discussing the four mimetic modes Müller, Bressemer and Ladewig observe that in the acting, tracing and moulding gestures tactile and sensory-motor experience of the hands provide the “derivational base” for thus bringing forth meaning, and in the representing mode it would be visual perception “only” (2013:712). Also that given the various ways in which object features are brought forth, there is a

foregrounding, or in other words a highlighting of specific object properties, such as its “corporeality” or just its lines (ibid.:713).

Echoed therein is another of Müller’s earlier formulations, of a “rudimentary” ability to analyse form, by way of which, as seen in fine arts, meaningful elements of the perceived world are abstracted and transformed into visual objects (1998:125). These meaningful elements are, as apparent in the gestural form features, the structural features or properties of the concrete world. Essentially all these reveal conceptual processes; gestures thus bring forth reduced *gestalts* of concrete entities, whereby mimetic objects are “mediated by processes of conceptualization, interaction, and the depictive possibilities of visible bodily movement” (Müller, 2009:512). We have seen how the depictive possibilities of visible bodily movement, here the hands presently being analysed, are fully taken advantage of to bring forth meaning to be communicated. Interaction or communication is integral to gestural usage. In terms of conceptualisation, we discern from the above analysis, what Müller calls conceptualized forms of reality (2010a:183). It is essentially a conceptualisation of reality in specific physical terms that is evident, bringing the discussion on gestural meaning to underlying conceptual processes.

Summarising this section, the form-based linguistic analysis, when applied to the explicit construction of meaning through hand gestures in the Indian performing arts context, exposed how there is, here as well, a linguistic notion of meaning similar to that observed in spontaneous co-speech gestures. Müller’s gestural mimesis, where something is depicted by something else through specific modes, applies to these gestures also, both by way of *what* gestures mean and *how* they mean in terms of mimetic objects and mimetic modes. Analysing thus their referential function revealed a depiction of objects, actions and events of the concrete world by way of their characteristic shapes and movement, and this consistently. Finally, a more differentiated analysis of the gestural form features or parameters and how exactly they relate to the depicted meaning unveiled in exacting terms varied object features, such as shapes, actions, movements, movement trajectories, spatial locations, surfaces and other spatial aspects; in short shapes, spatial aspects and movements.

Also, we have seen that what becomes meaningful and how is apparently a phenomenon that is not limited to specific contexts in which gestures are used, considering the central findings of Linguistic Gesture Studies with regard to spontaneous co-speech gestures and the parallels

traced to the explicit construction of meaning in Indian dance theatre. Essentially, the gestural form features shed light on basic structures that, as Müller defines, motivate meaning in the first place, whatever the final local, intended or contextual meaning. With this we arrived at how gestures reveal a basic meaning that is derived from structural aspects of physical properties related to the concrete world of objects, actions and events. In the notion of reduced gestalts of concrete entities that gestures depict, we essentially discern how form or structural features become relevant for meaning. Gestural meaning construction reveals a conceptualisation of reality in physical terms. It reflects, in this sense, and by of the form features analysed, how meaning is literally “shaped and construed”, terms that Langacker (1991:2) uses in discussing the notion of meaning equates conceptualization. There is, in as much, something fundamental about meaning brought forth through gestures, which has to do with how we make sense of the physical world, bringing the discussion thus to conceptual processes underlying meaning.

1.3 Gestural meaning – a cognitive semiotic process of conceptualisation

Gestures, in presenting meaning by way of representing and acting Modes of Mimesis, reveal cognitive semiotic processes of conceptualisation (Müller, 2009). Features presented through the acting, representing, tracing or moulding modes, such as the characteristic shape of an object, its contours or lines, or movement of objects, events and imagined actions, are the reduced gestalts of objects, or the ‘modulation’ of an action hands would perform (Müller, 2009:514f). The transformation of the hand to enact or represent something reflects specifically a process of abstraction, in cognitive semiotic terms a metonymic abstraction. Thus, from a linguistic perspective, the physical properties, identified in exacting terms in the gestural form features above, are reduced metonymic abstractions, underlying which are cognitive semiotic operations, as I will examine in this section.

Mittelberg (2010b:124), citing Arnheim, postulates how every subjective perception and representation is reductionist and partial. In this sense, gestures, as noted elsewhere, are the “partial representations of something else”, which makes them metonymic (Mittelberg, 2013:763). As Cienki (2013:189) also maintains, metonymy is inherent in representational gestures. Mittelberg, referring to Jakobson (1956), defines metonymy as one of the two aspects of language, the other being metaphor. These are not just poetic means of stylization, but associative modes structuring linguistic and non-linguistic expressions (Mittelberg,

2010b:119; Mittelberg & Waugh, 2009:334). While metaphor is based on the principle of similarity, metonymy is based on contiguity relations. However, as Mittelberg's explications presented below illuminate, Jakobson does not mutually exclude these two aspects, but understands them as being in a continuum, whereby information is characterized by the dominance of one modus over the other.

Essentially, as will be laid out in this section, it is metonymy in interaction with the two semiotic modes, similarity and contiguity, that characterizes such a continuum. On this account, metaphor is integrated into the notion of metonymy (Mittelberg & Waugh, 2009; Mittelberg, 2010b/2013). For Mittelberg (2010b:119), Jakobson's understanding of metaphor and metonymy is, therefore, a forerunner of contemporary theories on cognition. While metaphors have the function of enabling access to abstract domains of knowledge (2010b:113), it is metonymy which is central to meaning as revealed in gestures. Metonymy is understood to be based on contiguity relations that arise from proximity, factual and causal connections. However, as we will see, similarity is not excluded in the understanding of metonymy, but integrated into it. Mittelberg approaches the role of metonymy for meaning from the perspective of disambiguation on the part of the listener, looking at how inferences are drawn based on the associative nature of the semiotic modes. For the purpose of this study, it is of interest how the gesturer/speaker uses metonymy in conjunction with similarity and contiguity to convey the meaning intended.

1.3.1 Gestures are metonymic

Let us look at the phrase *lotus-eyed* in the cognitive semiotic perspective to be discussed, before going into a more detailed discussion on metonymy in gestures. Here, one sees how metaphor and metonymy interact and are inherent in the phrase itself that constitutes the local or intended meaning. In the context of the narrative that is referred to in the verse, the phrase refers metonymically to the cowherd maidens playing in the water; by definition, a single feature, the eyes, stands for the whole, the cowherd maidens. The eyes, in turn, are metaphorically likened to the lotus flower by way of what Mittelberg calls "parallelism" (2008:132) with reference to metaphor. The gesture is executed to establish such a parallel between the eyes and a lotus. It takes the shape of the fully blossomed lotus flower, though shape, as such, is not referred to in the verse. There is the implicit understanding that the eyes are likened to the shape of the lotus flower. It is common practise in Indian arts that such

parallels to define beauty are established by way of similarity to properties perceived in nature. Where eyes are concerned, one finds apart from lotus-eyed, reference to the doe-eyed. The shape that thus constitutes meaning, is in cognitive semiotic terms, a metonymically abstracted reduced gestalt of the object in question, the lotus flower. The subsequent gesture, as illustrated in Figure 2, refers to the eyes. There are, as will become evident, different outer contiguity relations operative here. Most apparently, two basic definitions of contiguity are evident. Gestural meaning is established by way of proximity of the hands to eyes. The other is proximity of the two gestures as signs; the gesture for eyes is executed immediately after the lotus gesture to depict the meaning in the whole phrase *lotus-eyed*.

These gestures are a typical example of metonymy guiding meaning, both in the referred phrase and in gestural meaning construction. As will be discussed below, meaning in the gestures being analysed here is driven by what Mittelberg postulates as two different kinds of metonymy, internal and external (2008, 2009, 2010b, 2013, all emphases in the citations below as in original). While different kinds of contiguity relations account for these, similarity is also operative in varied intensity.

Here again, Mittelberg (2010b, 2013) draws from Jakobson's differentiation of metonymy into internal and external metonymy, explaining how these are guided by inner and outer contiguity relations respectively. Applying Peirce's sign model of iconic and indexical object-sign relationship, Mittelberg observes internal metonymy in gestures with a predominantly iconic Ground, whereby, inner contiguity relations based on similarity are operative. External metonymy is seen in gestures with a predominantly indexical Ground, determined by various kinds of external contiguity relations. Ground is defined as Peirce's "metonymically profiled quality of an Object that is portrayed by a Representamen" (Mittelberg, 2013:764)¹³. It may be noteworthy to add here that Peirce's understanding of an Object (Mittelberg, 2010b:120, 2013:764) corresponds essentially to Müller's mimetic objects with the addition of possibilities, goals and relations. Thus, what are evident as properties or aspects of these objects in gestures, are their metonymically profiled qualities.

¹³ Mittelberg uses the capitalized form when referring to the notions from Peirce's sign model (2013:763)

1.3.1.1 Internal metonymy in gestures

We saw the characteristic shape of the object lotus and the eyes in the gesture for *lotus-eyed*, the material of the brocade border, its shape when draped in specified ways, and the action of draping the sari in the gestures used for the phrase *brocade saris*. We saw meaning in the gesture for *onto a tree climbing* being depicted in terms of the spatial orientation of the tree, its vertical shape and the movement trajectory of the act of climbing onto the tree.

In doing so, these gestures, in cognitive semiotic terms, the Representamen, portray a metonymically profiled quality of an Object, here the mimetic objects at hand, by way of reduced gestalts of the objects or actions. The features gestures here depict are, going by Mittelberg's (2010b:119; 2013:765) definitions, abstractions of partial aspects or parts of the objects, thus, reflecting part-whole relationships within an object and inner contiguity relations. Part stands for the whole object, or a whole for the part, or a part for another part within the whole. Thus the eyes stand as part for the whole, namely the cowherd maidens, or the action of draping a sari and the movement trajectory of the climb as reduced gestalt of the depicted actions. Or there is the part, namely the shape of the eyes, that stands for another part within the whole, the eyes. One thus sees internal metonymy in these gestures in conjunction with inner contiguity relations. As Mittelberg defines, the hand, or even the whole body, can represent an object, event, action or idea by way of shape, size, movement, internal relations or structure.

Two different degrees of iconicity are also evident in some of these gestures. The hand representing the lotus flower reveals '*image iconicity*' (Mittelberg, 2008:132) with a 'high degree' of iconic resemblance to the object of reference. Mittelberg coins such gestures an '*IMAGE ICON*' (2013:767). The iconic resemblance to the shape is based on a perceived similarity to the lotus flower as it appears in nature in both its phases, as bud and fully blossomed. Meaning thus guided by parallelism, which is essentially similarity, is presented by way of the form features, with fingers being initially held together at the fingertips and then opened and spread out in various directions. Incidentally, the names given to the conventionalized hand forms used here, *mukula* and *alapadma*, mean bud and fully-blossomed lotus, respectively. The names are themselves derived based on an iconic resemblance, as Figure 19 in Chapter 2 to follow illustrates. They are, however, being used in the sense of an iconic object-sign relationship in this context only. They can carry several

other meanings in other usages (cf. Ramesh, 1982, 2013), where iconicity in this sense is not evident. As I will discuss below, this cognitive semiotic analysis has implications for understanding not only the notion of similarity, but also of hand gestures used in the Indian performing arts context.

Another aspect of similarity evident in the same gesture is Mittelberg's "*metaphor iconicity*" (2008:132, 139, 2013:769), whereby the object-sign relationship is "heavily iconic", and the gesture a "METAPHOR ICON". In highlighting a parallelism, such a gesture reflects what is defined on this account as the characteristic that two concepts share at the conceptual level. The shared characteristics are conceptually established between a concrete entity represented in the sign and an abstract idea that constitutes meaning. The lotus flower is the concrete entity and the meaning in the phrase *lotus-eyed*, referring to the beauty of the cowherd maidens, is the idea. They share a characteristic, namely, shape.

We also discern here how local and basic meanings are metonymically established. The round shape as the metonymically abstracted aspect of the concrete entity flower is the basic meaning that guides gesture formation, and the meaning it takes, thus referring to the local intended meaning in the phrase. Putting it the other way, in the explicit gestural meaning construction here, the local meaning requires the comparison of the eyes with the shape of the lotus flower. Therefore, in the depiction of eyes, which in turn refers to the cowherd maidens at the level of intended contextual meaning, the gesture for the lotus flower with its fully blossomed round shape is used. In doing so, meaning depicted reveals a cognitive semiotic conceptual process with the round shape as a characteristic property of an entity in the concrete world, taking on basic meaning. The gesture directly refers to the property to which the eyes and thus the idea of beauty is likened. In cognitive semiotic terms, while Mittelberg's notion of *image iconicity* guides basic meaning, *metaphor iconicity* guides the notion of local meaning. Finally, it is again the metonymical reference to the cowherd maidens by way of their eyes at the contextual level of meaning. In terms of specifying the canon of typical classical compositions that have been created specifically for dance, one sees how there is already the metaphoric-metonymic reference in the accompanying verse. And yet, it is not just in the framework of poetic stylisation or aesthetics that metaphor and metonymy are operative, as Mittelberg (2010b) cited above rightly notes. They are associative modes that guide meaning in the first place, underlying which are the semiotic modes of similarity and contiguity. It is interesting to note that, in practise, gestural/corporeal meaning construction

can be very varied, the gesture variations as will be further presented, revealing, similar to the examples here, both mimetic and cognitive semiotic processes to varying degrees.

Essentially, one sees in these gestures, how, to put it in Mittelberg's terms, iconicity and metonymy "jointly drive form and meaning construction" (2013:767). Also evident is how metaphoricity, by definition based on similarity, involves "metonymy first" (Mittelberg and Waugh, 2009). Then the gestural form, and thus, the meaning conveyed, refers to a metonymically profiled object feature, here the shape. In other words, the shared characteristic is first and foremost a matter of metonymic profiling or abstraction, based on which "a perceived or construed similarity" (Mittelberg, 2013:764), involved in the metaphoric aspect, is established. A shape, as seen in the lotus gesture, is in this sense, a metonymically profiled feature, and is the perceived shared characteristic, finally referring to the notion of beauty. One thus essentially discerns how, underlying the gestures with predominantly iconic Ground, there is not only an iconic object-sign relationship, but a meaning that at the basic level is driven by internal metonymy with similarity as primary semiotic mode.

1.3.1.2 External metonymy in gestures

One also discerns adjacency, proximity, contact and so forth in the gestures referring to *lotus-eyed*, *brocade saris* or *onto a tree climbing*. In doing so, these gestures reveal various outer contiguity relations and, thus, the manifestation of external metonymy. As cited earlier, Mittelberg (2010b, 2013) sees external metonymy in gestures with predominantly indexical Ground, where the sign stands in an indexical relationship with the object, which Mittelberg defines elsewhere as being based on a "factual (physical or causal) connection between the two" (2008:127). In gestures several outer contiguity relations that emerge from such an understanding are thus identified. These could be contact, adjacency, impact, instrument, source or cause-effect. As is further explained, they could also exist between gesture and accompanying speech, or the gesturing hands and "imaginary traces, objects and space as such" (2010b:122f). Based on these various kinds of outer contiguity relations, several kinds of gestures with external metonymy are distinguished and given different labels. These are reflected in the explicit meaning construction in Indian performing arts as well. I will look at all of these to enable an insight into the broad spectrum of possible indexical object-sign

relationships gestures reveal, and what they tell us about baseline cognitive semiotic mechanisms that guide meaning.

The RH depicting the flower in the lotus gesture is placed on the LH held with flat-shaped *patāka-hasta* that depicts the leaf. From the perspective of external metonymy, an outer contiguity relation in terms of proximity as contact is being used, on the one hand, to depict the flower as a whole. On the other hand, the leaf depicted is not a referential meaning, i.e. not referred to in the verse. In a sense, a spatial proximity of signs is operative here which, as Mittelberg explains, enables the contextualization of one sign through the other. The leaf is contextualized as such by way of the proximity established between the hands. In another sense, the leaf being depicted adds meaning to the depiction of the lotus flower, by adding another detail that is perceived with regard to it. These explicit gestures are finally the means by way of which meaning is communicated. Adding details helps disambiguation on the part of the observer. Or the flat leaf visually highlights the round shape of the flower. Of interest here is that there is a perceived outer contiguity relation existent between flower and leaf, that constitutes meaning as a perceived spatial property.

In other instances, there is a temporal proximity of signs, also defined by Mittelberg. The gesture for eyes, as has been analysed, is executed immediately after the lotus gesture to bring forth the meaning intended in the phrase *lotus-eyed*. In another variation conveying the same meaning, illustrated in the LH depicts the fully blossomed lotus flower by way of the *alapadma-hasta* and in representing mode, while the RH, in a *hasta* called *kartarimukha*, traces the corners of the eyes. The depiction of the meaning in the phrase, the local meaning, is a matter of executing these gestures sequentially or simultaneously, i.e. in temporal proximity. This also a typical example for Lausberg's (2003) observations discussed in the section on mimetic modes, where the LH is in representing mode and the RH in an acting mode. Here again outer contiguity relations contribute to gestural meaning depiction.

At the same time, the hand tracing the eyes in these gestures is held near the eyes, revealing adjacency as an outer contiguity relation. This reflects a gesture that Mittelberg defines as BODY PART INDEX (2013:771). The hands could indicate one's own body part by way of adjacency, contact or proximity in general, whereby the body part stands for the referred object. Such a referred object could also be more abstract, such as in the example recorded by Mittelberg. The speaker places BH on her temples to metaphorically refer to the head as a

‘site’ or ‘CONTAINER’¹⁴ for the notion of “*knowledge*” (2013:771). As Mittelberg explains, there is external metonymy established here by way of outer contiguity relation between the hands and the body part head, on the one hand, and ‘the outside of the head and its inside’, namely, its content, on the other hand. The gesture for *stealthily*, illustrated in Figure 4, seems to relate in this way to an abstract notion. One sees how the hands are held together, enclosing each other alternately near the chest. Such a proximity of hands to chest is commonly used to denote desires, fear, something secretive, etc., which, applying Mittelberg’s explications, would be an outer contiguity relation in terms of a BODY PART INDEX to denote something inside the heart. The particular hand configurations in the gesture for *stealthily* depict something secretive, that can be interpreted here as a desire – of the heart – to steal the sari. Or that one wants to keep the intention to oneself, not disclosing it, but keeping it enclosed within. It becomes clearly apparent how there is a whole conceptual process underlying such traditionally handed down gestural interpretations, which takes advantage, in cognitive semiotic terms, of contiguity relations.

The hands held near the waist in the gesture for *brocade saris* reflect yet again a BODY PART INDEX that adds meaning to the act of draping depicted here to denote sari. It brings in another feature as meaning, namely that the sari is tied around the waist, the outer contiguity relation of proximity indicating this. At the same time, the hand configurations seen therein, namely hand form and its movement depicting the action of draping the sari, reflect, by definition, a HAND/OBJECT INDEX (Mittelberg, 2013:772). Such gestures are defined as also revealing outer contiguity relations of contact or adjacency, but to establish a relationship between hand and an imaginary object that enables a metonymic inference of supporting, holding, placing or otherwise manipulating the imaginary object. In constructing the meaning in the gesture by way of executing the described action of draping or tying, the *catura*-hands not only depict the gold border as analysed earlier, but also the act of holding the imaginary sari while draping it. In this sense, even the hand moulding the shape of the lotus flower, as analysed under mimetic modes, reflects the holding of the imaginary flower, revealing a gesture that is an HAND/OBJECT INDEX.

As another INDEX that accounts for the acting mode, but differentiates actions performed on or with physical objects from those on or with tools, Mittelberg distinguishes a HAND/TOOL

¹⁴ This capitalization is a convention in the Conceptual Metaphor Theory discussed in Cognitive Linguistics.

INDEX, where the hand depicts iconically the hand shape or grip and a typical “motor routine” (2013:775) when using a tool. When such actions are depicted explicitly in Indian performing arts, a stylized or conventionalized hand form or *hasta* is normally used in conjunction with a movement that reflects the referred action as it is executed normally in everyday life (cf. Ramesh, 2013). One discerns thereby, that finally, whether with an object in general, or a tool specifically, the hand is seen to manipulate the imaginary object or tool in question, with the hand shape reflecting the grip having to do with its shape, and the depicted motor routine with the kind of action one performs with or on an object or tool. This is evident in the gesture depicting the saris most clearly, both in terms of the draping action and the specific hand form of holding the sari. An iconic grip and a reduced gestalt of an action together guide gesture formation, and in doing so, constitute the basic meaning.

It is interesting to note how similarity guides gesture form and thus the basic meaning depicted, only that it is not similarity to a shape as such, but to how the object is held based on its shape, and similarity to the actions on and with the object in question. Essentially, one can specify how local and basic meaning are driven.

Some of the gesture examples reveal other categories of an INDEX, that, given Mittelberg’s definitions, reflect the tracing/moulding Modes of Mimesis in terms of outer contiguity relations. One sees in the gestures for *taking away* in Figure 5 and *onto a tree climbing* in Figure 6 how, initially, both the hands and then the RH trace a path which was seen to be the upward movement trajectory entailed in the climb. In this tracing gesture in terms of Müller’s mimetic modes is an example for what Mittelberg coins a HAND/TRACE INDEX (2013:774), where hands trace lines or project trajectories and, thus, draw attention to these features. Evident is how a basic meaning, here the spatial aspect as a property of the action being referred to, is established by means of outer contiguity relations. These relations, in as much, do not reflect a perceived property, as is the case in the earlier example with the lotus flower on the leaf. They rather define the relations the hands establish to imaginary traces.

In the gesture example described in detail when discussing mimetic modes in the earlier section, where the flat *patāka* hands depict the flow of water, a variation for tracing or even moulding gestures, called a HAND/PLANE INDEX, becomes evident. Here one discerns how outer contiguity relations are established between the “flat hands and the surfaces they pretend to be exploring” or “volumes they seem to be touching or creating” to put it in context

to Mittelberg's definitions (2013:774). Regarding the gesture for water, it is not so much in terms of exploring the surface of water, but rather creating the wavy volume. The *patāka* hand form is also often used to touch objects or mould the voluminous contours of an object. Even the *alapadma* hand as in the lotus gesture, reflects a voluminous moulding in this sense. Such outer contiguity relations between hands and imaginary objects are also established in a variety of the HAND/OBJECT INDEX that Mittelberg differentiates as HAND/OBJECT INDEX 2-SIDED (2013:772). Gestures in Bharatanatyam would, for instance, depict a wheel by holding a wheel on both its sides and executing circular movements with the hands or a street, the frame of a door or window, by tracing the sides of a street or door with the flat *patāka* hand form (cf. Ramesh, 2013). These two categories of INDEX by definition reflect how hands, or even fingers, depict, yet again, a property of a referred object, such as shape and size. This is, however, not by way of an iconic depiction as in the representing mode, but rather by referring to the contours by holding, tracing or moulding an imaginary object on its sides, and in doing so, refer to it in an indexical sense.

In all these above instances of INDEX, outer contiguity relations are the means of referring or drawing attention to object features. And these object features are, as discernible both in Mittelberg's definitions and the above analysed examples, specific properties. They are what we saw in the discussion in the earlier section to be physical properties in the concrete world, such as a characteristic shape, spatial aspect, action or movement. I think outer contiguity relations, as discussed here tell us the manner in which hands depict basic meaning. They guide gesture formation, the aspect that Mittelberg looks into in defining metonymy in gestures. At the same time, another aspect becomes discernible. While external metonymy based on outer contiguity relations might guide how gestures establish meaning, meaning itself, at the basic level, is consistently a matter of metonymically profiled object features, and essentially driven by internal metonymy and inner contiguity relations, as was seen in the corresponding subsection above.

There are some more instances where the spectrum of outer contiguity relations that Mittelberg identifies tell us how meaning is referred to or depicted. In other gestures not being analysed here, outer contiguity relations as causal relationships can underlie how meaning is depicted. For instance, in a more elaborated narrative depiction of the story at hand, one depicts how the cowherd maidens get into the river for a bath. Here, a shudder as caused by the cold water can add meaning.

Finally, Mittelberg's INDEX AWAY FROM BODY (2013:771) is defined as being based on the relationship established between the hand/body part and object of reference, whereby hand or another body part points at something concrete within the visual field or at an imaginary location, or at something abstract as if it were a concrete entity within the visual field (Mittelberg, 2008:128; cf. also McNeill, 1992:18; 2005:12). Such an INDEX is evident also in several gestures that depict other phrases in the verse that have not been analysed here. For instance, to depict the word "you" in the verse addressing the subject Krishna, either the flat *patāka* hand, or another conventionalised hand form called *suchi* (Ramesh, 2013:317) with outstretched index finger, is used. This latter is a classical universal pointing gesture as such. As an INDEX AWAY FROM BODY the hand is moved from CC in front of the chest forwards towards peripheral gesture space, in a curvilinear manner with palm finally arriving with an upward orientation, the fingertips pointing in the direction of the person addressed. Even if such pointing gestures are considered by Mittelberg as having least iconicity, one can define them as revealing similarity to an everyday pointing action. In the dance gestures they are stylised forms of an action the hand performs in instances of pointing, the reduced gestalt of an action as such. Iconicity or not, we see how similarity is thus in play.

The above discussion exposes how the wide spectrum of metonymic mechanisms postulated by Mittelberg are operative in the explicit gestures used in Indian performing arts. We also discern how outer contiguity relations are seen to enable variations in depicting meaning or can add meaning. The gesturer takes advantage of these in enabling varied depictions and bringing richness to presentations. Hands revealing such relations can depict the perceived spatial properties associated with objects such as the perceived proximity of flower to leaf. Or they establish proximity to a body part to add or specify the meaning being depicted, draw attention to spatial aspects such as trajectories, indicate object shapes and sizes, or depict other kinds of proximity such as contact to underscore, for instance, sitting on the tree. As mentioned above, outer contiguity relations are seen to guide gesture formation by referring to or drawing attention to object features.

In general, we see how the various kinds of contiguity relations, inner as well as outer, shed light on mechanisms underlying the depiction of meaning. They not only indicate how mimetic modes come into being, but tell us about how meaning is established in gestures. By Mittelberg's definition, inner and outer contiguity relations are operative respectively in the

two aspects of metonymy, internal and external, attributed to which are iconic and indexical Ground mechanisms. How an object feature is depicted in the gesture could be indexical, or for that matter iconic. These two mechanisms tell us, in as much, about various kinds of object-sign relationships established in any given gesture, and in doing so about the various cognitive semiotic mechanisms underlying gesture formation.

At the same time, the discussion essentially through the lens of contiguity relations exposes how metonymy understood as guiding gesture formation can be one aspect and how it drives gestural meaning at a basic level another. Then, the depicted meaning itself, nevertheless, consistently reveals specific physical properties as discussed in the previous section. What is being depicted at a basic level is thus a matter of metonymic abstraction of object features. Of interest is how similarity as an associative mode is apparently the guiding factor for what becomes meaningful, embedded in all cases with varying degrees of intensity. Thus, while underlying meaning depiction in gestures are, as evident, cognitive semiotic conceptual process driven or guided by what Mittelberg defines as the two “fundamental semiotic modes” (2013:757), similarity and contiguity, one discerns an interesting difference at the same time, as I will examine below.

1.3.2 Similarity and contiguity – the fundamental semiotic modes

That mimetic objects are depicted by way of the hand taking on an iconic resemblance to aspects of these in terms of, for instance, shapes or actions, is the most obvious and general statement one can make about gestural meaning construction. These gestures have, as Mittelberg explains, a predominantly iconic Ground with internal metonymy based on inner contiguity relations in play. On the other hand, there are the gestures with predominantly indexical Ground guided by external metonymy and outer contiguity relations. Based on Mittelberg’s account, not only the classical pointing gestures fall under this category, but all gestures that refer to objects by way of some form of outer contiguity relation, as seen above. Finally, these gestures also refer to one or other object features. There is still the reference to shape, size, spatial aspects, action, movement, etc., which, in cognitive semiotic terms as discussed in this section, are metonymically profiled features or reduced gestalts of objects or actions; by definition, features of objects and/or actions, highlighted in the gestures by way of reductionism and partial representation. Thus, whatever the means by way of which an object-sign relationship is established, depicted is essentially what bears resemblance to object

features, revealing the role of similarity as semiotic mode. In Mittelberg's terms, these are gestures with a "muted indexical Ground" (2013:775).

The gestures thus reveal what Mittelberg (2010b:120) further observes, namely, that similarity/iconicity and contiguity/indexicality, rather than mutually excluding each other, are in a distinct hierarchical relationship. They should be understood as constituting a continuum along increasing or decreasing degrees of iconic and indexical Ground (2010b:136, 2013:776) along which the various iconic and indexical gestures find their place, from pointing towards an object, at the one end of the continuum, to image icons, at the other end. According to Mittelberg, "iconic and indexical ground mechanisms may be regarded as two routes of abstraction competing in corporeal/gestural sign creation" (2013:765). To what degree internal or external metonymy are in play thus needs to be analysed case by case. It finally rests, as Mittelberg observes, on several contextual factors, such as accompanying verbal expression, neighbouring gestures and gestural form (2013:779). At the same time, gestures are considered by both Müller (2010b) and Mittelberg (2010b:113) as being inherently indexical, considering they refer to something.

As the above analyses illuminate, these observations hold for how meaning is conveyed in gestures. Iconic and indexical mechanisms describe the object-sign relationship evident in gestures, i.e. the gesture reveals an iconic or indexical relationship to object. However, a finer distinction is discernible when it comes to meaning itself that is conveyed, i.e. what gestures refer to as basic meaning. Even if iconic and indexical ground mechanisms are seen as two routes of abstraction in gestural sign creation, similarity and contiguity relations seem to better define what guides gestural meaning at this level. And given gestures, whether predominantly iconic or indexical, refer to physical properties as metonymically profiled aspects, it is similarity in interaction with both inner and outer contiguity relations that is essentially pervasive, as the discussion on metonymic mechanisms listed above reveals.

Inner contiguity relations in conjunction with similarity in varying grades of iconicity were seen to be the guiding factor in gestures with predominantly iconic Ground. In a similar manner, outer contiguity relations in interaction with similarity are evident in gestures with predominantly indexical Ground. Even if establishing meaning could be by means of various outer contiguity relations, such as proximity, adjacency or contact, the hands continue to depict some aspect or feature that bears resemblance to physical properties of objects, actions

or events. Thus, we see, for instance, in the hands held in proximity to or adjacent to the waist while referring to the brocade saris, both how a sari is held and the tying action around the waist. Not only does the grip, that is by Mittelberg's definition iconic, bear similarity to holding a sari. There is similarity guiding the draping action as well. It is not necessarily iconicity, but a similarity to an action, revealing essentially its movement trajectory, that guides meaning. There is, in this sense, similarity involved also in the movement, trajectory and spatial orientation of the gesture for the climb onto a tree or the wavelike tracing of the movement of water. Even where temporal and/or spatial proximity prevails between signs, as in the gestures for *lotus-eyed*, the meaning to be conveyed is shape, here with each hand in high iconic resemblance to the objects of reference, as for the lotus and the leaf, or schematically resembling, as with the eyes. Interestingly, even the outer contiguity relations such as adjacency or contact in depicting the lotus flower on a leaf, are a perceived property of the flower, and thus based on similarity.

Similarity is thus seen to be the basic guiding factor for meaning. And as evident, need not pertain to iconicity as such. Given Mittelberg's definitions, the term iconic, iconicity or icon is used when the hands take on shapes, as seen in the lotus gesture. These reveal the representing Mimetic Mode. Even when it comes to imitating their own actions, as in the HAND/TOOL INDEX, which is an example of a gesture in acting Mode, Mittelberg distinguishes between the iconic hand shape or grip and a typical motor routine that was cited above. And yet both involve similarity. One may say, while similarity is seen to guide meaning conveyed in the gestures, outer contiguity relations are used to present the similarity thus established. It is in this sense that meaning is indexically anchored. And such a definition holds good for such gestures with outer contiguity relations.

This understanding would also account for the tracing/moulding gestures. These gestures were seen above to be defined by Mittelberg's HAND/PLANE INDEX and HAND/TRACE INDEX. Müller (2009:514f) attributes them, on the one hand, to external metonymy, based on the adjacency relations between hands and imagined objects. On the other hand, considering these gestures present parts or aspects of an object that stand in an inner part-whole relationship, as has also been observed in the listing above, they are attributed to synecdoche, which in Jakobson's understanding is internal metonymy. At the same time, the discussion exposes how it would account for considering tracing/moulding gestures as both acting and representing modes, as discussed earlier with reference to mimetic modes.

In general, the cognitive semiotic operations of internal and external metonymy listed above relate essentially to Müller's four modes subsumed under acting and representing, underscoring Müller's analyses that the Modes of Mimesis reflect cognitive semiotic processes underlying gestural meaning. Mittelberg herself attributes the four Modes of Mimesis to iconic gestures and internal metonymy. These modes enable the establishment of "a different kind of iconic Ground" of the same object (2013:765) and, thus, profile different aspects of the object, as Müller also observes. Most obvious is the iconic similarity or internal metonymy in the representing mode where the hand becomes an object. However, regarding the other modes, there are different attributions, as seen above. Tracing and moulding modes or even acting modes are by Mittelberg's definition seen in gestures under external metonymy.

Thus, it appears that mimetic modes need not be attributed to iconic gestures only, but nevertheless to internal metonymy, given this appears to be pervasive in gestures, whether they reveal predominantly iconic or indexical Ground. At the same time, it need not be a different kind of iconic Ground, but the same aspect of an object, depicted, however, in different ways, both in terms of mimetic modes and different metonymic operations. A shape can be depicted both by means of iconicity/similarity and indexicality/contiguity. But similarity is pervasive in both mechanisms at the basic level of meaning.

What becomes essentially apparent, is how similarity rather than iconicity better defines what guides basic meaning. Regarding the performing arts convention, it calls for a differentiation between the term *hasta* and the term *mudra* – terms often used interchangeably when referring to gestures, leading to misconceptions that every hand form has a meaning. The term *hasta*, literally meaning hand, and is used to categorise the hands forms conventionalised due to practise. Such hand forms themselves do not carry a meaning. They can be used in both narrative and non-narrative dance (Ramesh, 2013). A *hasta* is therefore best defined as a hand form rather than a gesture based on the linguistic analysis presented here. I would say it becomes a gesture when it is used in the various gestural form configurations, and as necessary in either of the functions. And the term *mudra*, meaning a stamp in the literal sense of the term, rather defines the gesture when the hand form takes on a specific meaning, and this in rather an iconic way.

It is again best illustrated in the gestures for lotus analysed above. The conventionalized *hastas mukula* or *alapadma* used for the lotus gesture reveal an iconic resemblance to bud and fully blossomed lotus flower respectively, based on which they derive their names. However, they take on the specific highly iconic meaning only in the instance where they are used to refer to the entity lotus. There is the instance of a *mudra* here. There are several other meanings they can take on, such as a mirror or ball with the *alapadma* (cf. Ramesh, 2013), or a mouse with the *mukula hasta*. The resemblance underlying this abstraction is based then on a lesser degree of iconicity, but nevertheless similarity. In yet other instances, the *alapadma* hand, for instance, need not relate to any concrete entity, but depict abstract notions such as beauty. For this purpose the *alapadma* hand is placed in front of the chest, PL, with slightly shaking or rotating movement at the wrist. There is no object-sign relationship established with the external world here. But what such a gesture and thus meaning would bear similarity to, can be analysed, given the placement near the chest and the movement thereby, and based on the discussion regarding BODY PART INDEX. It must refer to what is within the body part, in the proximity of which the hand is placed. The form-based and cognitive semiotic approach does not provide tools for analysing felt qualities. But the movement indicates a similarity to what is felt in the heart when the notion of beauty is experienced.

Summing up, the cognitive semiotic analysis presented here clearly calls for defining the mechanisms underlying gestural meaning in terms of the two fundamental semiotic modes similarity and contiguity. While the two notions of metonymy, internal and external, underlying gestural form and meaning, are defined by Mittelberg based on the predominance of iconic or indexical Ground mechanisms in gestures, it illuminates the role of metonymy in conjunction with similarity and contiguity relations for meaning. Thus even if iconic and indexical Ground mechanisms are considered to be the two inherent modes of abstraction, Mittelberg's definition of similarity and contiguity as the two fundamental semiotic modes, holds a more basic relevance. Gestures reveal that they can be understood as the two *inherent* mechanisms that guide meaning, whereby clearly similarity in conjunction with inner and outer contiguity relations is operative. And here as well, the various contiguity relations are the means by way of which meaning intended is established. They guide gestural form features. But the meaning itself at the basic level continues to reveal aspects or properties of mimetic objects, such as the shape, spatial trajectory or movement/action. These are by definition metonymically profiled features based on reductionism or partial representation, a metonymic abstraction in other words based on similarity.

1.3.3 Gestural meaning – a cognitive semiotic conceptualisation of physical properties

Bringing this section to a close and recapitulating, the discussion above sheds light on conceptual processes from a cognitive semiotic perspective in terms of object-sign relationship. We started with the observation that the Modes of Mimesis are, according to Müller, creative processes that bring forth conceptualized forms of reality mediated by processes, such as conceptualization and visible bodily movement (2010a:183, see also Müller, Bressemer, and Ladewig, 2013). Müller's mimetic modes in conjunction with Mittelberg's taxonomy of various metonymic operations were seen to shed light on cognitive semiotic conceptual processes underlying gestural meaning construction that are primarily metonymic.

The discussion, while shedding light on metonymic mechanisms that guide gestural form, also exposes something basic about the associative semiotic modes. We essentially see how similarity in conjunction with inner and outer contiguity relations best defines how they function in various ways and across iconic or indexical ground mechanisms. The cognitive semiotic processes of conceptualisation can, in effect, be understood as guided by these semiotic modes. They are the inherent guiding principles that enable both meaning *and* the various ways it is conveyed, which is characterized by the mimetic modes. In other words, they guide both form *and* meaning. Gestural meaning construction reveals how the form that pertains to physical properties and evident in gestural form parameters is derived based on similarity and contiguity relations. It is the shape or an action based on similarity, or a spatial relation based on contiguity relations that give gestures form and, thus, meaning. And even if these are seen to constitute extended notions of meaning by way of metaphoric extensions and, in Mittelberg's words, "additional semantic leaps" (2013:769), in terms of basic meaning itself, we see that it is based on a metonymic abstraction of physical properties evident in the concrete world, such as shapes, various spatial aspects and movement. Here we, in as much, discern similarity as the primary semiotic mode.

Putting the mimetic and cognitive semiotic processes together, it becomes evident how the conceptualized forms of reality that Müller identifies in gestures and were seen to constitute basic meaning are the outcome of mimetic/cognitive semiotic processes. I had cited earlier Müller's (1998:125) postulation that gestures, as in mimesis in fine arts, reveal a rudimentary ability to analyse form that enables extracting meaningful elements from the perceived world

to transform them to perceivable objects through different Modes of Mimesis. Such a rudimentary ability must, in cognitive semiotic terms, lie in the pervasive yet fluid role of similarity and contiguity, not only as essential structures of the object-sign relationship as laid out above, but also as fundamental semiotic modes (Mittelberg, 2013:757). Whereas Mittelberg defines metonymic mechanisms in their role of enabling inferences to be drawn on the part of the onlooker or listener and thus metonymy would be operative from an observer perspective, in terms of the explicit meaning construction through gestures in Indian performing arts, I would rather look at how metonymy defined in terms of inner and outer contiguity relations must guide the gesturer firstly. The gesturer apparently takes advantage of an inherently available resource or ability of metonymically abstracting features of objects, actions or events of the concrete world, which as seen are their physical properties, guided by the two fundamental semiotic modes. While this is a notion that needs further examination, we do see how it is the gestural form features themselves, that indicate how similarity in conjunction with inner and various outer contiguity relations must play a role in extracting the identified meaningful elements, and presenting them in gestures.

At this point, there is another process that is evident but not discussed explicitly in the form-based linguistic analysis, but implicit in Müller's definition of conceptualised forms of reality cited earlier, namely the "depictive possibilities of visible bodily movement" that also mediate conceptual processes (2009:512). The explicit construction of meaning through hand gestures in Indian performing arts enables an examination of just this, given these possibilities are used creatively and to their utmost potential, revealing thereby what I would like to call a *kinetic* conceptualisation of meaning, as the next section will lay out.

1.4 Gestural meaning – a kinetic conceptualisation of physical properties

We have seen in the discussion hitherto, how shapes, spatial aspects and movement are physical properties that are discernibly meaningful elements, by way of which mimetic objects in their wide range of definitions as postulated by Müller, get referred to. In doing so, they constitute what we have seen to be basic meaning, whatever the intended final meaning may be. Drawing from other gesture examples from the teaching sessions mentioned at the beginning of this chapter, the analysis being presented in the following, while highlighting the central observations of Linguistic Gesture Studies discussed above, illuminates how gestural meaning in terms of characteristic shapes, spatial aspects and/or movement of referred entities

emerges only when movement is executed in specific ways. In doing so, it exposes a more fundamental relevance of movement.

Müller (2010a:150) notes in terms of gestural mimesis, how the hands reveal the highest flexibility in movement and form in comparison with other articulators. As the analysis being presented here reveals, this is specifically taken advantage of in the kind of explicit meaning construction hands are used for. That *how* movement is executed matters to bring forth meaning, becomes particularly evident with students of dance who have to first train the forming abilities of the hands, until the execution of the gestures bring forth the intended meaning, while simultaneously attaining a quasi *spontaneous* quality. This is the aesthetic notion attributed to gestural depiction in Indian performing arts, necessitating certain precise and clear methods of executing gestures on the part of the student. Training in such a use of gestures is, therefore, a long drawn out process. And as my observations and analysis point to, it is movement that brings forth meaning intended, wherein what can be coined a *kinetic conceptualisation* becomes evident.

In this context, as observed earlier, I consider it important to differentiate between a *hasta*, the term that denotes the conventionalized hand forms, and the term gestures, which is generally used to refer to these hand forms themselves. As the linguistic analysis being presented here underscores, a *hasta* becomes a gesture when it is used in specific form configurations or parameters to bring forth meaning. We have seen in the analysis at the beginning of this chapter, that these configurations are the same as those identified in spontaneous co-speech gestures. There is, of course, the other usage of *hastas*, that is for purely aesthetic purposes of movement without narrative meaning (cf. Ramesh, 1982, 2013). In this usage, it would still be a gesture if applying the conventions of Laban Movement Analysis, where any movement of a limb is called a gesture. Such a usage is not the subject of analysis here. But as we will see, it is movement nevertheless that is primary and central in differentiating for what purpose hand forms are used. And how it is executed, is all the more important if meaning is intended.

I have chosen two examples for the purpose of the analysis here. They exemplify how shape, in one case, and spatial aspects, in the other, that are central to bring forth meaning intended in the gestures, are a matter of what I have termed kinetic conceptualization. That kinetics, or movement execution, is central, is particularly evident from the specific instructions and corrections the student needs in the learning process, as well as the several attempts thereby.

The analyses not only illustrate what is needed in movement terms to execute the gestural meaning, but also shed light on the relevance of movement in a fundamental way. I will be taking not just manual gestures, but gestures of other body parts or the whole body into consideration as well. But will, however, yet again, look at their referential function only at this point, not taking into account eventual overlapping expressive or appealing functions.

1.4.1 Kinetic conceptualisation of shape

I present a different gesture variation for the phrase *lotus-eyed* to analyse the conceptualisation of shape. The variation presented earlier featured the flower together with the leaf on which it appears. Another typical gesture for presenting the lotus flower involves an upward spiralling movement of BH, out of which the hands take on the characteristic round shape of the flower. In this case, the shape of the flower is depicted with both the hands, whereby the wrists are held together, and the fingers, first held together for the bud, open and spread out like in the first variation to depict the fully blossomed flower. This gesture variation highlights the flower's emergence from the depths of the water bed, an event perceived in the concrete world.

Let us look at the kinetics involved in this depiction, exemplified by the series of attempts by the student learning the gestures, as illustrated in the following Figures 7 and 11 with corresponding tables that illustrate the Description of Form for the hand configuration for Figures 7 and 9 to indicate how after corrective measures, the hand gesture was subsequently executed. The cues for the corrective measures appear directly under the images.

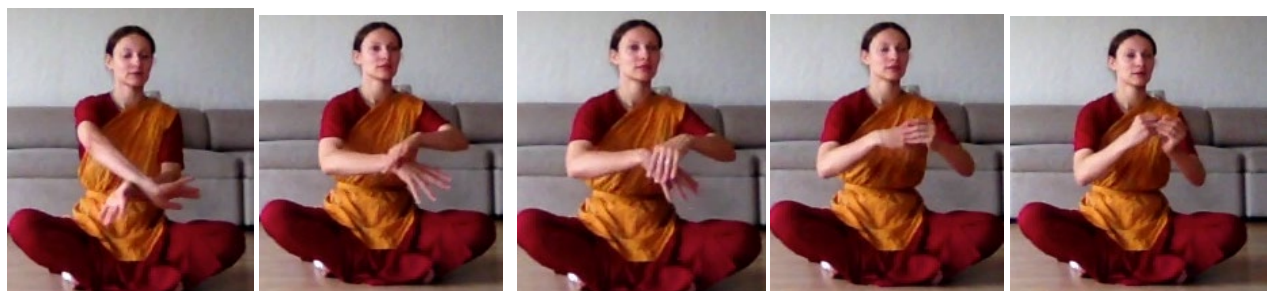


Figure 7: *lotus* – Spiralling – incomplete circles during spiralling
Instruction: ‘from there...’ and movement is shown while singing a verse
Instruction after this movement: ‘one circle...’

Description of Form:

Hand form/handedness	Orientation	Position	Movement
BH PO but fingers not extended fully > Closed palm with flexed fingers	PAB H > PD V > PTB H > PL	C-L, medium reach > CC medium reach	Upward spiralling movement with right lower arm placed across left lower arm > LH over right arm and then hand > hands coming together at fingers

The initial placement of the hands reveals how forearms are placed across each other, right over left at C-L in gesture space. After this, the spiralling movement takes place with the wrists not in contact with each other all the time. Finally, they go apart as the fingers come together at CC with palms facing the body. The spiralling movement is not continuous, nor enables a smooth transition out of the spiralling into the final hand shapes as described for this gesture variation at the offset above, which would depict the meaning intended here. The hands loosely circle back and forth, prompting the corrective instructions ‘from there...’ and ‘one circle...’. As the analysis illustrates, it is the incorrect initiation itself, coupled with the wrists not held together, that did not bring forth the necessary form configurations for meaning. Once initiated correctly, the movement usually runs smoothly, as the next figures illustrate.

Figures 8a-c illustrate the corrections being made regarding the initiation with corresponding instructions being given while the movement is being shown as well as executed.



Fig. 8a: initiation – ineffective placement
Instruction: ‘left hand is forward’



Fig. 8b-c: Initiation – corrected placement, incorrect palm orientation
Instruction: ‘Yes,.... now keep it firm’
(palms spread out to PAB – see Fig. 13)

One can see in Figure 8a how the student is placing the RH over the LH, which again did not bring forth the spiralling as required. Observations correcting this movement over several years of teaching have exposed how placing the LH over the RH at initiation and rotating

them in an anti-clockwise direction brings forth a smooth and continuous spiralling. Therefore, the student was instructed ‘left hand is forward’. However, when the palms were held laterally and vertically downwards in this position, as seen in Figure 8b, there was not enough firmness/tightness in the hands and wrists to start the movement. The instruction that followed was ‘now keep it firm’, which prompted an instantaneous reaction of spreading the palms out and away from the body, as evident from Fig. 8c. This, in turn, immediately changed the firmness of the hands and how movement got initiated.

The student is then talked through the spiralling movement. Figure 9 shows the movement sequence.

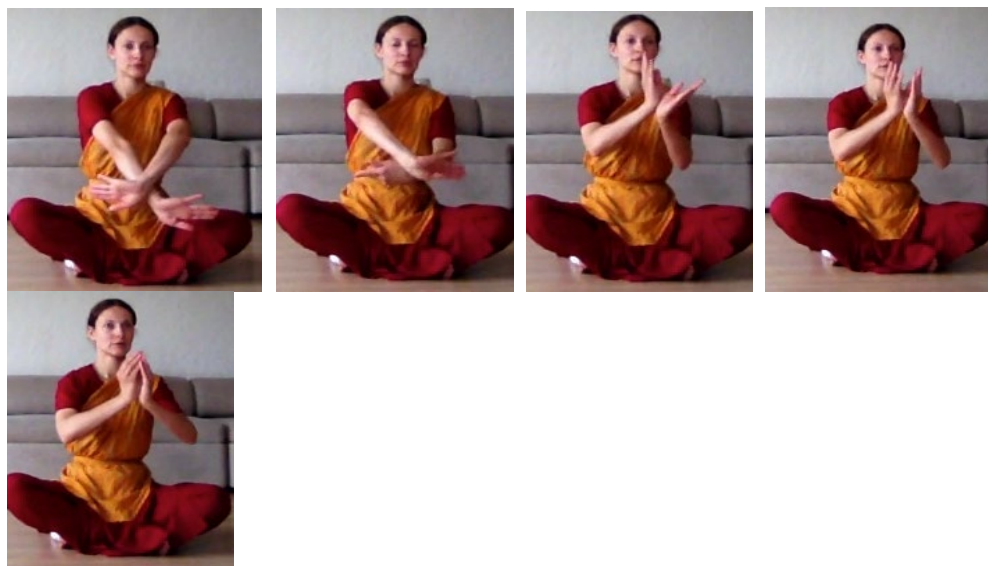


Fig. 9: *lotus* – Spiralling – corrected
 Instruction: ‘and turn...and make it *mukula*...’

Description of Form:

Hand form/handedness	Orientation	Position	Movement
BH PO fingers extended fully > Slightly hollowed palms with fingertips coming together.	PAB H > PL V	P-L, far reach > C-U medium reach	Upward spiralling movement with left wrist placed over and across right wrist > right wrist over and across left wrist > wrists and fingertips coming together

In this attempt, the initiating position at the P-L and far reach is with left wrist placed across and in contact with the right wrist, palms clearly facing away from the body, fingers extended

fully, reflecting firmness. The upward spiralling takes place with wrists circling around each other, and held in contact to one another, until the fingertips also come together for the bud shape as instructed, evident from the vertical and lateral orientation of the palms at CC.

Figure 10 illustrates how the hands then opened out by extending and spreading the fingers to reach the final part of the gesture that depicts the crystallisation of the intended characteristic shape of the fully blossomed lotus flower.



Fig. 10: *lotus* – final placement – too high
Instruction: ‘and open it...yes,...but not in front of the face....’

However, the position of the hands was too high and the student was instructed to lower them. Gestures executed in the narrative convention seen here, are usually placed at what is called CC in form-based analytic convention, drawing from McNeill’s notion of gesture space that was described at the beginning of this chapter, and at a neutral medium reach to enhance the depictive abilities of the hands. Placing at CC is also observed in co-speech gestures as a typical position of hands, and simultaneously as a means by which speakers are seen to unconsciously draw attention to the gesturing hands. We have also seen how hands near the body take on meanings as a BODY PART INDEX and hands away from the body could establish an imaginary location of an object.

Finally, in a third attempt, as illustrated in Figure 11, the student manages to complete the circular spiralling and arrive at a final position that as seen is at CC. Both the characteristic bud shape and the following round shape, with fingers spreading out, emerge forth from the spiralling movement, thus, depicting the meaning in its intended entirety.



Fig. 11: Third attempt with precise arrival at CC for final shape

One sees in this essentially moulding gesture that certain form parameters are required for the upward spiralling movement and its culmination in the shape of the flower to get established. There is a conceptualisation of movement for this purpose, reflecting several aspects, which also include movement principles, as my analysis over the years has revealed. The position of the hands in gesture space both at the initiation and end of a movement are important aspects that are traditionally practised in gesture execution in dance theatre forms like Bharatanatyam. For the spiralling movement in this particular case to emerge and bring forth the intended meaning effectively, we have seen above how the placement of the wrists and the orientation of the palms in relation to each other and the body at initiation matter. We see how it is the wrists and not the lower arms, that have to remain in contact, going around each other as they move up, and most effectively in an anti-clockwise direction. Finally, it is the complete spiralling movement with wrists still intact in their contact position that enables, in one successive movement, the bringing together of the fingertips and their subsequent spreading out necessary for meaning here.

One can also make several such spiralling movements before opening the fingers in a more elaborated movement. Alternatively, one can spiral up with the whole body in a creative complete body movement, while the hands execute their movement. The end position, executed as also described in the analysis above, draws attention to the shape the hands are bringing forth, thus underscoring the relevance of position and orientation of hands for communicating meaning, as observed in gesture studies as well. Furthermore, the correct initiation required for the spiralling to run smoothly, together with a specific end position in space reflect how neuromuscular movement principles are in play. Initiation of movement and spatial intent fire neuromuscular connectivity patterns, thus, enabling a smooth execution of movement into spatial directions (see Hackney, 1998, for insights into these patterns). Also, we have seen the relevance of wrists placement. It is the wrists with their rotating ability that enable a clear spiralling movement with the hands. Often students do rotating movements at

elbows, or shoulder rotation sets in, undermining the activity of the hands, and thus what is being articulated with their help.

One, thus, sees that the effective execution of movement following several kinetic principles is integral to the emergence of intended meaning. How the form parameters of placement and orientation are embedded into such movement are also evident, apart from the conventionalized hand forms that here additionally contribute to meaning. They enable a stylisation and thus drawing attention to the depicted, as I have noted earlier (Ramesh, 2013). When these are precisely executed, with the initiating position enabling a smooth, continuous and complete upward spiralling movement, the notion of a spiralling emergence of the lotus flower from the depths of its water bed gets established, thus bringing to materialisation, to use McNeill's (2005) term, the intended gestural meaning. Interestingly, it also reflects how the flower takes shape in relation to the circular movement of water, a cognitive semiotic aspect that I will look into below.

There is, firstly, the enaction of an event, with the hands here, as discernible, in both acting and representing Modes of Mimesis. The gesture variation reveals that meaning here is guided by a perceived or imagined similarity to such an event in nature. Simultaneously, it indicates a cause-effect relationship also, in terms of the contiguity relations that Mittelberg defines. The intended meaning being depicted in the gesture variation here reflects that it is guided by how the lotus flower takes shape in relation to the circular movement of water, as an effect of it. Further meanings can be identified based on the fact that the round shape of the lotus flower is a metaphor to describe the beauty of the cowherd maidens. Indian understanding places the flower's beauty in contrast to its origin; the lotus flower emerges forth into a perfect shape and beauty seemingly untouched by, and in spite of the muddiness of its origin. Depicting its emergence from the depths of the water would, thus, bring to the discerning audience's attention the special notion of beauty attributed to the lotus flower and in turn to the cowherd maidens. In metonymic terms the depicted meaning is guided by how the event of emergence as a whole stands for a part of the flower, namely, its profiled feature, the round shape. In terms of this basic meaning finally, the meaningful property shape that leads to final intended meaning, one sees that it is a matter of part-whole relationship as well, by way of internal metonymy with inner contiguity relations guided by similarity. At the end of the spiralling movement, the fingers opening and spreading reveal, just as in the first variation, iconic resemblance to the opened petals.

We discern here how a mimetic/cognitive semiotic conceptualisation of meaning is established primarily through kinetic means. In fact, a high degree of iconic object-sign relationship, based on similarity in interplay with contiguity relations, is aimed at and brought to maximum realisation or materialisation, only when movement is executed in specific ways. Mimetic/cognitive semiotic and kinetic processes are, thus, seen to inform each other. Another aspect that becomes evident is that the shape of the lotus flower profiled here is seen to materialize through the interplay of spatial relations, such as orientation, positioning, and movement of the corresponding parts of the hands, such as the wrists and fingers. The analysis of a kinetic conceptualisation of meaning, thus, tells us how form features or parameters, that were seen hitherto to be central to gestural meaning construction, are essentially embedded in movement. In other words, it is finally movement that relates form and meaning. And even more fundamentally, that shape itself as such, is the result of movement parameters, is clearly evidenced.

1.4.2 Kinetic conceptualisation of space

In the following, I will examine the conceptualization of space in bringing forth meaning in a variation of *brocade saris stealthily taken away*. The gestures of the version analysed earlier in the chapter entailed both the acting and representing modes defined by Müller, with the saris being profiled first and then taken away stealthily. Opposed to that, the saris being taken away is conceived in the example presented here, as an action of the whole body with the hands in the strict sense of an acting mode. The act of gathering them and running away is profiled, for which specific spatial configurations play an important role.

As an added note, the gesture variation, conveys meaning from the whole phrase *brocade saris stealthily taken away*, rather than word by word. Both techniques, of referring to each word, or a whole phrase or sentence as such, are widely employed in Indian performing arts. These also reflect two methods of depiction that the late master teacher of expressive dance in India, Kalandhi Narayan, called acting and narrating (personal correspondence). When taking on the role of the character, as the example to be analysed here reveals, there is acting, which also corresponds with Müller's acting Mode of Mimesis. In gestures that are predominantly in representing mimetic mode, on the other hand, as were seen in examples analysed earlier, one discerns a more narrative kind of depiction. One narrates to the onlooker about an object,

action or event, mimetic objects so to say, by depicting aspects of these as we have seen. McNeill (1992:67) discusses character viewpoint (CVPT) and observer viewpoint (OVPT), which roughly correspond to these depictive possibilities. The former entails enacting the character or the gesturer becoming the character and, thus, executes the actions of the character being referred to. The observer viewpoint, on the other hand, would be narrative, because the dancer narrates as an observer, depicting various mimetic objects with the hands and not necessarily becoming these objects.

As mentioned above, spatial configurations are central to the gestures being analysed here. I will, yet again, examine both the kinetic as well as the mimetic/cognitive semiotic conceptualisation of these. Let us first look at the movement being executed. Illustrated in Figure 12 are the gestures of various body parts executed in synchrony with the phrase *brocade saris*. Here a gathering action is depicted.

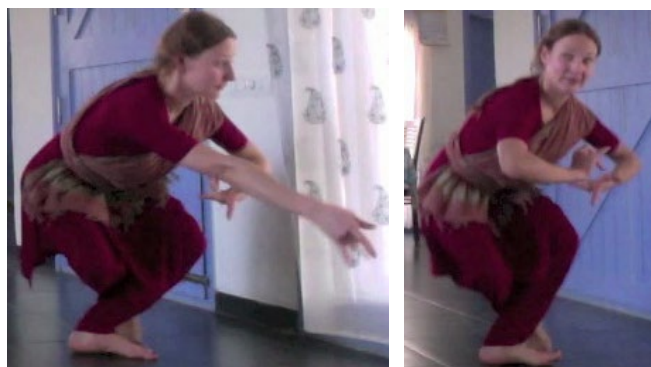


Fig. 12: *brocade saris* – PL S at extreme lower P (EP-LW) at a far range from the body, changing to PL V at CC at a medium range from the body.

Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
RH <i>katakamukha</i>	PL S > PL V	EP-LW, far reach > CC, medium reach	From far reach left-forward-low to medium reach CC twice	Acting. Enacting the gathering of saris
LH <i>alapadma</i>	PU H	CC, medium reach	None	Acting. Holding the saris.

The movement of the RH begins at far reach in the peripheral space on the forward left low, moving to CC where the LH is held. The hand shape here, called *katakamukha*, is used as a grasping gesture, reflecting specifically, the holding of a sari. We also see how an action entails spatial relations if the action needs to bring forth a specific meaning. There is a general downward orientation of the whole body towards forward left to depict both stealth and the reaching towards the ground where the imaginary location of the saris has been established

for this gesture. The knees are turned outwards and bent, the feet kept in a crossed position at the ankles, right foot behind the left. This is not only a stylised stance of the lower body and feet, but a stance that enables and supports the lowering and forward orientation of the upper body and thus used here. That it is a stealthy action, is depicted additionally through the gaze directed once to the left side and once to the right side while executing the gesture.

The series of pictures in Figure 13 illustrates the subsequent movements for *stealthily taking away*, depicted as a running away after the act of stealing to climb onto a tree as the meaning in the next phrase of the verse cited at the beginning of the chapter foresees, namely, *onto a tree climbing*.

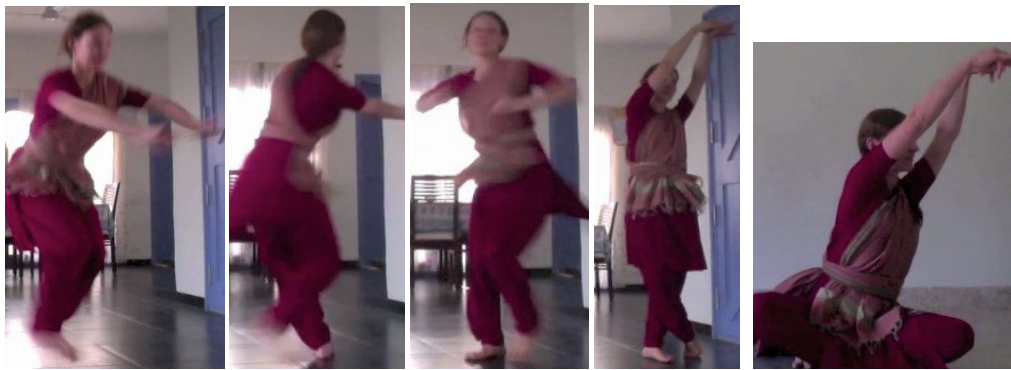


Fig. 13: *stealthily taking away*

The movement in the gestures from left to right illustrate the running away as executed by way of a jump with both the feet simultaneously rising and a whole-body turn to arrive at a position at back left as illustrated, where the imaginary tree is localised. That this movement phrase also integrates the following phrase, is evident in the final vertical erect posture with straight crossed legs, right foot in front of left foot. Finally, the grasping *katakamukha* hands holding the imaginary bundle of stolen saris are brought to rest at the extreme P upper left far reach in an act of throwing the gathered saris up onto the tree, before climbing. The PD orientation of the hands in the final posture also adds more detail, namely, that the saris, thus, thrown would, in effect, hang down from the tree. I have added a picture in the sitting and learning phase at the far right of Figure 13, where this gesture is more clearly visible than in the picture with the standing posture.

We see in the above, how space is firstly conceptualised as an aspect of meaning. There are imaginary locations, of the saris on the ground in the forward left space, and of the tree at the rear left area from the perspective of the dancer. The ultimate goal of presenting the narrative

to an audience also guides the conceptualization of space as a dimension of meaning. The former not only specifies what the gathering action is about, but also enables it to be conceived in such a way that it is clearly visible and, thus, transmittable to an audience. The latter enables the enaction of running away from there to a tree. Stealth is characterized by a directing of the gaze to the right and left at or above eye level to denote a furtive look on the part of a little boy bending forward towards the saris on the ground.

There is, in mimetic terms, an acting mode in the gesturing hands for gathering, the holding of the saris and, finally, throwing them up onto the imaginary tree. As the description of the hand parameters in the table in Figure 12 reveals, the RH denotes the action hands would have performed if they were actually gathering the saris, with the exception that a stylized grasping gesture is employed for gathering. The shape of the hands in *katakamukha* again depicts how a sari is held. Another typical *hasta* for depicting a sari, it is often used in a draping action as well. There is, thus, an abstraction and stylization, to use Kendon's (2004) terms cited earlier. The gathering movement of the RH is an abstracted version of picking up something. At the same time, the use of the RH in an acting mode underscores, yet again, Lausberg's observations regarding inherent right and left hand usages. There is also a reduced gestalt of an action of the eyes in the cautious gaze around oneself as if ensuring nobody is watching, and the enaction of a jump and turn that a whole body would execute in such actions. We see here how other natural instances of activities that pertain to the body as a whole contribute to meaning in conjunction with manual gestures. The kinetic conceptualisation of meaning here also weaves in more intricate meanings for the benefit of discerning audiences. The character, Krishna, who is stealing the saris, is usually depicted standing in the posture that is described above, where one foot is placed in front of the other at the end of the jump and turn action.

Several similarity and contiguity relations are in play in terms of cognitive semiotic operations. The first movement in Figure 12 bears a similarity to an actual action of stealthily gathering, with the gaze reflecting stealth and the hand gestures carrying out an action that is the imitation of a gathering action the hands would execute themselves. Such an action becomes more specified here in the context of gathering saris, both in terms of the grasping hand form and how this action is executed. Repeating the gathering action twice reflects that what is being gathered is long, thus, highlighting the size, which is here the length of the sari. This action, thus, bears a resemblance to a natural instance of an action on the object sari. At

the same time, Mittelberg's HAND/OBJECT INDEX involving an outer contiguity relation is evident. And in the subsequent throwing of the saris onto the tree, the jump and turn are also reduced gestalts conceived in terms of similarity and inner contiguity relations, where the jumping from the gathering posture and the single turn stand for a running-away-from-a-spot action. Even the gaze is based on similarity to movement of the eyes in stealth, whether perceived or otherwise in this case, needs to be examined.

Coming back to the role of movement, we yet again discern how mimetic/cognitive semiotic and kinetic conceptual means inform each other. In these gestures as well, the thus conceived spatial relations and spatial aspects have to be brought to maximum materialization through kinetic means for the meaning to emerge in spatial terms. We have seen above how the intended spatial relations are effected by way of gesturing hands and eyes, and whole-body postures, jumps and turns. This necessitates the precise execution of various kinds of movement between the body and the imaginary objects, between the spots where the imaginary objects are, and the like. Essentially, such movement has to be in specific directions and trajectories, with exact orientation and positioning of the hands, whole-body or also gaze, such as in the gathering gesture, or in the jumps and turn. Stealth characterized by a directing of the gaze to the right and left at or above eye level necessitates the correct movement of the pupils.

In short, there are the form parameters placement, positions and orientation involved, both of the whole body and the gesturing body parts such as hands and eyes. All parameters are relevant and finally embedded in movement here as well, just as in the case of shape analysed earlier. And as discussed in the section earlier about form parameters and their semantic relation to the referred mimetic objects, movement is integrative of all. Where spatial aspects are concerned, they finally underlie as parameters such as positions, orientation, trajectories, etc. the depiction of whatever the gestures refer to, whether objects, actions or events. The kinetic conceptualisation of gestural meaning, that is consistently constituted at the basic level of physical properties of these, is finally a spatial conceptualisation with spatial aspects integral to such depictions in various ways. In the above analysed example of actions, we see how *every action is, in effect, spatially defined*. There is a spatial trajectory in the gathering action and jump. Similarly even objects, such as the lotus flower, or the event that reflects its emergence, are a matter of spatial parameters. The lotus flower depiction requires specific

spatial movement and placement of fingers, so as to bring forth its shape. The event of its emergence is an upward spiralling action.

A further analysis of what enables students to bring forth meaning sheds light on some interesting and poignant mechanisms with regard to the kinetic conceptualisation of spatial aspects, that also tell us about how these are inherently tied to movement. I will present a few incidents with this particular student whose learning process is being analysed here. They reveal how attending to spatial aspects may help in executing gestures, but finally it is the movement itself that enables comprehending and bringing forth the spatial aspects.

Figure 14 illustrates how students often stretch their hand out into the space in front of themselves for the gathering gesture, rather than to a point closer to the ground where the saris must be. The illustrated hand movement then just becomes any movement, but not necessarily one that depicts the gathering action required here, where the gesturing hands, given the imaginary location conceived, should move precisely to left forward low as illustrated in Figure 16 above. Such a spatially precise movement of the hand towards the imaginary saris is what must get finally manifested into a jump along the same trajectory, coupled with a corresponding forward and downward orientation of the upper body, for meaning to get established in its entirety.



Fig.14



Fig. 15

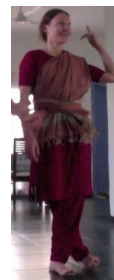


Fig. 16

While making corrections it was noticed that assessing the spatial direction helped the student. One discerns in Figure 15 how she is pointing with her hand and directing her gaze to the direction she is being instructed to move towards, thus, bringing it into her attention, before yet again attempting the movement in the trajectory required with more precision. Even if there is an intuitive understanding of right/left, up/down, forward/backward, etc., it is often seen in studio work, that the imaginary, and yet specifically conceptualized spatial locations or spatial aspects of objects of reference or actions have to be called into one's

awareness by attending to them. Analysing the learning process reveals in general that such an attending to spatial aspects is relevant for getting them right in movement.

Similarly, the jump and turn towards the location of the imaginary tree required specific instructions, until the student reached the imagined location before taking the posture, as depicted in Figure 13. Or the direction of the gaze for stealth required several attempts. She kept directing it to side low on each side, rather than side high. Side low does not establish the meaning of a furtive gaze, namely looking around to see if someone is watching. Several corrective instructions, too numerous to be illustrated here, were given. They included, depending on the gesture being corrected, instructions to execute the jump with a yield and push off the floor; a precise defining of the directions of execution, for instance, in relation to the enclosed area; or also images, such as one must look up while gathering the saris to see if someone is watching, because nobody would be crawling around.

In such instances, while drawing attention to spatial aspects as seen above might help in movements such as jumps or turns, the teaching sessions also reveal that it is more often than not regarding spatial aspects in gestures, that attention to the movement itself matters. In the gathering gesture, apart from bringing the movement trajectory to the students' attention, the dancers learning this phrase required several attempts to move the hand precisely to the imagined location of the saris, with attending to the location as well as the actual movement of the hand informing each other in each attempt, until the movement itself clarified the location for them. The students, thus, finally need to pay attention to the details of the movement itself, in conjunction with spatial aspects such as orientation, spatial intent, positioning of hands and so forth, *while* executing the movement. This is evident for the action of gathering or, for that matter, the spiralling movement in the gesture for the lotus flower as discernible in Figures 7 to 11 above, that illustrate the student's attempts to execute the spiralling movement as required for meaning.

It is discernible in Figure 7 how her gaze is directed to what was being shown. Except for a 'from there' to instruct the initiating position for the spiralling movement, where she is seen looking at her own hands, she is not given any further instructions and is completely dependent upon the visual input. The spiralling movement did not succeed here. As evident from where her gaze is directed in the subsequent illustrations in Figure 8 to 11, one sees that she is attending to her hands every time she is given instructions and corrects them, such as

when asked to keep firm in Figure 8c while correcting the placement of the wrists in relation to each other. And additionally, when she is told ‘and turn...and make it mukula...’ in Figure 9. The spiralling movement finally succeeds here and she arrives at the necessary hand shape. Even for the final placement more towards CC, she is attending to the hands while executing the corrected version, as if ensuring that they are placed as instructed. One sees in kinetically conceptualising this gesture that her attending to the movement details of her own hands is guiding her in executing the spatial aspects with more precision with each attempt.

Of particular interest finally, revealing another aspect of attending, is an unusual incident that occurred when the spatial aspect of the gaze for stealth was being corrected on this particular student. Looking at it from the perspective of the discussion here, it sheds light on the primary role of movement itself. It was mentioned above that she was directing the gaze downwards rather than side up. None of the several guiding instructions, seemed to help, particularly for the left side up. Her several attempts revealed that this was tied to her inability to execute the necessary eye movement. In one attempt, it just suddenly worked and her reaction was instantaneous. She interrupted her gesture, laughed, covered her face, then mumbled something about the direction up there, pointing simultaneously with the index finger of the LH to the back upper left, as illustrated in Figure 16. Her spontaneous pointing gesture revealing, that her instantaneous spatial awareness of what ‘up there to the left’ meant as a direction, was directly related to not only her gaze, but also the actual movement of the eyeball. As her reaction indicates, the exact spatial aspect suddenly made sense, literally dawned on her, much to her own astonishment, as it actually emerged in the movement, finally guiding her effective execution of the gaze with the necessary spatial direction.

The above observations and their analysis illustrate that while spatial aspects necessitate often attending to them, it is finally the actual execution of movement, that matters. Spatial aspects not only get established thus, but also come into awareness, becoming spatial understanding in the first place, coming so to say, to one’s attention, as they emerge in actual movement. Neither giving spatial specifications nor images helped in this case. But the student’s constant attempts through movement finally brought forth the necessary spatial direction, at the same time revealing it to her. There was also obviously, as seen in her reaction, something profound in her experience, that must come from the intricate movement of the eyeball, to which I will come back to in later parts of this study. The corrections presented here exemplify the observation that students become aware of spatial aspects in increasingly finer ways as these

keep emerging through their attempts at arriving at the spatially relevant movement. This, in turn, enables the precise execution of meaningful form parameters, as the final successful attempts reveal. Essentially, looking at the kinetic conceptualisation of spatial aspects clearly exposes how spatial understanding is something that is *corporeally emergent* and tied closely to movement.

The analysis above of learning two gesture variations to bring forth the necessary meaning, enables insight into what goes into meaning construction in kinetic terms. In the explicit gestural depiction employed in Indian dance theatre forms like Bharatanatyam, one discerns how the various ways to bring forth meaning through one or the other Modes of Mimesis are essentially tied to the kinetic possibilities of the body. These are used exhaustively for depictive purposes, bringing richness into corporeal narration and communication. Essentially, it is an attending to the movement to be executed based on depicted meaning, that constitutes a kinetic conceptualisation of meaning. And more essentially, the kinetic means reveal how meaning depicted at the basic level refers to properties that are themselves an outcome of movement, specifically movement executed with its inherent spatial parameters. Such a movement underlies the depiction of gestural meaning, whether it is about characteristic shapes or characteristic movement as in actions, or spatial aspects and relations. At the same time, it is movement itself that brings into awareness or attention, the inherent spatial aspects and thus also the properties that are seen to constitute basic meaning.

The analysis, in as much, instantiates, on the one hand, the notion of depictive possibilities of visible bodily movement that, as Müller, cited earlier, defines, mediate the conceptualised forms of reality that constitute gestural meaning at its basic level. On the other hand, the very fundamentality of movement for basic meaning becomes evident, given gestures, while referring to a range of mimetic objects, consistently bring forth as meaningful properties, emergent properties of movement. This brings us to the notion of movement-based conceptualized forms of reality.

1.5 Meaning – a kinetic conceptualisation of form derived from physical properties

The kinetic conceptualisation of gesture examples analysed here underscores and relates several observations made in the course of the discussions so far, with regard to gestural form

and meaning, and how gestural form reveals meaningful physical properties as conceptualized forms of reality.

Firstly, it underscores what was seen when analysing gestural form features at the beginning of the chapter above, namely, that movement is both a semantically relevant form parameter and means by which meaning through form parameters is conveyed. We see in the kinetic conceptualisation of meaning analysed above, how movement is crucial for the physical properties to emerge as meaning. The spatial aspects, such as directions, trajectories, imaginary locations, spatial orientation, and so forth, are inherently integral to movement, emerging or getting established through movement. This echoes what Sheets-Johnstone (2011:124) postulates: movement does not simply take place in space, space is rather created through moving. As mentioned above, it is also movement in conjunction with spatial aspects, that is crucial for presenting both shapes and actions as meaning. We saw how it is the spatial aspect of an action that is referred to in the gesture. The gathering action had a trajectory towards a specific point on the ground. And shape emerges when certain spatial relations are established through movement. Then here as well, directions, orientation or placement of the fingers, the palms, the wrists, etc. matter. The fingers need to open and spread out to create the round shape. This applies to other gestures as well, such as opening the palm and stretching fingers held together in the leaf gesture. Even when the shape is presented less iconically and rather more schematically, as in tracing gestures, movement is involved and requires a conceptualisation in kinetic terms, just like the examples above. The tracing movement must reflect, for instance, the shape being denoted.

Thus, gestural meaning, when thus analysing from a kinetic perspective, reflects what is fundamental and inherent about movement. While spatial aspects are inherent to and emergent in movement, shapes emerge from movement in space: “movement in space creates shape” (Ramesh, 2014:1230). Shapes, spatial aspects and movement are fundamentally tied to each other and inherent in the body as part of the body’s *kinetic signature*. These are relations discernible in nature as well, as presented in the second variation for the lotus gesture. The round shape is the outcome of a movement event in nature, namely the upward spiralling movement in conjunction with the circular movement of water. That the movement of water creates round shapes is evident in the shape of the lotus leaf as well, or the shapes that emerge when the surface of a river freezes, to name but two instances. Therefore, what we see as

meaning depicted in gestural form features is the outcome of inherent relations movement enables, both in the body and as perceived in nature.

This, secondly, illuminates in movement terms what we saw both in terms of cognitive semiotic operations underlying meaning and the relevance of form for meaning. In cognitive semiotic terms, the similarity established in terms of shapes as in the lotus gesture, the contiguity relations such as cause-effect relation holding between its emergence and its shape, or contact, adjacency and proximity established in the gathering and holding gestures in conjunction with the saris, are, thus, seen here to be a matter of the relations movement itself establishes. And it is, in effect, through movement that they also get anchored by means of gesture, becoming gestural form. The creative process of gestural meaning construction defines these relations anew in each gesture, depending upon whether it is a shape, spatial aspect and/or movement that gets highlighted, and to which concrete object, action or event it either directly refers to, or bears resemblance to, to denote another intended final meaning in an abstract sense.

At the same time, it also illuminates why specific constellations in gestural form features matter for semantic specificity. The observation of Linguistic Gesture Studies cited earlier, and discussed extensively by Müller (2010b), that any change in form parameters leads to change in meaning, must essentially read: any change in movement changes meaning. Kendon's "core of visible bodily phenomena" (2004:16) getting their semantic value based on their constellations, lies in how movement forms these. We saw above, how it was imperative to execute movement with precise form parameters in any given gesture, in order to bring forth meaning that depicts the profiled feature. A hand stretched into forward space, as illustrated in Figure 18, does not bring forth the meaning envisaged in the gathering gesture, because the saris cannot be in mid-air. It is the movement of the hand in conjunction with spatial aspects that makes the difference.

Thirdly, it deems appropriate at this point, to bring the discussion back to the two levels of meaning postulated by Müller (2010b) and discussed earlier. There is the intended or contextual meaning, as for instance, of stealing the saris, given in the verse, and the reduced gestalt of an action, here a gathering action, given in the gesture form, constituting basic meaning. In Müller's definition, given basic meaning emerges relative to form, visuo-kinesic basic forms described as motor patterns of everyday actions, geometric patterns or gestalts

motivate gestural meaning. Here, a motor pattern must motivate meaning. But there is more to it. A motor pattern, which, by definition, is that of the hand, including actions on and with objects, when seen from the perspective of movement, is primarily a movement pattern. However, depending upon the kind of motor action that constitutes meaning, there are specific spatial aspects tied to it. In the case of the gathering action involving saris lying on the ground, there was, thus, a movement pattern entailing a movement trajectory towards left forward low. The basic form, thus, reflects both the movement pattern involved in the gathering action for stealing and the spatial aspects that pertain to the conceived location of the saris. In other words, features of two referred mimetic objects, a stealing action and saris, constitute meaning. It becomes evident that whatever the contextual or local meaning, the basic form, and thus meaning to be conveyed in the gesture, has its own structures; it is derived from or driven by object features, specifically of the mimetic objects in question. I had mentioned while discussing the relevance of the semiotic modes, that physical properties evident in gestural form parameters are discernibly derived based on similarity and contiguity relations. What we essentially see now, is a kinetic conceptualisation of form derived from physical properties.

Let us take this a step further. In fact, the analysis tells us that what thus become meaningful and get referred to as physical properties of concrete entities, have their roots in movement. In other words, basic meaning *is* basic form that is the outcome of movement. Form and meaning come together in movement. Coming back to Müller's notion of a rudimentary ability to analyse form that enables the extraction of meaningful elements from the perceived world to transform them into perceivable objects through different Modes of Mimesis, what was seen earlier to lie in the pervasive, yet *fluid* role of similarity and contiguity, the two fundamentally semiotic modes that Mittelberg discusses, can now be understood as lying in the ability of movement to produce form, both as source given in physical properties, and as a product derived from it in the gesture. Then, meaningful elements of the perceived world, as the kinetic conceptualisation of gestural form reveals, are tied to movement in the first place, emergent in and through movement. Similarity and contiguity as inherent associative semiotic modes must enable extracting such movement-given forms, driving in turn the mimetic/cognitive semiotic mechanisms of object-sign relationship that we saw established as iconic or indexical Ground in the gestures. This depictive aspect is kinetically enabled by just the same kind of movement inherent in the hands and body as well, namely movement that brings forth shapes and spatial aspects. However, in what ways such movement might play an

even more fundamental role in how the meaningful forms are thus extracted or for that matter perceived, still needs to be unveiled.

The analysis of kinetic conceptualisation gives a first lead. An aspect that stands forth is how the student has to attend to movement details to bring forth through the necessary precise form features and their constellations, the properties pertaining to any given mimetic object. In fact, the kinetic conceptualisation of the gesture examples in this section, which are a few from studio work over the years, exposes that rather than showing the students the movement, or drawing their attention to the object with its features by describing these, making them attend to these features through their own movement is more effective. At the same time, we saw in the student's reaction, how what emerged in actual movement came into her awareness and attention, and also made sense to her. Not only do gestures reveal a foregrounding, or highlighting of object features in mimetic/cognitive semiotic terms. Examining in movement terms how meaning is kinetically conceptualised also sheds light on how properties come into awareness in the first place. I see here reflected what Croft & Cruse define as 'natural properties of perceived phenomena' in the concrete world that 'lend themselves to being attended to', thus, enhancing 'those phenomena's salience to the human beings' attention' (2004, 3.2:711). In the kinetic analysis presented above, we see how the physical properties, which are essentially natural properties of phenomena in the concrete world, lend themselves to being attended to directly through movement. Given that they are inherent to movement, they must lend themselves to being attended to, *because of movement*.

Looking in this way at gestures in the Indian performing arts context from the perspective of Linguistic Gesture Studies, sheds light on how these two perspectives can inform each other. Based on applying the form-based linguistic analysis to the explicit use of gestures in Indian dance theatre forms like Bharatanatyam in the chapters hitherto, we understand how they reflect the linguistic processes observed in spontaneous co-speech gestures in terms of what meaning they carry and how they do so. While Gesture Studies help illuminate that there is a linguistic notion of meaning in the gestural practise of Indian performing arts, the explicit construction of meaning in these gestures, in turn, enables specifying and taking forward central points observed in these studies, in particular in terms of what meaning, how meaning and also why meaning. The salient points we have seen so far in the discussions above can, thus, be specified as follows.

The analysis of gestural form and meaning exposes how:

- shapes, various spatial aspects and movement, consistently constitute basic meaning,
- basic meaning given by basic form and motivated by basic structures reflects conceptualised forms of reality,
- there are mimetic/cognitive semiotic operations driven by similarity and contiguity in enabling such meaning
- and a kinetic conceptualisation of form derived from physical properties perceived in the concrete world
- these physical properties are inherent in movement
- they lend themselves to attention *because of movement*.

Essentially, the analysis of how gestural meaning is conceptualized in kinetic terms sheds light on a fundamental role of movement for meaning, that calls for further scrutiny. Putting the various streams of discussion together, one can take forward the following understanding of meaning from the above discussion:

Meaningful elements such as shapes, movements, movement trajectories, spatial locations, surfaces, etc.; in short, shapes, various spatial aspects and movements, as physical properties of objects, actions and events in the concrete world, are seen to constitute a basic meaning in gestures. Such a meaning reveals not only a mimetic-cognitive semiotic, but also a kinetic conceptualisation of forms derived from these properties, revealing how these properties are inherently entailed in movement as the *kinetic signature* of the body. Given they lend themselves to attention in and through movement, we begin to understand gestural meaning to be a comprehension of reality in physical terms, where movement plays a role.

There is evident in meaning embodied in gestures, a shaping and construing of meaning, terms used by Langacker (1991:2) in defining meaning as equating conceptualisation, whereby gestures reveal this in bodily terms. And the aspect of attention points not only to what Croft & Cruse (2004) as cited earlier define from this perspective, but also discuss as basic cognitive conceptual processes that reflect a conceptualisation of experience to be communicated. This brings us to discussions in cognitive linguistics on meaning and conceptualisation, and the notion of meaning-making grounded in embodied processes.

2 Meaning embodied – a cognitive linguistic take

We have seen by applying the form-based linguistic analysis to the explicit gestural meaning construction practised in Indian performing arts, that meaning involves here, as well as in spontaneous co-speech gestures, primarily a conceptualization of the concrete world of entities in terms of their shapes, various spatial aspects and movement. Gestural form features relate semantically to these, revealing, in cognitive semiotic terms, a metonymic profiling of objects and actions driven by the fundamental semiotic modes similarity and contiguity. Müller (2010b) sees a basic level meaning in gestures that is relative to form and motivated by basic structures. The discussion that culminated with an analysis of the actual kinetic conceptualisation of gestural configurations to bring forth the form that relates to meaning in any given context, illustrated the centrality of movement therein. We saw in the necessity of attending to its precise execution, that the meaningful physical properties that constitute meaning are emergent inherent aspects of movement. They, at the same time, lend themselves to attention in and through movement. As cited earlier, they reflect the notion of “natural properties of phenomena in the perceived world that lend themselves to being attended to”, thus, enhancing “those phenomena’s salience to human beings’ attention”, a definition put forward by Croft and Cruse (2004:3.2:711). In the kind of embodied meaning that gestures reveal, there is literally a shaping and construing of meaning as was cited earlier, terms that Langacker (1991) uses from a cognitive semantic perspective in defining how meaning equates conceptualisation, whereby a cognitive conceptual processing of meaning as discussed in cognitive linguistics, becomes apparent. This field of research discusses such a processing as grounded at the basic level in embodied experiences, whereby image schemas as structuring patterns of essentially bodily experiences play a central role in structuring meaning and giving it form (Johnson, 1987, 2007). This chapter aims at examining this cognitive take on meaning, placing the explicit gestural meaning construction analysed hitherto in the light of findings therein.

2.1 Meaning equates conceptualisation – a matter of cognitive construal operations

The Modes of Mimesis in bringing forth meaning in different ways revealed how the same entity was referred to by way of different physical properties with which it is associated, and in different ways. When referring to the phrase *brocade saris*, for instance, the first variation of gestures analysed at the beginning of Chapter 1, depicted the shape of the brocade border

and the act of draping the sari, conceived, as analysed, in representing and acting modes, respectively. In the alternate variation presented in Chapter 2, the whole body was involved in a gathering action based on the phrase *brocade saris stealthily stealing*, with the sari itself integrated into the gathering action of the hands, the repetitive movement in acting mode referring here to the length of the sari. Thus, in depicting the meaning in the phrase in different ways, different aspects of the brocade saris became meaningful in each variation, relative to the mimetic modes. At the same time the profiling of the saris itself was more pronounced in the first variation, while the gathering action to denote stealing gained prominence or was highlighted in the second. Similarly, the round shape of the flower for *lotus* was depicted differently in the two gestural variations analysed. In the first, it was represented by means of an iconic shape only, which highlighted the flower's opened petals and as it appears on the leaf. The flower's spiralling emergence from the depths of the water, the event in nature, was highlighted in the second variation. Here, the source for the round shape is seen to become meaningful, yet again revealing two different ways of bringing forth the meaning referring to the flower's round shape.

Such a paraphrasing of meaning, as the mimetic modes illuminate, reflects Langacker's understanding of meaning equates conceptualisation. Meaning, here discussed in terms of semantic structures and as they become evident in language use, does not reside in object reality, but in "cognitive processing" (1991:61). An objective situation may differ in meaning depending on how it is shaped and construed, which in turn is a question of alternate construals of the scene, whereby different aspects of the same entity get profiled, though each is "compatible with its objectively given properties". This lies in people's abilities to "construe through alternate images" (1991:35), or due to "subtly different images structuring the same conceived situation" (1991:13). As is further noted, they are specific images, the choice of which "is a matter of linguistic convention" (1991:56). Grammar is itself considered to be image. Coming back to gestures, even in the explicit usage analysed in the previous chapter, we see how they differ in what aspects of the object become meaningful in any given meaning construction. In this sense, they too reveal a cognitive conceptual processing of meaning. In the following these will be examined.

Langacker lists various what are defined as "dimensions of imagery (i.e. construal)" (1991:61), which essentially reflect varied construal operations, such as profile-base relations, scalarity, various levels of specificity, salience and perspective/viewpoint (1991:5-12). Of

interest here, is how Croft and Cruse (2004: 3.1 – 3.6) specify this further. On this account, each of the construal operations are tied to four basic human cognitive abilities involved in different aspects of experience. They are attention/salience, judgement/ comparison, perspective/situatedness and constitution/gestalt. Construal is, thus, understood to be similar to other cognitive activities of the mind. There is thereby a conceptualisation of experience to be communicated. While not all construal operations classified on this account are of relevance here, a brief insight into those that relate to the basic meaning gestures bring forth will be presented with a few examples to examine the notion of cognitive processing in relation to experiences involved therein.

2.1.1 Construal of Spatial Relations in gestures

Spatial aspects find mention under perspective/viewpoint and relative salience in terms of figure/ground organisation. In these, not only situatedness, but also attention as cognitive ability constrain meaning construal.

One discerns a figure/ground organisation defined under relative salience in the gestural configuration for *climbing on to the tree*. Here, one discerns the kind of subject/object organisation, or a figure-ground alignment or organisation that entities are attributed with in conjunction with spatial relations between them. The alignment itself depends upon their location, size, motion/mobility, structure or shape, which Croft and Cruse, drawing on Talmy, list as factors for such an organisation (2004: 3.3.3), whereby, the smaller, more motile object with less specified location becomes the subject or figure construed relative to an object or ground. And such an alignment is evident when spatial relations are in play, such as next to, behind, in front of, or on. These are, as evident in the gestures, established through contiguity relations, such as proximity, adjacency or contact. In the gesture, we saw just this dimension of construals getting established by the hands: the right hand takes over the function of the subject/figure that is mobile, here the subject being addressed in the verse. And the left hand, the tree as the object/ground with a fixed location, on to which the subject climbs. The right hand finally establishes contact with the left hand to denote the arrival on the tree.

The spatial relations themselves, which, based on the discussion in the previous chapter, are the basic meaning being referred to, are a matter of perspective/ viewpoint. This is discernible in depicting the tree as something vertical and upright with the left hand, or the

proximity/adjacency relations of the leaf conceived under the flower for the corresponding lotus gesture. It reflects what Langacker defines as a basic level objective perspective on an entity, involving factors such as orientation, assumed vantage point and directionality (1991:12, 1987:122-127). As Croft and Cruse (2004:3.4.1) specify, **viewpoint** together with **vantage point** and the human body's vertical upright **orientation** impose certain spatial relations defined as below, above, in, behind, backward-forward, above-below and so forth, based on a bodily **situatedness**¹⁵.

In the spatial relations, and thus, the various kinds of spatial aspects evident in gestural meaning, we discern just this kind of a perspective guided by situatedness as cognitive ability. The vertical hand configuration for the tree at left high depicts both the tree's verticality and its height as perceived in relation to one's own upright orientation. The thus perceived tree as being higher characterises the upward trajectory for the climb onto it by the subject, who becomes the figure. Other typical examples are the downward movement to the imaginary location of the saris for the gathering action, which reflects a perspective on something lower on the ground than oneself; or the side up direction for the furtive glance for stealth, that reflects the downward-oriented bodily situatedness, in this case, of the subject gathering the saris. As evident, spatial directions, directionality of movement, imaginary locations and orientation, get kinetically conceptualised, based on situatedness. At the same time, as noted in the earlier chapter while discussing the kinetic conceptualisation of space, considerations with regard to the ultimate goal of presenting the narrative to an audience also guide the conceptualization of space as a dimension of meaning. We discern now, that in denoting the subject's bodily orientation, as in the acting mode, both a generally known perspective/viewpoint on something and the gesturer/dancer's and the onlooker's bodily perspective/viewpoint are taken into consideration, all of which are reflected in the dancer's body.

While these are imaginary construals of spatial aspects that get kinetically conceptualised in the gestures, they are, nevertheless, based on actual physical situatedness. Our situatedness in the world is, in the most primary sense, always physical, thus, imposing constraints on perspective, as Croft and Cruse discuss. This could be spatial, temporal or spatiotemporal, both bodily in the here and now, and in imagination. It could be epistemic or cultural at more abstract levels, which also considers knowledge, beliefs and attitudes shared by the

¹⁵ The bold letters are as used by Croft and Cruse (2004), thus emphasising their specifications.

participants in any specific speech act situation. In the above analysed gestures, for instance, given that the dancer/gesturer becomes the subject in the gathering action envisaged as meaning and is, thus, part of the scene, there is what is defined as Langacker's abstract level of perspective/viewpoint in terms of a scene being conceptualized that "includes the speaker herself/himself" (Croft & Cruse, 2004:3.4.3:933). Every gesture can, thus, be analysed from these different kinds of perspective/situatedness. Of interest at the moment is, however, the notion of bodily situatedness and how it is basic.

There are several other gestures that are conceived based on the situatedness that comes from a bodily vantage point perspective in general. The best examples are the manual gestures for depicting water described in Chapter 1, where a river is depicted with hands moving in wavelike movements. Here the side to side movements, either horizontally or diametrically, reflect a cognitive conceptualisation of the meaning presented in the gesture, based on how water movement is perceived from one's natural vantage point on a riverbank. Or in the case of the ocean, wavelike sagittal backward-forward movements are used, reflecting how we perceive the water movement as coming towards us and moving away. In the case of a whirlpool hands are moved outwards in concentric circular movements along a horizontal plane from a central point. These are human vantage point perspectives on movement of water that come from standing alongside these water bodies. The kinetic conceptualisation of different spatial aspects in the movement of water in these gestures, reveal conceptual processes based on cognitive capacities enabled by bodily situatedness and general vantage point perspectives. And interestingly, while revealing the alternate construals that Langacker, cited above, defines, with each compatible with the objectively given properties in each instance of, namely, the movement of water, they also reflect different kinds of water bodies, given the specificities in depicting the different kinds of spatial aspects of such a movement. This exposes another dimension of construal also operative here, which I will look into in the next subsection.

Perspectival spatial relations also define deictic construals, coined **deixis** by Croft and Cruse, (2004:3.4.2) such as personal pronouns, *I*, *you*, *he* and *she*, demonstratives such as *this* and *that*, or deictic time reference in terms of past and present. Here, the speaker's actual spatial or spatiotemporal situatedness matters from a communicative perspective, as in a speech act situation or a narrative, or by displacing it to another place and time, such as bringing a narrative to the present. In the case of the gestures, it is again the

gesturer's situatedness, which would have, to put in Mittelberg's terms, an indexical grounding. Also Mittelberg (2010b) notes how situatedness is always there considering we are anchored in the objective world in a bodily way. They also occur extensively in the Indian performing arts. The flat hand form described in Chapter 1 as *pataka*, for instance, is used in different configurations for different deictic representations. When placed in CC gesture space at near reach, with fingers pointing downwards and palm facing away from body, it denotes *here, this, now* and so forth. Placed at CC at medium or far reach, i.e. away from the body, with palm facing up and fingers pointing into forward space, it is used for *you*, as I also briefly described in the earlier chapter. When the palm of same hand form is placed directly on the chest, it would denote *I*. When placed to the side in centre gesture space, with palm facing forward, fingers directed to the side, it could denote *that, he* or *she*. The communicative situatedness in these various construals, is essentially a bodily situatedness of the gesturer in relation to imaginary entities or with reference to persons being addressed.

The discussion above illustrates how a conceptualisation of varied spatial aspects as a basic factor of meaning is a question of construal operations constrained by cognitive abilities that are essentially physical versions of perspective/situatedness. Finally, the notion of salience/attention is evident in how spatial aspects informed by just this kind of perspective/situatedness gain salience in any given gesture; their depiction in the gesture revealing that these are being attended to, or they lend themselves to attention thus.

Interesting is also how this translates to relative salience in the organisation of entities as figure or ground. Then, if such an organisation depends upon factors such as location, size, motion/mobility, and so forth, as cited above, these are what come into attention and gain salience, and finally relative salience in any given situation. Thus a construal of spatial aspects is seen to reside in how perspective/viewpoint in relation to situatedness and attention as cognitive abilities, and also relative salience in terms of figure/ground organisation constrain such basic meaning.

2.1.2 Construal of shapes in gestures

Construing meaning in terms of shapes, defined as structural aspects, is discussed under schematization. It is seen to be both a construal operation under what Langacker (1991:7) calls a level of specificity, and under the basic cognitive ability constitution/gestalt, that Croft

and Cruse discuss. In all these, attention as basic cognitive ability is seen to interact with comparison/judgement and perspective/situatedness.

2.1.2.1 Schematization/categorization as construal operation

In the gesture for *brocade saris*, depicting an aspect of the brocade border, such as material, or the semi-circular shape and position when the sari is draped in a particular way, refer to a specific kind of sari, namely a brocade sari, and a specific way of draping it. When depicting the shape of the lotus flower, keeping fingers apart in a spreading fashion could depict any kind of flower, given that other flowers also have petals as a spatial feature. However, a lotus flower is specified here by depicting the leaf on which the lotus flower is perceived thus, with the left flat hand placed under the right hand. In doing so, the gestures reflect a level of **schematization** and **categorization** that Croft and Cruse (2004: Ch.3, 4.3.3) classify under Langacker's level of specificity. There is a **fine-** or **coarse-grained** construal of a scene, situation or object enabled by **attention/scalarity**, or **granularity**; i.e. aspects or properties of entities, scenes or events are attended to in their scalar dimensions, as fine- or coarse-grained (Langacker, 1987:135, Croft & Cruse, 2004:3.2.3). Referring to a polygon, for instance, would not be as specific as referring to a triangle. The shapes brought forth in the gestures mentioned above reflect, in this sense, typical examples of a fine-grained construal of the mimetic objects in question, involving both schematization and categorization.

Firstly, a more fine-grained depiction is evident in how more properties are depicted, for example, shapes, spatial orientation *and* movement. There is not only the round shape in the gesture for the lotus flower, but also a spatial orientation of the petals or a movement of opening included. Shape here is depicted with pretty exact *image iconicity*, to use Mittelberg's term. But shape can also, at times, be depicted by schematically tracing its two-dimensionality or moulding its three-dimensionality, which would be a more coarse-grained construal. In each case, there is a schematization with different levels of specificity. It involves what is specifically defined as a **Quantitative scalar adjustment**, namely, attending to some parts and ignoring others.

In the practice of dance theatre forms, such as Bharatanatyam being analysed here, a fine-grained construal is in the nature of shaping and construing meaning corporeally, thus, bringing forth the basic aspects of meaning relative to the local or intended meaning given in a verse or text in pretty explicit terms. It enables meaning to be communicated, even in the

absence of verbal accompaniment. At the same time, it reflects the ability, or experiences of the gesturer/dancer, involving, as we see here, a level of specificity in attending to object features.

Secondly, it is not just any sari, but a brocade sari, and as mentioned above, not just any flower, but a lotus flower. There is, thus, by the definition Croft and Cruse give, a level of categorization, which tells us about belonging to a category or class of entities, as in *animal* vs. *dog* vs. *spaniel*. In the fine-grained depiction of brocade saris, for instance, this would be *clothes/attire* vs. *saris* vs. *brocade saris*. Categorization here is defined in terms of superordinate, basic and subordinate categories, respectively, with the level of specificity progressing towards the subordinate category. Categorization, in terms of cognitive abilities, is defined, thus, in conjunction with a **qualitative** aspect of scalar adjustment or scalarity. Something is viewed “by means of a more encompassing category” (Croft & Cruse, 2004:3.2.3:801). And yet, what really determines a category is, by the above definition, the level of specificity, or attending to object properties in a quantitative sense; in other words, schematization. As Lakoff and Johnson (1999:28f) explain, entities are generally attributed to basic level categories based on properties that finally have to do with perceiving or interacting with part-whole structures of “physical beings and objects”.

We see in the definitions for categorization cited here, how schematization, and, basic properties, which are perceived part-whole structures, matter, with perceiving, connected with attending, namely, attending to object properties involved therein; the more attended to, the higher the level of specificity and thus schematization, which in turn determines the level of the category. This indicates, on the one hand, that attention imposes basic structures on categorization and, on the other hand, that schematization determines categorization. We see this underscored in gestures.

That part-whole structures are the characteristics of entities, are seen in gestures: they are the very essence of gestural meaning construction, as was discussed in the analysis under mimetic/cognitive semiotic conceptualisation in Chapter 1. In Mittelberg’s (2010b:119; 2013:765) terms, part-whole relations, whereby a part could profile a whole or vice versa, are established in gestures based on the metonymic profiling of aspects or properties of the mimetic objects being referred to. Based on the definitions cited above, and given the level of specificity, both fine- and coarse-grained, evident in how gestures bring forth object

properties as basic meaning, we discern how it is schematization in terms of construal operations, that is basic to meaning. Categorization underlies, one may say, the local or intended meaning. If saris as a category were the intended meaning, what gets depicted in gestures are the properties attributed to them. And these are finally based on being attended to by way of perceiving or interacting with these part-whole structures. As mentioned earlier, this depends upon the ability of the gesturer to attend to object features, which can also depend in turn on the kinds of perspective/situatedness variations discussed above.

This is particularly evident in experiments with workshop participants. When testing how they would spontaneously depict something corporeally, it is observed that different gestural configurations are presented when they are asked to depict some object or event. Let us take the simple object such as a tree, for instance. When asked to depict this, some spread the arms out, reflecting a tree branching out; others bring their hands together over their heads, bringing forth a conical, pointed shape. While this reflects by definition, a viewing of entities by means of more encompassing categories, such as coniferous or deciduous, one sees that it is essentially the shape that is in their attention, that gets depicted, revealing how schematization underlies their depiction.

At the same time, these kinds of experiments also reflect how participants, in presenting different shapes, are essentially attending to these based on their knowledge of trees that also comes from perspective/situatedness. Apart from a situatedness based on one's own vertical uprightness, one also discerns in some experiments, an epistemic perspective on trees that comes from a bodily situatedness in specific geographic regions with specific kinds of trees. While participants in Europe often come up with the conic shape, a knowledge about trees in the Indian subcontinent flows into its kinetic conceptualisation in Indian performing arts. There could be a stylistic abstracted or reduced depiction of its height and verticality with a conventionalized gesture, as seen in the gesture for *climbing on to a tree* (Figure 6), or a more illustrative depiction entailing a spreading movement of the arms towards side-high, with a placement of BH in the same hand form *tripatāka* at side-high, palms facing down. Differences based on one's own situated perspectival experience have been observed in other instances of spontaneous depictions as well, like for plucking flowers, or for water. In the case of the latter, often any one of the movement versions described above for river or ocean are brought forth.

One sees, in particular, with participants who are laymen, that their own perspective plays a role. As opposed to that, the dancer learns and also explores different depictive possibilities, which are based on exploring expanded perspectives necessary for creative variations. Nevertheless, it is important to understand that even in such an afore-mentioned epistemic notion of situatedness, the basic meaning as evidenced in gestures, is finally a matter of perspectival experiences coming from a bodily situatedness in the world. And what matters for any instance of depicted meaning, is the notion of attending to, or what comes into attention in terms of properties or object features. Based on the various functions of attention that Croft and Cruse discuss, it would be selection, namely a selective attention to an object feature. What is depicted in a gesture in as much tells us what comes into attentional focus at the moment of producing the gesture, the term “foregrounding” (Müller, Bressemer, Ladewig, 2013) was seen to be used in the discussion cited in the previous chapter. And as gestural meaning depiction indicates, this must finally lie in what lends itself to attention in the first place, in perspective-enabling situatedness. At the same time, an attending to can also change the perspective given through epistemic knowledge. When attention is drawn to features participants are not depicting in workshop sessions, such as branches of the tree, a spreading of hands is observed, at times after a short reflective moment. In discussing the construal of shapes and the role of schematization involved thereby, it becomes evident how both attention and perspective/situatedness matter. They inform each other just as was seen in the construal operations that reflect a conceptualisation of spatial aspects.

2.1.2.2 Schematization as cognitive ability to structure

Schematization is finally discussed as a basic level constitutive ability, falling under the cognitive capacity of constitution/gestalt, which, according to Croft and Cruse (2004:3.5.1), gives experience structure or gestalt. The **structural schematization** defined in this regard as the ability to conceptualize entities of a scene or their component parts in terms of their topological, meronomic or geometric structures is most evident in gestures. Entities or their component parts are conceptualized in terms of their Geometric structures, i.e. contours or outer form such as shapes, or topological structures such as surfaces, is again best illustrated in the lotus gesture. There is the conceptualisation of the flower based on its round shape. Or the conceptualisation of a surface on which the flower is perceived, in the position and orientation of the palm of the LH, whereby it is the orientation of the palm that was seen to be given semantic relevance, whether in the gesture for the lotus leaf or Müller’s examples of a picture frame cited in Chapter 1.

In the account by Croft and Cruse, one also yet again discerns categorization in conjunction with schematization. The part-whole relations attributed to categories are discussed here as meronomic relations. That this is a question of structural construal is defined here in terms of structuring as a constituting of entities based on specific or non-specific **boundedness**. While discussing categorization is not the aim here, nor the notion of meronomic relations as discussed in cognitive semantics, the understanding that at the basic level these part-whole relations are based on the constitutive ability to structure experience is of interest. The reference here to outer form or overall shape is, for instance, seen in the definition given by Lakoff and Johnson (1999:27f) of basic category levels. It sheds light on structuring in terms of geometric or topological features, of outer form, surfaces and overall shape, all of which in terms of boundedness are given in, for instance, the depiction of the lotus flower.

It is with regard to such a structuring of experience defined under constitution/gestalt that the notion of image schemas is discussed by Croft and Cruse. They are understood as structuring both bodily and non-bodily experiences. In their constitutive capacity, they impose gestalt or topological structures on entities. That they are operative in construal operations is illustrated here by taking examples from language use and linguistic terms. For instance, in referring to milk in a bowl, or dust on its surface, an image schematic construal of the bowl, as a container in the first instance, and surface in the second, is indicated. In other instances, there are force dynamics image schemas that impose structures (2004:3.5.2). Events are conceptualized in terms of some forces acting on participants of an event in different ways, i.e. an antagonist acting on an agonist. These are exemplified by way of how sentences are structured revealing these different ways.

Of interest is that the kind of construals mentioned above are again brought in relation to attention. There is selective attention to topological or geometric features of objects, whereby attention interacts here with both Gestalt and figure/ground spatial alignment. Scalar attention is relevant in terms of boundedness. The construal of bounded individual entities involves fine-grained attention, which, again, is best illustrated in the lotus gesture. The attention to individual components informs the constitutive ability to conceive the flower as a bounded whole. While construing bounded/unbounded unit wholes reveals a more coarse-grained attention. And given the discussion by Croft and Cruse with regard to boundedness based on linguistic examples, the coarse-grained notion would underlie a categorization in the

superordinate category, similar to the earlier discussion on this, perhaps best illustrated in terms of gestural meaning depiction for brocade saris; referring to attire in general would not have reflected the same fine-grained attention to object features, as in the case of saris, and, even more, brocade saris.

Essentially, the same operations such as schematization, or for that matter, figure-ground organisation, discussed elsewhere with regard to structuring shapes, or related to spatial relations, are discussed here as well, however in terms of a structuring as a constitutive ability. Here, these basic properties are understood as underlying a structuring or constitutive ability as a cognitive capacity, where, yet again attention matters. Schematization is finally discussed here as a constitutive cognitive capacity itself. In fact, as Croft and Cruse specify, constitutive cognitive capabilities, given the notion of image schemas, differ in a way from the other three cognitive abilities, in that they provide structure to experience that is communicated. It is such a notion that is of interest here. Based on their definition, image schemas are understood as structuring experiences that are grounded or stem from embodied domains. What domains are, becomes evident below in the definition of the construal operation called profile-base relations.

2.1.3 Construal of gestural meaning as profile-base distinction

A profile-base relation is the most significant among the dimensions of imagery/construals, according to Langacker (1991:5). And part-whole relations are considered to be the “canonical example” of profile-base distinction (Croft & Cruse, 2004:2.2:294). We see in gestures, how part-whole relations and structures are basic to meaning and are the metonymically profiled features of objects being referred to. Thus profile-base relations must matter in a primary way. Let us look at how they are defined.

On Langacker’s account, words reflect concepts, defined as a specific aspect or a substructure in a base, profiled or gaining prominence in a specific construal by being “elevated to a distinctive level” (1991:61). They in as much presuppose a base or domain of experience, against which they are profiled. In this sense they are a profile or concept profile. This is perhaps best understood in the examples given by Croft and Cruse (2004:2.2). The word *arm*,

for instance, profiles a concept ARM, and presupposes a BODY¹⁶. DAUGHTER presupposes PARENT and the kinship relationship existing between them. Or the concept WEEKEND, presupposes a whole background system which entails both a natural phenomenon of day and night sequence and cultural conventions of working and non-working days. Domains are, in as much, defined by Langacker as hierarchical cognitive structures of indefinite complexity that range from most basic cognitively irreducible perceptual experiences, such as sensory, kinaesthetic and emotive experiences to a concept, both novel and fixed, a conceptual complex, an elaborate knowledge system or “recognition of immediate context (social, physical and linguistic) and so on” (Langacker, 1991:2, 61). Croft and Cruse (2004:2.2:273) see in the notion of domains, Fillmore’s frames, defined as a coherent region of human knowledge or conceptual space based on which concepts are organized. Concepts are always characterised relative to one or more of these domains (Langacker, 1991:35). There is, thus, no concept that is independent; it is always related to some form of general knowledge of the world, reflected in the base, frame or domain that is necessary to understand it.

In the meaningful elements, metonymically profiled or highlighted in any given gesture, there is thus a concept, presupposing a base or domain of experience, which can be hierarchical. Applying this understanding to one example, for instance, the gesture for *brocade saris stealthily stealing*, there is knowledge about saris in kinetically conceiving the gestures discussed in earlier chapters. In this sense, while we could understand SARIS as an immediate base, there is a domain CLOTHES or ATTIRE with a larger knowledge system involving cultural practises concerning attire, to be presupposed in addition. We see such a larger cultural knowledge against which meaning is profiled in the different aspects profiled within each of the alternate gesture variations analysed, such as the gold material and draped shape of the brocade border, the draping action, or the length of the sari in the gathering action. It reflects, at the same time, the construal operation that Langacker defines as scope of predication or dominion (1991:7). Alternate construals are enabled by definition, due to just this larger scope of dominion, apart from the relevance of the immediate base or domain for the concept.

In this dimension of construal as well, cognitive capabilities constrain construal operations. Aspects or substructures of individual entities or whole knowledge systems as gaining

¹⁶ In Langacker’s (1987) cognitive semantic conventions lower-case italics represent the word while upper case the concepts underlying meaning (cf. footnote Croft and Cruse, 2004:2.1:163).

prominence through profiling/highlighting is defined as a selective attention or focussing on only parts of one's experience relevant for the purpose at hand. So when in the performing arts context, the performer's creative ability to make such selections informs gestural depictions, which, in turn, also relates to one's experiences, there are domains of experience in play. Additionally, metonymy itself is defined by Croft and Cruse (2004:3.2.1:731) as a selection of a more salient entity or concept within a domain or domain matrix to refer to another concept in the same domain, thus, leading to a shift of a concept profile or meaning. We saw, however, in Mittelberg's cognitive semiotic explications discussed in Chapter 2, a broader understanding of metonymy when applying the sign-object relations to gestures. In the notion of internal and external metonymy, we saw similarity in conjunction with inner and outer contiguity relations driving form and meaning in conceiving the various part-whole relations that gestures bring forth as basic meaning. In this sense, selective attention must interact with these semiotic modes, in particular similarity, in enabling both the iconic and indexical gestures, given they all finally refer to profiled object features based on part-whole relations. Or as we can here discern, profile-base relations.

In this broader context, metonymy, which was seen to subsume metaphor, should in effect be constrained by the other cognitive capacities as well, such as situatedness as discussed above, or even comparison, which underlies a metaphor. As noted earlier, Mittelberg (2010b) also refers to a situatedness as always given. Comparison is entailed in the notion of parallelism that defines a metaphor. In the lotus gesture, an entity is compared with another based on the parallelism in shape. Yet, the very basic notion of a facet or feature being highlighted has to do finally with an attending to these. In the meaning referred to here, an attending to the round shape in the first place, both in the lotus flower and the eyes, must enable the comparison and parallelism entailed therein. Such an attending must in turn lie in how the shape, as a property of the natural phenomena being referred to here, must lend itself to attention.

Attention is further evident in the function defined as **scope of attention** (2004:3.2.2), which enables the alternate construals of meaning that stem from the larger scope of dominion mentioned earlier. It denotes an attention or a periphery of consciousness that surrounds what is selected, in which there are entities **accessible** to attention. This understanding is discernible in a most obvious manner in the additional features that were depicted in the gestures or their variations. The knowledge of saris at large enables bringing further features

to attention. This attention to the larger scope is often enabled, as Croft and Cruse discuss referring to Langacker's **reference point**. It functions as an initial focus of attention by way of which a scope of dominion can be established. In the most simple of instances, attending to the shape of the lotus flower, would thus enable attending to the leaf below the flower.

The depictions of variations or elaborations of narratives on a more creative note, in revealing such a notion of a reference point, also unveil the complex ways in which attention functions. After a word or phrase meaning is established by a gesture, other facets and features, explicit or implicit in the verse and given in the story at large, enter the gestural narrative as variations and elaborations. This in fact reflects the notion of reference point being used as a methodology of depiction, to then elaborate upon it, enabled, in turn, by the abilities of the performer to attend to these. Such an initial gesture functioning as a reference point can establish the very first understanding of what is being depicted, both for the onlooker/audience and the learner. In the learning process, which is interesting here, it enables leading to elaborations based on attending to the initial gesture, its envisaged meaning and movement. And once this is established, it guides the learner to get more elaborate or find more variations.

For a mature performer, the added features could emerge progressively out of the actual kinetic conceptualisation itself: like the spontaneous shudder accompanying the depiction of the cowherd maidens entering the river; a gestural elaboration mentioned but not analysed in the first chapter. One may say a further physical property is, thus, referred to, namely the temperature of water. However, this is not being attended to in a conscious way; it comes out of conceiving the gesture as entering a river. It essentially emerges with the downward movement depicting a dive. Such spontaneity in depiction has a term in Indian performing arts, *sāttvika-abhinaya*, defined in the NS, the treatise on performing arts cited in the Introduction, as a mental capacity to bring forth meaning. But, as practise reveals, the knowledge this presupposes, must lie in a domain of experience pertaining to movement itself. It points to an aspect of attention, which as was mentioned in the earlier chapter, comes from attending to the kinetic conceptualisation of meaningful elements. The attending to the execution of the necessary movement to bring forth meaning, also enable spontaneous depictions that, just as with the spatial aspects, come into attention or awareness subsequently, after they emerge in movement.

One discerns how attention is apparently taken advantage of, one may say, both in the learning process and the presentation to the onlooker. Attention as a cognitive capacity is particularly operative in profile-base relations, the most significant, yes fundamental dimension of construals. As Croft and Cruse discuss, there are several ways in which attention operates. Gestural meaning construction, as analysed above, exposes how these are operative, exemplifying, in particular, the function of attention as a complex process. We not only see that meaningful properties as metonymically profiled aspects of objects are a matter of what gains salience, but also how, in particular, how attention might operate. Attention is related to metonymy in that, metonymy driven by similarity and contiguity must involve attention, specifically an attending to properties. Establishing similarity, so that there is an iconic or any of the indexical depictions in terms of an object property such as shape or spatial aspect, indicates that this object property is being attended to. Such an attending to also enables other entities to enter attention, as the shudder example illustrates. Here there is no attention to the property of water, its temperature. But in a bodily way it emerges with the movement of entering, thus bringing it to attention, both of the performer and the audience.

We have seen in the discussion on profile-base distinctions above that meaning is finally a question of how it is characterised by a base or domain of experience, that can range from bodily experiences to whole knowledge systems. Thus the profiling of object features is a matter of various kinds of experience. Gestures are produced to invoke meaning, but this is evoked primarily in specific ways and with the specific content, namely physical properties. such as shapes, spatial aspects and movement, which are, as mentioned above, the profiled properties of the referred objects, events and actions in the concrete world. From the perspective presented above, an evoking of meaning is also connected with a human cognitive ability to conceptualize the experience to be communicated (Croft & Cruse, 2004:150) and resides, as Langacker cited earlier defines, in cognitive processing. Thus, given frames and domains are connected with general knowledge, the basic meaning gestures reveal is, essentially, evoked based on knowledge that stems from the physical world. There was a conceptualisation of reality identified in the earlier chapter. The discussion here brings us to the notion of a conceptualisation of experience that is rooted in the physical world, with attention as the cognitive capacity key to enabling it.

2.1.4 Meaning – a conceptualisation of experience

Drawing conclusions from the observations made in this chapter hitherto, the analyses presented reveal how gestural meaning construction is seen to follow cognitive construal operations as postulated by Langacker, which in turn are related to basic human cognitive capacities, as Croft and Cruse elucidate. As exemplified in the analysis, there are specific construal operations and cognitive constraints that are relevant for the basic aspects of meaning as depicted in gestures.

Firstly, spatial relations are seen in conjunction with figure-ground organisation as construal operation. It is in spatial relations that such an organisation takes place; a subject is on, next to, under or behind an object. Furthermore, there is a level of specificity in the profiled features gestures bring forth as meaning, which is about a level of schematization and categorization that is connected with scalarity. In all these instances, it is essentially factors such as size, structure, motion and location, or the contours or overall shapes, specifically perceived object properties, that define these. Apart from this, we have seen how a profile-base distinction is relevant in every gesture, given that gestures metonymically profile an aspect of an entity. Every profiled feature is relative to a base that is a cognitive domain, a coherent domain involving knowledge.

We have also seen in each of these construal operations how one or more cognitive capacities are manifested. Given that part-whole relations are evident consistently, there is attention as selective attention in these. Attention, in one or the other of its functions, was generally seen to be manifested across construals. It was, thus, seen to be ubiquitous, revealing an overarching function. Not only spatial aspects, but also shapes or movement were seen to be a question of perspective/viewpoint as well. Situatedness at both basic and abstract levels was also seen to inform meaning, at the same time, clearly revealing the basic function of bodily situatedness. Comparison/ judgement was relevant more at a secondary level of meaning as in a metaphor. Finally, the basic constitutive capacity of structuring not only geometric and topological structures, but also part-whole relations is given in the very nature of gestural meaning.

The point that stands out in the discussion hitherto, is the fact, that in identifying the cognitive construal operations that must underlie the kind of basic meaning gestures reveal, a few stand

out from the dimensions of construals that Langacker lists, and which Croft and Cruse relate to basic human cognitive capacities. These are perspective/situatedness, schematization and attention, which are all essentially cognitive capacities, given schematization is also finally discussed as a constitutive cognitive capacity due to its structuring function, essentially in terms of a constitutive structuring of experience, exposing, thus, the role of image schematic construal operations.

In fact, the construal operations that relate to structural and relational aspects, such as spatial relations, part-whole relations or structuring of shapes, are recurrent across classifications, even if Croft and Cruse classify them distinctly under the four cognitive capacities. Finally, construal is defined as “constrained by convention as well as by the experience itself” (2004:3.6:1089). In their postulation of a dynamic construal of meaning regarding linguistic semantic expressions, Croft & Cruse (2004:4.5) observe that the basic cognitive capacities involved in experience are understood to be a very basic kind of constraint. They impose certain structures and limitations on construal operations. Of interest here is the notion of a universal tendency towards structuring, as in figure/ground organisation or gestalt, or as in memory and attentional focus. We have seen that structuring in figure/ground organisation is in conjunction with spatial relations. Gestalt is understood as a structuring of geometric gestalts and part-whole relations, given not only in shapes, but also spatial aspects. Gestures in revealing such meaning in a basic and consistent way underscore this universal tendency.

Attentional focus is particularly pronounced in gestures. Not only the ubiquity of attention across construal operations, but also the role of attentional focus is evident in the analysis above. Meaning is a matter of attending to facets or features that lend themselves to attention. Croft & Cruse (2004:4.5.3.2) maintain, that it is in the ‘nature of reality’ that certain aspects lend themselves readily in certain ways and not in certain other ways. In gestures this can be understood in a most basic sense, that shapes, spatial aspects and movement lend themselves to attention readily. And depending on the mimetic object, it can be in certain ways and not in certain other ways. In workshop experiments with spontaneous depictions, it is rather shape in the case of a static tree, and movement in something motile like water, that are depicted, revealing that, it is these prominent properties that stand out in attention in each case. Thus, whatever gets depicted as meaning is what comes to attentional focus, which in turn is a question of what lends itself readily to attention. And as gestures reveal, it is the physical

properties or as put forward by Croft & Cruse, “natural properties of phenomena in the perceived world” (2004:3.2).

Coming back to the notion of foregrounding (Müller, Bressemer, and Ladewig, 2013) that was cited earlier, that gestural meaning depiction reveals when bringing forth different aspects of mimetic objects. In this sense, based on the discussions so far, one can say that whether there is a shape depicted in representing mode in a well-formed gesture, or schematically traced, must lie in how much attention one is paying to what lends itself to attention. In the analysis of a kinetic conceptualisation of gestural meaning in the previous chapter, it also became evident how depicting entities by way of their properties is a matter of attending to these properties through movement. Also, they can come into awareness in the first place, and, thus, lend themselves to attention as they emerge in movement. This was seen in particular for spatial aspects. Spatial aspects as a naturally inherent aspect of movement finally define both shapes and actions, in other words the reduced gestalts and actions that gestures are seen to depict as basic meaning. Croft and Cruse, as cited earlier, define how there are natural properties of phenomena in the world, that by lending themselves to attending to, enhance the salience of the phenomena to human attention. Thus, gestural meaning depiction, in revealing how properties such as shapes, spatial aspects or characteristic movement are the means by way of which objects, events and actions of the concrete world are depicted, tells us that it is through these physical properties that such phenomena gain salience. But more importantly, there is the notion of they lending themselves to being attended to.

Summing up, the conceptualisation of reality in physical terms that gestural meaning exposes, and was discussed from the perspective of mimetic/cognitive semiotic and kinetic conceptual processes in the earlier chapter, becomes discernible here as a cognitive processing involving human cognitive abilities. And this is understood, specifically, as a conceptualization of experience to be communicated. There is thus a conceptualisation of experience that gets communicated in gestures. At the same time, gestural meaning depiction reveals what must underlie such a conceptualisation. While the conceptual processes discussed in mimetic/cognitive semiotic terms exposed how object-sign relationships are established, we here discern how these could be a matter of a universal tendency to structure experience in terms of the physical properties identified and seen to lend themselves naturally to attention. The discussion here, in fact, illuminates how attention informs or contributes to experience. In other words, there is not only how, but also *why* the physical properties evident as gestural

meaning make sense as they do, and how evoking such a meaning could be more than invoking it for the purpose of communication.

At this point, we have arrived at the observation, that the meaning gestures present is what becomes meaningful in structural terms, revealing thereby a conceptualised knowledge about the world, that lies in the *ability to structure experience*. This calls for taking forward just this structural nature of conceptualising experience. At the same time, indicated is a structuring of experience that is perhaps in a more bodily and primary way, than evident from the understanding of general cognitive abilities. These, as postulated by Croft and Cruse, are abilities proposed by cognitive psychologists and phenomenologists. Gestures, on the other hand, shed light on how situatedness or attention would operate in specific bodily terms. In fact, the kinetic conceptual processes expose, how properties that become meaningful in a basic way are those not only emergent in and through movement, but also come into attention through movement. With this, we come back to the notion of image schemas discussed in the cognitive take we are looking at here, in their role as structuring experience, particularly in a bodily way.

2.2 Concepts, images, image schemas

Conceptualisation in Langacker's understanding is, as discussed above, a matter of cognitive processing relative to hierarchical cognitive domains, which range from basic embodied experiences to concepts to elaborate knowledge systems, thus, bringing forth distinct meanings. The successive chains of complex profile-domain relations finally "bottom out, when we reach directly embodied human experience" (Croft & Cruse, 2004:2.4.3:413). These domains are defined as irreducible domains of perceptual and other embodied experiences that do not presuppose other domains. These basic embodied domains of experience, which characterise cognitive processing at a basic level, are of interest with regard to the kind of basic meaning depicted in gestures. Then this is where such a meaning discernibly resides. Aspects profiled in gestures reflect, as illustrated in the examples below, what Lakoff and Johnson define as embodied basic level concepts and spatial relations concepts (1999:22-35). These in turn take us to the notion of images and image schemas that shed light on how embodied domains operate.

2.2.1 Basic level and spatial relations concepts in gestures

Basic level concepts are essentially discussed as basic level categories that were mentioned under categorization above. The understanding is that a mid-level category is a basic level category, in as much as it is the highest category by way of which something is recognised as belonging to a category. Such a categorization, mentioned earlier as determined by overall part-whole structures, is related, amongst others, to gestalt perception based on our bodily interactions, both perceptual and motor, with objects in their part-whole structures (Lakoff and Johnson, 1999:27-28). The depiction of the lotus flower, for instance, in its entirety as it appears on the surface of water, is a matter of such a gestalt perception. Going by its definition, there is a construal of the flower as a bounded entity, where the whole makes sense based on its parts. As was analysed in the previous chapter, the gesture is a composite of depicting the various aspects of the flower.

Furthermore, the RH placed over the flat LH in the same gesture, reflects a spatial relations concept *on*¹⁷, which is defined as a composite of elementary spatial relations such as *above*, *in contact with* and *supported by* (1999:31). In a similar vein, we see in the gesture for *brocade saris* that there is again gestalt perception in the shape of the brocade border, and a spatial relations concept *around* in the motor pattern of tying. The hands are moved in a circular manner around the waist. In the gesture for climbing onto a tree there is *onto*. Essentially, spatial relations concepts are discernible in all the gestures. In the analysis of a kinetic conceptualization of gestural meaning it was illustrated how spatial aspects as inherent to movement underlie the depiction of all basic meaning, given shapes and actions are a result of movement in space.

Spatial relations concepts are understood as being “at the heart of our conceptual system” (Lakoff and Johnson, 1999:30). They are, essentially, discussed as standing out to experience in terms of figure-ground organisation, coined as *trajector-landmark* (1999:30f, all emphases in original). Then, spatial aspects are not visible as entities in the physical world like objects are. Perceptual and conceptual processes impose them automatically and unconsciously, based on perceiving an entity in any of the spatial relations to another entity. Elementary spatial relations, which also enable more composite ones as stated above, are thus defined to have internal structures consisting of an *image schema*, a *profile* and a *trajector-landmark*. However, the point is, that underlying perceptual/conceptual processes are spatial relations as

¹⁷ Concepts are cursive in lower case in the Cognitive Linguistic convention put forth by Langacker .

embodied concepts. Lakoff and Johnson define them as embodied in various ways, as bodily projections enabled by the human body (1999:36f). There is a bodily grounding to these relations based on the orientation provided by the three-dimensionality of the human body. And there is a bodily situatedness involved, as was analysed while discussing the construal of spatial relations earlier. As Johnson (1987) further discusses, they are formulated by image schemas which are abstract, continuous, analogue structuring patterns of a specific experience. This brings the discussion to image schemas, understood as central for meaning and inference.

2.2.2 The notion of images

Croft and Cruse define image schemas as “schematic versions” of “images” arising in cognitive domains that are grounded or embodied, specifically, images that are representations of “specific, embodied experiences” (Croft & Cruse, 2004:3.1:687). There is, thus, by definition, the notion of an image that stems from embodied experiences, and a schematic version of it, which is the image schema. At this point, it seems useful to look briefly at the notion of image as defined in the fields under consideration here, namely gesture studies and cognitive semantics.

In Langacker’s postulation from a linguistic semantic perspective, as cited at the beginning of this chapter, varied construals of meaning is due to subtly different, yet specific images, the choice of which is a matter of linguistic convention (1991:56). They are defined as “language-specific semantic structures” (Croft & Cruse, 2004:3.6:1070). As semantically relevant conventionalised images they “embody” linguistic units (Langacker, 1991:61). In another formulation, a linguistic expression essentially “imposes a particular image on the content it evokes” (1991:1). Images here are apparently brought in conjunction with linguistic structures and/or how linguistic structures impose these.

McNeill (2005:74) considers that Cognitive grammar, though including seemingly dynamic elements such as image, however, does not provide the tools to look into the dynamic dimensions of language. Gestures, on the other hand, enable the understanding of the nature of imagery, because they present the mental images, memory and thought of the speaker as global, analogue, instantaneous images (1992: 12), and in doing so reflect the dynamic aspect

of language. Given the imagistic notion that McNeill (1992, 2005, 2013) brings to gestures and meaning, it seems appropriate to look into this account at this point.

Gestures according to McNeill bring imagery to materialization. Such gesture imagery is characterized in terms of certain semiotic properties that are different or opposed to those of speech (2005:10-11, 56-57, 90). So if gestures are instantaneous, because the image is materialized directly and instantaneously, speech unfolds meaning sequentially. The gesture directly takes on the image of the whatever is being referred to. If meaning presented in gestures is synthetic, i.e. several meanings are evident in one gesture unit, speech can present only one meaning in one linguistic unit. Also, a gesture is global in that the meaning of each part of a gesture is determined by the meaning of the whole. Gesture imagery is in addition dynamically shaped by the immediate context of speaking and is tied to communicative dynamism. Another feature of gesture imagery is that it is non-representational, in the sense, that gesture is the image, not a representation. McNeill thus differentiates imagery and linguistic content as the dynamic and static dimensions of language respectively.

Essentially, the “gesture, *the actual motion of the gesture itself*, is a dimension of meaning”, (2005:98, emphasis in original). And this is possible if “the gesture *is* the very image”. The gesture not just expresses or represents an image; the image becomes by way of gesture the “most developed - that is most materially and naturally embodied – form”(ibid). Gesture in effect gives body to imagery, making it tangible or obtainable. Such imagery is specified as visuospatial-actional imagery. Essentially, the understanding of imagery that McNeill posits is not of a photographic kind of mental imagery (2005:56ff). Meaning is directly embodied by form, and such a form is spatial and actional. “To make a gesture, then, is to iconically materialize meaning in spatial and actional form” (2005:56). At the same time imagery is not considered to be the same as iconicity. Iconicity could rather be a causal force to the one producing the gesture. It adds reality; “more iconicity equals greater materialization or reality of meaning” (2005:58) in the gesture.

This would mean an IMAGE ICON in Mittelberg’s terms. However based on the example given “by moving the hand up, upness is materialized” (2005:58), one discerns that meaning is created in action (McNeill, 2005:59). There is the notion of a spatial aspect taking on meaning here. This apart, iconicity is, primarily, a feature that emerges in the gesture, as was analysed in the earlier chapter from the perspective of cognitive semiotic conceptualisation,

establishing a specific kind of object-sign relationship. And we have seen there how object features are depicted in more specific terms, to put it now in Langacker's terms, with a high level of specificity. To use the terms materialization and reality that McNeill postulates, there is, so to say, a rather precise and high level of materialization that makes the lotus flower, for instance, look real in the gestural depiction. Also the analysis in the earlier chapter from a cognitive semiotic perspective exposed the relevance of the semiotic mode similarity for such a depiction. As was concluded there, similarity that drives gesture form and meaning on the part of the gesturer, better defines an iconicity that may be evident in a gesture. Thus, if iconicity is causative, it must hold good in this sense as well. Essentially, iconicity is given, when the gesture brings forth an image that is to a high degree similar to the object of reference. And the high level of materialization is given in the number of object features, that as discussed earlier, are evident in the gesture, in cognitive conceptual terms, due to what one is attending to.

Hands are, finally, a "material carrier", a term McNeill borrows from Vygotsky, which is "the embodiment of meaning in a concrete enactment or material experience" (2005:98). We have seen what a concrete enactment must mean in gestural meaning depiction. And given hands are material carriers, material must be interpreted in a bodily sense, the material being bodily. The gesture brings forth a material, bodily form of imagery. And if there is such a material experience, which is in this sense a bodily one, is it to be understood as an experience in the aftermath of gestural depiction, as was evident in the analyses earlier, or an experience that underlies meaning and leading to being presented in the gesture? This is the question that remains to be resolved.

Though McNeill's definitions define an embodied, materialised imagery, the further course of defining gesture imagery looks at the thought processes underlying it, continuing to draw from Vygotsky's 1930 (1986) writings. Given thought and language on this account impact each other mutually, and speech and thought come together in verbal thinking, McNeill, thus, considers the gesture and its accompanying speech together as constituting "verbal thinking in the form of action" (2005:90). In the extended definition, verbal thought is constituted of both speech and gesture, and in this understanding of verbal thinking, speech, gesture and thought must come together. This coming together is discussed in terms of growth point, GP (2005:64, 82, 90f,105f/2013:32); essentially a coming together of two distinct semiotic modes, or opposing or different modes of cognition (2005:92), namely form or linguistic form

here, and image, for the same underlying idea, created at the moment such an idea comes into being. This is the begin of unitary thought. Thus, gesture and speech have their “own means of packaging meanings” (2005:91), presented finally by way of gesture/imagery and speech/linguistic content. There is thus a differentiation between imagery and linguistic content evident here. And yet, McNeill essentially sees imagery as being shaped by the proximity to language, with language and imagery presenting a “same underlying idea unit in unlike forms” (2005:56).

Finally, meaning itself is discussed as a matter of thought, innermost thought. Vygotsky’s psychological predicate, defined as a „pure differentiation of significant information from the immediate context“, constituting a final innermost form of inner speech, has a unique structure, closer to pure thought, but thought “shaped by its intimate involvement with language” (McNeill, 2005:82). Perhaps the notion of the psychological predicate as adapted by McNeill can best be understood from the formulation “*significant (newsworthy) contrast*” (2005:107, emphasis in original). This reflects the communicative aspect given in gestural depiction. And the context from which the psychological predicate gets differentiated is defined as having external social and material constraints, but also as a “mental construction” on the part of the speaker in “an effort to construct meaning” (2005:107), an “essential component of thinking for and while speaking” (2005:86) that cannot be separated from the process. Both these constructs, the focus and the background, together constitute meaning in a psychological sense (2005:107). Meaning in as much is an irreducible point to background relationship. Elsewhere, quoting Vygotsky yet again, meaning is defined as “an act of thought” (2005:81). What we can conclude from McNeill’s discussion, is that given growth points are considered to be psychological predicates, and get unpacked to „surface linguistic forms“ (2005:82), the meaning thus constructed mentally, as becomes evident from the definition here, must get presented as stated above by way of both gesture/imagery and speech/linguistic content.

Though McNeill does not explicitly bring this observation in correspondence with the notion of spatial-actional gesture imagery he posits the gesture as revealing, one must conclude that the content that gets differentiated from the background and becomes meaningful, the newsworthy content or the focus in other words, is in effect such an imagery. In terms of gestural meaning, one sees here the same basic kind of meaning analysed earlier. Based on the analysis of a kinetic conceptualisation of gestures, the term spatial defining gesture

imagery must mean spatial aspects that finally define all other meaningful elements presented in the gesture, given their inherence to movement. Then movement in space is what we see in gestures, reflecting bodily depictive possibilities that are also essentially movement possibilities. And the term *actional*, given the movement-based nature of the hands when gesturing, must refer to the hands acting when gesturing, and not actions as mimetic objects. In other words, *actional* must also refer to the movement of the hands required for any given gestural meaning depiction.

Thus, hands as material carriers, essentially, and naturally, bring forth as what McNeill defines as tangible, embodied forms of images, basic meaningful elements tied to movement. Given this, if, as was cited above at the offset of this discussion, a gesture, “*the actual motion of the gesture itself*”, is a dimension of meaning, as McNeill (2005:98, emphasis in original) rightly defines, and this is possible if the gesture *is* the very image, then, one may conclude that the gesture is not just an embodied form of an image, but *is* an *embodied image*, in other words, an image having an embodied grounding. Then gestures produce, as has been analysed, meaningful elements that are primarily the outcome of movement, having movement as their inherent aspect. Furthermore, McNeill’s notion of a differentiation of meaning (the newsworthy contrast) from a meaning whole (the background or immediate context), reflects in a sense, the notion of profiling against a base. Thus, even though in the discussion from McNeill’s perspective, such a differentiation is understood as rooted in thought processes, there is good reason to believe that such a process is embodied.

To sum up, in McNeill’s definition on image or imagery as defined from the perspective of gestures, even if these are defined as embodying imagery or bringing to materialisation the most developed, embodied forms of images, specifically visuospatial-actional images, they are essentially seen as related to thought processes. To be specific, the embodied notion of gesture imagery only pertains to how images find embodiment in gestures. They are not seen to be the outcome of bodily processes. One rather discerns how the images reflect imagistic processes rooted in innermost thought, with gestures being defined as the “moment-by-moment thinking” (2005:15) or the momentary state of “cognitive being” (McNeill, 2005:99) of the speaker. Nevertheless, thought in this sense, is not considered to be of a conscious kind. One is not thinking of the gestures one is producing. They are rather “unconscious movements with semantic significance” (2005:90). And they are spontaneously and dynamically produced ‘online’ (2005:244) in the event of communication. This underscores,

in turn, even if McNeill does not explicitly mention this either, that there is a non-conscious attending to, operative when gestures depict meaning. McNeill also defines gesture as revealing the person in his entirety as “a thinking, speaking, willing, feeling and acting” whole by presenting the mental images, memory and thought of the speaker as global, analog images, which are instantaneous (1992: 12). Here, one discerns the thinking, speaking or acting aspects. How feeling comes into it needs further scrutiny.

In this brief overview of McNeill’s understanding of imagery in terms of gestures, one, thus, essentially discerns how meaning, thought, gesture/imagery and speech/linguistic content get related. Finally, McNeill discusses imagery as being shaped by its proximity to language (2005:56), even whilst defining how imagery is different to language. There is, essentially, in the notion of image a product of thought. McNeill, nevertheless, refers to Lakoff and Johnson’s notion of embodied cognition, defining gesture as the essence of embodiment (2005:103). This needs further fleshing out.

Going back to the notion of images arising from embodied domains and their schematic versions defined as image schemas, Johnson (1987) discusses the notion of image schemas¹⁸ as building blocks between embodied experience and language, reasoning and thought, equating image schemas to the very structures that become evident in a bodily way. There is thus an embodied component underlying language and thought characterised by images as arising from embodied experiences and their schematic versions, the image schemas. This notion of a structuring of experience underlying meaning will be examined henceforth, again placing it in relation to gestural meaning, and what such a meaning depiction, in particular from the perspective of explicit gestures being analysed here, has to offer as insights.

2.2.3 Image schemas as schematic versions of images

In Johnson’s (1987) explications, images as such are not defined, but images, schematic patterns and metaphoric projections in their hierarchical relationship are defined in their centrality to meaning. Image schemas arising as recurring dynamic patterns of bodily movements and various perceptual interactions can be projected by metaphor onto abstract domains. Thus, image schemas and metaphoric projections constitute a two-way projection from the concrete to the abstract, constituting two types of imaginative structures (1987:xv).

¹⁸ I will use this generally used term, though Johnson uses the term “schemata” for the plural of image schema.

Finally, metaphor, imagery, metonymy, mental spaces, categorization and so forth are listed as imaginative processes (Johnson, 1987:191-192, Lakoff and Johnson, 1999:77); processes we have seen earlier in gestures as well. However, given the notion of the bottom-line understood as central to conceptualisation is embodied, and definable in terms of images and their schematic versions, Johnson thinks that imagination itself is an image-schematic ordering of experience that is rich and includes basic perceptual, motor, emotional, historical, social and linguistic dimensions. By means of imagination, the “bodily works its way up into the conceptual and the rational” (1987:XXI). It lies in how conceptual structures themselves are connected with the image schematic structuring of experience in a basic bodily way, at the level of what is considered concrete.

Image schemas are, in effect, based on Kant’s understanding of the term schema, defined as “nonpropositional structures of imagination” (1987:19), the body-based forms of inference. Unlike Kant’s idea of schema, Johnson does not see them as fitting concepts, but, as cited above, formulating them. They neither specify an objective reality symbolically, nor are rich images, but operate at a mental level somewhere between these, functioning like abstract structures of an image that manifest themselves in images, perceptions or events. Cognitive operations finally modify and extend their structures to become explicated in propositional terms. Linguistic meaning, is in this sense, a “special case within the broader notion of *meaningfulness in general*” (1987:18, italics in original). When discussing image schemas, one is but looking at pre-linguistic patterns that are a part of meaning and understanding and exist as connecting parts of our meaning network, conceptual system and language. In this sense, image schemas, thus, call for a broader understanding of meaning, as Johnson maintains (1987:48). It is this approach to image schemas that this account entails, namely the emphasis on an embodied notion of meaning, that is of interest here, though in the cognitive take itself, image schemas continue to be discussed in linguistic terms and metaphors. In other words, the intention of looking at an image schematic understanding of meaning construal aims at arriving at an understanding of the embodied grounding, from where meaning must arise.

There is in the notion of image schemas as building blocks, as defined above, the understanding of a) images that arise at the bodily level from embodied experiences, b) image schemas that are the schematic versions of these images, and c) the images, perceptions and events that image schemas as coherence-giving structures of experience finally manifest. This

occurs apparently as the bottom-line of cognitive, or perhaps, imagistic processes involved in meaning and conceptualisation. That image schemas manifest images, perceptions and events is directly discernible in gestures, and will be the starting point for the analysis, that will subsequently look into how image schematic construals reflect in a direct bodily manner that the conceptual processes evident in gestures are grounded in a structuring of experiences of a basic embodied kind.

2.3 Gestural meaning – an image schematic construal

There is a definition of image schemas by Turner (1997), that is best suited to understand the notion of image schemas in a most brief manner and that would benefit the analysis to be presented. There is an image schema of moving toward an object, of joining one thing to another, of a path that leads from a source to a goal, of hesitation and advance, of movement from a centre to a periphery, of entering or leaving, of enclosing or extracting, of rising or falling, of stopping or penetrating. There is, thus, an image schema for every concept or meaning, but the most important and useful ones are about how we structure and interact with space. This itself reflects the relevance of movement gestures instantiate. Finally, a basic image schema that a meaning has, can be mirrored in a form. What is, thus, defined as a form-meaning pairing is immediately and directly discernible in the gesture. I analysed in the earlier chapters how gesture form is the meaning, evident both from the semantic relevance of gestural form parameters and the kinetic conceptualisation of meaning. Given form is meaning in gestures, gestural form must most directly reflect a basic image schema.

Coming back to how gestures in revealing basic meaning, as postulated by Müller (2010b) reflect basic structures such as everyday actions/motor patterns, or geometric patterns/gestalts. These structures are defined as motivating meaning independent of the local, intended or secondary meaning a gesture may refer to and as given in the accompanying verbal expressions. I observed at the conclusion of Chapter 2, that basic meaning has its own structures, derived essentially from object features, given these basic structures constitute the meaningful object features identified as shapes, spatial aspects and movements. Müller's form-based analysis discussed in Chapter 1, looks at the form itself to see what motivates meaning. In this sense, in the further analytic criterion called Motivation of Form, basic structures are identified in gestures and attributed to image schemas.

Müller’s analysis is meant to analyse and study co-speech gestures in terms of a disambiguation of what they depict and how this relates to linguistic conventions. I intend to use this analytic criterion to identify the image schematic construal of meaning in the explicit gestures presented here, and from there, to unveil the very bodily experiences that may motivate the basic structures and, thus, meaning evident in gestural form features. And this, by drawing from Johnson’s (1987, 2007) account on image schemas and their bodily underpinnings. As was seen in the form-based analysis, the explicit gestures used in Indian performing arts reveal the same structures and the inherent gestural form-meaning pairing, thus enabling an identification of the image schemas mirrored therein.

Table 3 illustrates the image schemas revealed by some of the Bharatanatyam gestures analysed at the beginning of Chapter 1 and illustrated in Figures 1 – 6. While some of the image schemas may be specific to what the gestures discussed here depict, they, however, reveal some common and basic image schemas discussed by Johnson. Also, apart from looking only for motor patterns, I will specify movement patterns as such, considering, as was discussed in the earlier chapter under kinetic conceptualisation, movement finally underlies actions as well, while also becoming meaningful in gestures in broader dimensions. The hands do not always reveal only motor patterns in the strict sense of actions the hands perform themselves as understood in Gesture Studies. Motor patterns are essentially movement patterns with their own spatial features.

Gesture	Geometric patterns/shapes. Motor/movement patterns. Spatial configurations	Motivation of Form/Image Schemas¹⁹
<i>Lotus</i>	Geometric shape: LH flat, RH tetrahedral changing to round/cup-shape. Movement pattern: RH fingers opening, extending and spreading. Spatial configurations: RH over LH, fingers extended in various directions and held apart.	FLAT/SURFACE, TETRAHEDRON, ROUNDNESS, OPENING/SPREADING, HOLDING, MOULDING, PROXIMITY/ADJACENCY ON
<i>Brocade saris</i>	Geometric shape: BH partly flat, creating semi-circle. Movement pattern: BH moving downward and outward. Motor pattern: BH moving from the navel outward in a circular rotating movement and back, to be connected at fingertips finally at the navel.	FLATNESS, SEMI-CIRCLE, TYING, CIRCULARITY, AROUND, PATH, SOURCE-PATH-GOAL, ADJACENCY

¹⁹ The upper case is used to denote image schemas in Cognitive Linguistic Research.

	Spatial configurations: BH adjacent to and partly going around waist.	
<i>Stealthily taking away</i>	Movement pattern: BH clasping each other, then moved up from EP-RT to P-UL in a curve. Spatial configuration: upward direction of movement trajectory.	ENCLOSING, UP, SOURCE-PATH-GOAL, CURVE, FORCE/PROPULSION.
<i>on to a tree climbing</i>	Hand shape: BH flat Movement pattern: RH moved up from EP-RT to P-UL in a curve. Spatial configuration: LH vertical placement at P-UL, RH upward and then downward orientation of palm, upward direction of movement trajectory, BH adjacency/contact at end.	SOURCE-PATH-GOAL, UP, UP-DOWN, VERTICALITY, CURVE, PROPULSION, SUPPORT, BALANCE, CONTACT.

Table 3

In the gesture for *lotus flower*, illustrated in Figure 1, one discerns a tetrahedral and round geometric shape in the RH. Given that form mirrors the basic image schema of a meaning, there are the image schemas TETRAHEDRON and ROUNDNESS evident here. The movement pattern of the fingers is an opening and spreading, thus, mirroring image schemas OPENING and SPREADING. The movement, as was discussed under mimetic modes, could also reflect a voluminous moulding and, in turn, the image schema MOULDING. Or be reminiscent of an action of holding, thus motivated by the movement pattern of the same, and thus reflecting a HOLDING image schema. The LH is seen to be motivated by the geometric gestalt that is definable as flat, reflecting a FLAT image schema. While this is at the level of basic meaning, conceiving it, thus, with PU orientation reflects a secondary level of meaning, namely that of the leaf as a surface, which would be a topological image schematic construal. We have here a SURFACE image schema. At the same time, there is in the placement of the right hand over the left hand, as we saw earlier, the basic level spatial relations concept *on*, which would be formulated by the image schema ON, with outer contiguity relations which in image schematic terms are PROXIMITY and ADJACENCY.

In the gesture for *brocade saris*, illustrated in Figure 3 in the earlier chapter, the basic structures evident have to do with flatness seen in the almost flat shape of BH, which then trace a semi-circular geometric pattern, before revealing a movement patterns of moving outward and then back to centre in a circular rotating movement around the waist. There are mirrored in the form features, the image schema FLATNESS and SEMI-CIRCLE; shapes by way of which the gesture form and first movement are motivated. The motor pattern evident thereafter pertains to the tying action that constitutes the meaning in the gesture. There is,

thus, an image schema TYING here, in addition to CIRCULARITY and AROUND, formulating the spatial relations concept of *around* given here. Finally, there is the basic image schema SOURCE-PATH-GOAL in the whole movement pattern of BH; the hands start somewhere, traverse a trajectory in a specific direction and end at a destination, as this schema is defined (Lakoff and Johnson, 1999: 33). The hands begin at the navel, move in circular, first outward and then inward, trajectory around the waist and come back together near the navel. Additionally, the hands are placed adjacent to the waist to depict the sari being draped around the waist, mirroring again ADJACENCY as an image schema. This gesture illustrates the recruiting of all basic structures: motor and movement patterns, geometric gestalts and spatial configurations. Therefore, several image schemas are discernible.

Coming to the gesture for *stealthily taking away*, as illustrated in Figures 17 and 18, the hands clasped together near the chest depict, as discussed earlier, doing something secretly. There is something about enclosing thereby, one could say, of the desire to steal. I would say an image schema ENCLOSING is, thus, attributable to this placement and movement of the hands as in a clasping/enclosing, apart from ADJACENCY. There are subsequently several spatial aspects again mirroring the image schemas UP, CURVE and, yet again, SOURCE-PATH-GOAL in the upward curvilinear movement of BH (Figure 17). The same spatial image schemas are also evident in the movement patterns of the RH gesture for *on to a tree climbing*. It culminates with a placement PD on the LH, as in Figure 18. One can discern CONTACT, and assume BALANCE and SUPPORT schemas in this final orientation and placement, given the meaning depicted; the body makes contact with the tree, needs to balance and find support. In addition, there is an UP-DOWN image schema involved in VERTICALITY in the vertical placement of the LH of this gesture. The spatial features are, so to say, given form and gestalt through the geometric shape of the conventionalised hand form itself. There is also a force dynamic schema PROPULSION assumable in the upward movement in a curve and the intended meaning that is conceived as a jump on to the tree.

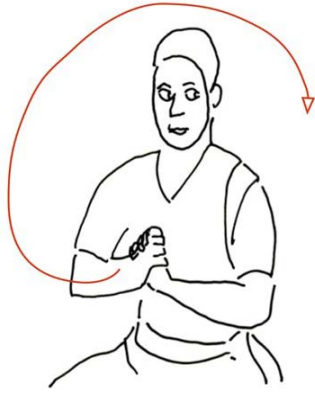


Fig. 17



Fig. 18

As the analysis here, even if perhaps not exhaustive, exemplifies, gestures with their inherently concurrent form-meaning pairing reveal an image schematic construal of meaning. Most importantly, they reveal such a construal in bodily terms. The basic structures that motivate meaning, such as shapes or geometric gestalts, as in the lotus gesture; or motor/movement patterns underlying spatial configurations that define both shapes, as with the opening/spreading, as well as actions, as in circularity and around for the tying gesture; or movement patterns that define spatial configurations as in trajectories and directionality for the climbing gesture, or for that matter in contiguity relations, such as adjacency/proximity or contact discussed under cognitive semiotic conceptual processes, are a matter of image schematic structures. Attributing image schemas to gestural form features also exposes how meaning depicted in these gestures is a matter of other image schemas that have to do with balance, surface or support. Given this, and considering the definition of image schemas, we discern, thus, that what motivates meaning at the basic level as evident in gestures, is primarily informed or driven by a structuring of experience.

From the perspective presented here, the conceptualisation of reality in terms of physical properties as revealed in basic meaning, reflects a structuring that occurs as “a recurrent pattern, shape, and regularity in, or of, ongoing activities” or “continuous structures of an organising activity” by means of which, according to Johnson (1987:29) our experiences get an order and pattern, thus, becoming meaningful and comprehensible to reason about. As we will see below, Johnson discusses *gestalt structures* (1987:44 italics in original) or internal structures of image schemas in this context that relate to structural aspects found in perceptual and/or motor experiences.

2.3.1 Image schematic gestalt structures

Gestalt structures are defined as a few basic elements or components which are definite yet simple internal structures in any given image schema. Let me briefly exemplify how gestural form exposes what Johnson defines as gestalt structures in two different images schemas seen in the gestures above. There is a source or starting point, a goal or ending point, and a continuous movement in the motor pattern for the gesture for *brocade saris*, and the movement patterns in the gestures for *stealthily stealing* and *onto a tree climbing*. There is, thus, a route from source to goal in the movement, as defined for the internal structures for PATHS (Johnson, 1987:113).

There is, simultaneously, a specific trajectory with a direction, evident in these movement/motor patterns as well as the palm orientation in the last gesture, that relates to the basic internal structures defined for the SOURCE-PATH-GOAL schema by Lakoff and Johnson and the “spatial logic built into” such a schema (1999: 32-33). The gestures in each case finally mirror what is defined as an extension of this schema, based on the specific meaning this schema is projected onto. Thus, the going around action involved in the tying reflects the structuring as a path with a trajectory that is circular, revealing an additional CIRCULARITY and AROUND. In going around the waist, the tying action is structured as a path alongside the waist. The spatial relations of *around* and *adjacency* are, thus, seen to be defined by the SOURCE-PATH-GOAL schema, reflecting this schema’s understanding as forming spatial relations. This is also evident in the other two gestures, where the trajectory has an upward direction with a curvilinear movement. In addition, the figure-ground organisation analysed in the third gesture, where the RH is moved onto the LH, reflecting the spatial relations concept *onto*, is again a question of the spatial relations that can be formed by this schema by “the addition of profiling (also called *highlighting*) and a trajector-landmark relation” (1999:33, emphasis as in original). Thus, a recruiting of the recurring pattern of SOURCE-PATH-GOAL schema with its basic elements for different kinds of spatial aspects of meaning is discernible in a pretty direct and bodily manner in the gestural form features.

One can also discern internal structures of a force image schema as defined by Johnson (1987, 43-44, all emphases as in original) in the upward movement patterns of these gestures. There is a tracing of a path which reveals a *vector* quality or directionality, defined as the movement of the force through space in a direction, here, of the object itself. That the vector has a *path of motion* is evident from the form features. However, that forces also have *origins* or *sources*

is only deducible from what here is, essentially, a structural analysis, based on knowing the meaning depicted in the gesture. The source of the force here lies in knowing that a jump requires pushing off the ground and having, thus, an *interaction* with it in generating the force. That there is a *target* for the jump, namely the tree, is, nevertheless, clearly evident from the final culminating position of the RH on the LH. Based on this, and the curvilinear trajectory of the RH, PROPULSION as a force schema is discernible. If we now stretch the form-based aspect of the structural analysis being presented here, and apply it to the positioning of the RH, which is kinetically conceived to arrive as a centred placement of the palm on the fingertips of the LH (Figure 18), one can, in a structural and purely theoretical sense, recognise Johnson's definition of the internal gestalt structures of a BALANCE schema with an axis and force vectors that symmetrically converge on it (1987:73-85).

The analysis above illustrates how gestures directly embody what constitute, according to Johnson, the basic structures of image schemas, namely, a relatively small number of parts or components in very definite relation to one another in any given schema. One also discerns the malleability attributed to these components, in the sense that they manifest across many experiences, perceptions and image formations for objects or events that are similarly structured in relevant ways (1987:28). This is evident in their manifestation across gestural meaning. Essentially, one discerns the recurrence of spatial aspects, such as path, directionality, trajectories and goal, as basic internal structures common across the gestures, whether the image schema is about spatial aspects, force or motor action. For that matter, even arriving at the round shape of the lotus flower involves directionality in the movement of the fingers; they need to open and spread in different directions to denote the position of the petals that finally constitute the shape of the flower.

The above defined notion of experiences, perceptions and image formations, points to how image schematic structures must manifest themselves when objects, events or actions get experienced, perceived and thus become images. There is a notion of image indicated here, that stems from image schemas. At the same time we discern in the basic structures in gestures, in particular, in the relevance of spatial aspects in relation to movement, that is, yet again, underscored in the analysis here from an image schematic perspective, the notion of irreducible gestalts that Johnson defines and that arise from interacting with the environment. Gestalt structures are defined as recurring patterns giving experience structure and coherence. It is their recurring level of organised unity for interacting with the environment, that makes

these “*very definite, highly structured image-schematic gestalts*” (1987:48) experientially basic. However, given such interactions are different for different people, there is nothing “rock bottom” or “foundational” about image-schematic gestalt structures (1987:62). Yet, considering human bodies are alike physiologically, there are commonly shared gestalt structures that arise from these interactions. All image schemas can, thus, be characterized as irreducible gestalts, even if there are other gestalt structures for “complex categorical structures, for metaphorical projections, and for unified narrative patterns” (1987:44).

In the basic structures and thus basic meaning that gestures clearly reveal, and are under scrutiny here, just these irreducible gestalts are most apparent and thus of interest. Reflected in the definition of these recurrent, pre-linguistic patterns, as becoming meaningful in their own right, and not merely emerging from a background against which meaning emerges, is the understanding of basic structures that Müller formulates as guiding basic meaning in gestures, that was discussed in Chapter 1. It is not a background contextual or other meaning, or domain of knowledge as such, against which they become meaningful. Their meaningfulness resides rather in how experience is structured, more specifically, in the fact that they are the very structures that arise from experience. In Johnson’s definition, structures emergent “at the level of our bodily movements, our manipulation of objects and our perceptual interactions” (1987:29), give coherence and meaning to the experience these enable. In the basic structures gestures reveal, we discern not only these structures, but also how they are the defining factors of the shapes, spatial aspects and characteristic movement, the physical properties of concrete entities such as objects, events and actions.

In as much, the very inherent structural aspects of these physical properties must arise as meaning-giving structures from interacting with the concrete entities in the ways defined by Johnson. Coming back to how Johnson (1987) essentially defines image schemas as abstract, continuous, analogue structuring patterns of a specific experience, gestures reveal just these in bodily concrete terms. In addition they also tell us about other aspects of experience such as balance, support or propulsion, given the image schemas of these are deducible from the gestural form configurations and the meaning they depict. What we essentially gather from the image schematic perspective presented here, is that the conceptualization of reality that is evidenced in gestural meaning at a basic level is a matter of how the physical world is experienced in a bodily way in its structural dimensions. At the same time, gestures in kinetically bringing forth meaning, which as evident is in spatial structural terms, also reflect

what Johnson defines as structures “analogous to spatial manipulation, orientation, and movement” (1987:25) that are always involved, irrespective of sensory modalities. In the following, Johnson’s explications on the body-based interactions out which these image schematic structures arise will be laid out.

2.4 Bodily basis of image schematic structures

2.4.1 Everyday actions and perceptions

Johnson describes several everyday bodily actions and activities and those pertaining to objects, events and actions in the physical world in which the internal gestalt structures of image schemas recur. The PATHS schema, for instance, has structures recurrent in the paths one physically traverses as one goes about daily activities, such as the path from bed to the bathroom, stove to the kitchen table, house to the grocery store, or in imagination, from Earth to the Moon (1987:113). They have a source, a trajectory, directionality and goal or ending point. In a similar vein, daily actions one executes or perceives where instances of *in*, *out*, *into* and so forth are experienced, enable, for example, the understanding of *in-out* orientation (Johnson, 1987:30-31). Spatial relations also arise from our body’s orientation; the front-back orientation gives rise to concepts such as *front of*, *back* or *behind* arise (Lakoff and Johnson, 1999:34-36). This is related to bodily situatedness, with a vantage point based on our upright orientation that is discussed in construal operations cited earlier as well. Image schemas for adjacency, contact, surface or part-whole schemas also stem from perceiving spatial aspects thus. Finally, it is by means of a figure-ground organisation that the otherwise intangible spatial relations are revealed. Cognitive capacities of conceptualising spatial aspects are, thus, seen to be grounded in bodily projections. These examples suggest perceptual experiences mostly of a visual nature, whether it is a perceiving of the structures in daily activities or through bodily orientation.

In a similar vein, the internal gestalt structure of the BALANCE schema, with an axis with force vectors symmetrically converging on it, is the recurring emergent pattern in experiences such as the early learning to stand up, walk or ride a bicycle. These activities require a distribution of forces and weight around the vertical axis of the body. The meaning of what is understood as balance is, thus, seen to be a matter of visceral experiences enabled by the moving body (1987:73-85), just as is the case with other force dynamic schemas, such as PROPULSION or SUPPORT. Structures of force schemas are described as arising from

visceral or perceptual experiences, as when one bumps into something, or when ingested food presses outward on a “tautly stretched stomach”, or when forces affect objects in our perceptual field (1987:43-44). It is these last kind of examples, implying visually perceptual experience, that are then discussed for component parts of the internal structures of force dynamic schemas cited above. Exemplarily: the path a wildly buzzing fly traces, the movement exertion in the baby’s hand grasping for a rattle or the force of gravity acting on a falling object. In addition, a physical experience can be projected onto perceptual experiences and is defined based on balance; the basic schema of forces and weights distributed around an axis or point is metaphorically projected as *visual* forces and weights in terms of relations, for example, between lines, forms, colours or spaces. These are psychological image schematic patterns that give structure and coherence, in this case, to perceptual experience.

The bodily basis of image schemas is, thus, essentially, seen in how their internal gestalt structures relate to the same vectors, trajectories, directionality, source, goal, and so forth, experienced both in the daily activities people undertake, as well as actions and manoeuvres related to objects and events in the physical world. This reveals, on the one hand, the basic relevance of image schemas such as PATH and SOURCE-PATH-GOAL, and, on the other hand, the fundamentality of spatial aspects for an image schematic structuring. Cognitive linguists stress the fundamental relevance of spatial aspects for experience. As was cited from Turner (1997) at the offset of this section, the most important and useful image schemas are a matter of how interactions with space are structured. Lakoff and Johnson’s (1999:30) postulation, that spatial relations concepts are central to the conceptual system, was also cited earlier. Gestural meaning most directly illustrates the fundamental nature of spatial aspects in enabling meaning, as was observed when analysing a kinetic conceptualisation of meaning in Chapter 1. They are evident in form features, whether they depict spatial relations, shapes, actions or movement as meaning. We see here, how form features revealing trajectories, vectors, directionality, paths, proximity, and so forth, that characterise the spatial aspects of the climb, or the spatial structural aspects of the flower, or the spatial force vectors for the jump, or for that matter, even balance, or contiguity relations, such as contact seen in other gestures, are a matter of the internal gestalt structures of image schemas. Gestural form features and, thus, meaning, in revealing the properties of depicted objects, events and actions, are, in this sense, the very manifestation of these structural aspects experienced in a bodily, as was observed earlier.

The upwardness and goal-oriented movement with a specific trajectory, by way of which the gestural meaning for *onto a tree climbing* is constructed and depicted, is given in any ascent or climb onto something. A curvilinear movement, as part of the upward movement trajectory, is a movement pattern inherent to a jump onto something with propulsion, which is how the climb here is conceived. It is then not a straight upward movement, as in a regular climb of pulling oneself up a tree, but a curved path the body needs to take when propelling itself from the ground onto the tree. The verticality of the LH depicting the tree is also the verticality given in the shape of the tree. The final position of the RH in this gesture reflects, based on Johnson's definitions, structural aspects given in bodily acts of balance, as analysed earlier. Taking the hands around in a circular fashion is given when tying or draping around something, or a rotating of the wrists in actions such as tying shoe-laces. Finally, even when considering the geometric shapes, as in the lotus flower, spatial aspects such as the directionality of the fingers when depicting the fully blossomed lotus flower, is given in the petals of the flower. The flatness of the LH in this gesture emulates the shape of the leaf.

Finally, the structural aspects that define the internal gestalts of image schemas, are understood as arising from experiencing, both perceptually and viscerally, the activities, actions and so forth, that occur in an ongoing manner in our world. As was cited earlier, Johnson's definition regards how these lend themselves to attention through bodily experiences occurring "at the level of our bodily movements, our manipulation of objects and our perceptual interactions" (1987:29). Based on this, gestural meaning depiction will be analysed in the following, for the kind of perceptual and/or visceral experiences they reflect, given the internal gestalt structures that form features reveal relate in a most direct manner to the depicted worldly actions, activities or events.

That the spatial aspects depicted in the gestures are a matter of bodily orientation, which is also connected with a bodily perspective and situatedness, was discussed earlier in the chapter. The verticality in the tree gesture stands in relation to one's own vertical stance. Even the higher placement of the LH here, or the upward movement of the RH for climbing onto a tree, is a matter of relating to the tree as something higher than oneself. Spatial relations in terms of figure-ground relations were also identified in this gesture while discussing construal operations, whereby it is how the structural aspects of the entities such as size, motility and location are attended to, that matter for a figure-ground alignment. In a similar vein, the fine-grained construal of the lotus flower's shape and its appearance on and in adjacent proximity

to the flat surface of a leaf reflects a situated perspective on the flower in conjunction, yet again, with one's own bodily orientation. An up-down orientation of one's own body underlies the construal of the flower *on* the leaf, or the leaf *under* the flower. These together enable constituting the shape of the flower as a whole, in terms of gestalt perception, as was discussed earlier. We see how the component parts that together make up the whole are essentially spatial configurations in their various dimensions and specifications to also include contiguity relations.

All these examples most easily illustrate the role of visual perceptual experiences, both in how the construal operations are defined, and as the form features most apparently reveal. This is evident from the spatial aspects enabled by bodily orientation and perspective/situatedness. In a bodily sense, verticality or contact, for instance, or a figure-ground construal evident in the gesture for *onto a tree climbing*, are visually perceivable bodily projections from one's bodily vantage point given the body's erect stance. Construing the lotus flower as a bounded entity reflects a visually perceptual experience, as also discernible in the definition of the iconic similarity in terms of the IMAGE ICON the gesture reveals, and analysed in the discussion on mimetic/cognitive semiotic conceptualisation in the previous chapter. The gesture reveals the kind of high degree of similarity that is understood as coming from perceiving. As the form features reveal, there is a construing of gestural meaning based on visually perceiving the lotus flower as it appears in nature, as the images in Figure 19 illustrate. And based on the fine-grained construal that is apparent here, which by definition reflects an attending to object features, visual attending is most easily recognisable.



Fig. 19

On the other hand, the structural aspects depicting meaning in the analysed gestures for the jump or tying are clearly discernible in the everyday actions they reflect. In this sense, and based on Johnson's descriptions, one could say that experiencing actions in a bodily way must underlie such a depiction. One knows how to execute the actions. However, the trajectories,

directionality, starting and ending points of trajectories, pathways, whether linear, curvilinear, circular, upward and so forth, can be structures motivated by the visual perceptual experience of seeing someone else executing the action of draping a sari or jumping on to a tree. Then, they occur in the physical external world and lend themselves to visual attention. The curvilinear movement given in PROPULSION could also just as well stem from visually experiencing a jump.

Essentially, it is a visual perceptual experience, that is most easily identifiable in thus analysing the gestures. As for the BALANCE schema or, for that matter, SUPPORT, that can be assumed in the *onto a tree climbing* gesture, or in the lotus gesture, the visceral experiences, that Johnson rightly describes for these, are a matter of deducing from the form features; as in the centred placement of the RH on the fingertips of the LH in the former, the internal structures of a BALANCE Schema; or the flatness of the hand shape reflecting SUPPORT schema in the latter.

Knowing the structural aspects of the gesture can also just as well be a matter of imagining actions. There are many phenomena described by Johnson that indicate seeing or imagining actions in the external world, such as perceiving the path of a bee or an imagined path, as I have noted above. There need not be a bodily experience of climbing onto a tree in order to depict it in the manual gesture seen in the first variation analysed. The trajectory and directionality can stem also from imagining such an experience, apart from a visual experience. And knowing there is a bodily experience underlying BALANCE can stem from imagining the act of sitting on a tree. Just as the opening and spreading of the fingers to denote the blossoming of the flower or the spiralling movement as it emerges forth from the depths of the waterbed, must be imagined as well. Here, one does not actually visually perceive these events, nor do they in any direct way seem to relate to one's own bodily experiences.

Analysing from the premise of a cognitive linguistic understanding as expounded by Johnson, we see that gestures not only bring forth physically, or better said, corporeally, the internal gestalt structures of basic image schemas such as SOURCE-PATH-GOAL and its specific extensions to include CIRCULARITY, CURVE; basic level spatial relations ON, UP, ONTO or AROUND; or any of the other image schematic structures identified above, such as CONTACT or SUPPORT. In doing so they also bring forth structural aspects, that Johnson

defines as arising from ongoing perceptual and bodily interactions with objects and events in the world. This reveals, on the one hand, how image schemas, defined as functioning like abstract structures of images that arise from bodily experiences and manifest themselves in images, perceptions or events, are manifested in gestures. On the other hand, gestures in thus bring forth the very structures arising from bodily experiences in the articulation of objects, events and actions of the concrete world, shed light, as was observed earlier, on how meaning is a matter of experiencing the physical world in its structural dimensions.

However, while the analysis of a kinetic conceptualisation of meaning in the earlier chapter indicated the role of movement itself in bringing forth these structures, the structural analysis discussed hitherto exposes what Johnson (1987:25) concedes as well, namely, that structural descriptions can lead to the “erroneous assumption of a predomination of visual schemata” and, thus, do not tell us about other experiences. This is particularly evident in the more visceral notion of experience, which is, in my opinion, only generally assumable in the kind of structural analysis being discussed here. This is so both in the form-based analysis of gestures based on looking at structural aspects in the gestural form features and relating these to image schematic structures, and in Johnson’s structural descriptions, namely of everyday actions and activities in the physical world, and identifying image schematic structures in these. Here, the bodily basis of experiences is deduced based on knowing *what* the actions entail in *structural* terms, or giving descriptions of visceral experiences based on bodily activities. This is particularly evident in gaining an understanding of how a visceral experience may underlie the BALANCE schema or, for that matter, SUPPORT. As the gestural analysis reveals, a BALANCE schema is theoretically revealed when analysed in terms of internal gestalt structures. Or, a visceral experience of balance underlying this can only be presumed based on knowing that the act of sitting on a tree must entail such experiences, much in the same way as Johnson’s descriptions of bodily actions and perceptions and the visceral experiences they entail.

Johnson (2007:136ff) later discusses how the kind of descriptions in terms of bodily activities, orientation or perception of objects and their movements are “phenomenological descriptions of the most basic structural features of all human bodily experience”. While conceding that image schemas would show themselves through these informal descriptions, it is stated that their operations necessitate other standard explanatory methodologies, from linguistics, psychology and neuroscience. Several discussions take these methodologies into

consideration to account for meaning, reasoning or imagination from an embodied perspective, (Lakoff and Johnson, 1999; Gibbs, 2005a/b; and Johnson, 1987, 2005, 2007). In the following those that most apparently discuss in bodily terms the experiential basis of image schemas will be laid out.

2.4.2 Neural grounding of image schemas

2.4.2.1 Conceptual structures are neural structures

Lakoff and Johnson (1999) initially discussed a neural grounding of embodied concepts based on findings from computational models. Concepts are to be understood as embodied because of how the brain and body are structured. “What we call *concepts* are neural structures that allow us to mentally characterize our categories and reason about them” (1999:19). This has to do with conceptual structures that arise from “sensorimotor” experiences and the neural structures that enable them (Lakoff and Johnson, 1999:36ff, 77). Conceptual inferences are, thus, sensorimotor inferences, because concepts are structures that make use of the sensorimotor system of the brain. Computational models that relate language use to neural structures were seen as a kind of existence proof that spatial concepts and motor patterns must have a bodily grounding (1999: 40f, 573-581), because they were seen to be structured using the same neural structures in the brain that already exist in the visually perceptual system and motor programs respectively.

Topological features, spatial orientation or concepts, such as contact, were seen to be a matter of the neural organisational structures existent in the human brain’s visual cortex in Regier’s Model. This is evident looking at how topographic maps of the visual field respond to stimuli and preserve nearness given therein, or orientation-sensitive cells “respond maximally to line at a given orientation” (1999: 573), or how cells respond maximally in centre-surround receptive fields when different inputs are given from a central and surrounding area. Spatial concepts, defined as stemming from bodily orientation, are, thus, seen to be grounded in a body-brain process; in “how the structure of the brain, together with our bodily capacities for perception and movement *might* create concepts and forms of reason” (Lakoff and Johnson, 1999:574, emphasis in original).

Motor concepts, on the other hand, are discussed as arising from neural circuitry involved in controlling motor actions, particularly of the hands, based on relating their occurrence in

verbs with neural models (Lakoff and Johnson, 1999:40-41/575-581). The conceptual structure of terms that relate to bodily movements are seen to be identical to the neural structures that perform such movements. These highly structured neural networks, defined as motor-control schemas, organise and perform complex movements by activating simple low-level movements, such as those involved in wrists or fingers.

These findings above indicate that spatial concepts must indeed be tied to visual experience, given that their structuring is defined as taking place in the neural structures that exist in the visual cortex of the brain. Regarding motor concepts, motor actions or essentially the movement patterns involved therein, must be a matter of how neural networks organise and bring these to execution. We see motor actions – in linguistic terms verbs – such as gathering, tying, wiping, falling or climbing, in the gesture examples cited or analysed in the discussions so far, executed with the actual movement patterns and spatial configurations inherent to them. They must, in this sense, be understood as an activation of the corresponding motor-control schema, directly becoming overt hand gestures. That complex movements are organised or performed by these schemas by activating low-level movements is discernible in how the hand actions as in tying, or the complex spiralling upward movement for the lotus gesture come into being by way of a rotating movement at the wrists, as was analysed in the kinetic conceptualisation of gestures.

At the same time, in unveiling the bodily neural grounding of concepts, these findings tell us that sensorimotor experiences are enabled by, and, thus, a matter of neural structures, but not what they are *per se*. Gibbs (2005a:197) observes when referring to these computational models, that they are to be understood as existence proofs of neural structures that suggest the complex ways in which “brains, bodies and world interact to provide the grounding for linguistic meaning”. In this sense, the cognitive linguistic take on image schemas is to be seen as an important factor in defining embodiment. Conceptual structures are to be understood as emergent structures based on experiences given in ongoing body-brain-world interactions, which is what embodiment connotes. Gibbs (2005a) and Johnson (2007) expound on this notion by drawing from findings in different fields, such as neuroscience, cognitive neuroscience, neurobiological research, psychology or phenomenology. A few cited examples will be presented below, that discuss how body-brain-world interactions must bring forth the kind of sensorimotor experiences relevant for the structural nature of image schemas and thus meaning, and thus insightful for this study about a bodily grounding of meaning.

2.4.2.2 Neural patterns and sensorimotor organism-environment couplings

Johnson (2007:124ff) points out that organisms have developed sensorimotor capacities based on ongoing interactions with their environment and their need to deal with their environs for existential purposes. Sensorimotor couplings, with one modality informing the other, occur as organisms go about their daily activities. These activities are essentially organism-environment couplings that reflect interactive coordination or enaction, a term that Johnson cites from Varela, Thompson and Rosch (1991), which has to do with a structural coupling. Interestingly such a notion is discussed in the latter account by drawing from mindful meditation practised in Buddhism (1991:21-27). Further discussions continue into, for instance, colour perception, or philosophical discussions on experience and in terms of embodied mind. Of interest for the purpose of this study is to look into bodily experience in movement terms. Johnson discusses the notion of structural coupling with the environment and the insights that impact an understanding of image schemas and meaning.

The primordial nature of such an organism-environment coupling is cited, for instance, by drawing from Maturana and Varela (1998). The cell membrane in a single-celled organism like an amoeba responds to chemical substances that make up its prey, the protozoan, with changes that occur in its protoplasm as “pseudopods – digitations” that, thus, enable an engulfing of the prey (2007:124). Sensorimotor coupling is evident in how locomotion is coordinated based on sensory stimuli from the surroundings. Sensorimotor coupling can also involve auditory and visual senses together informing locomotion, as in an owl’s ability to detect the position of a mouse in darkness and dive down upon it. Johnson explains that this is solely based on the difference in time of the auditory stimulus given by the movement of the mouse between each of the owl’s ears, in consequence to which, its position is established in the retinotectal or visual map of the owl.

It is in these interactions that neural organisation occurs as patterns that are structural correlations to features given in sensory stimuli. This is explained by citing, for instance, Scott Fraser’s (1985) experiment (Johnson, 2007:127). Organisms build neural maps in which “adjacent neural cells (or small groups of neural cells) fire sequentially when a stimulus moves across adjacent positions within a sensory field”. When a point of light is moved in a straight line, right to left and bottom to top, in a frog’s visual field, it causes a pattern of activation as a sequential firing in a straight line in the retinal map of the frog’s brain. “The topographic mapping between movement in the vertical visual plane and the plane of

retinotectal neural map” of the frog is, thus, consistent, even if a rotation of the spatial orientation occurs in the topography, such as right to left becoming front to back. Similar contiguous activation of adjacent regions in the auditory cortex of human brains occurs with a successive rising of pitches.

Structures are, thus, understood as having evolved due to the neural activation patterns that correlate to the sensory stimuli structurally, as in the owl or frog. Human cognition is more complex, but there is a continuity in terms of sensorimotor coordination, as Johnson (2007:126) citing yet again from Maturana and Varela (1998) observes. Patterns of experience have evolved as neural patterns, as ontogenetically selected neuronal groups existing as sets of visual, auditory and somatosensory maps, whether in frogs, owls or humans, that are essentially related to the organism’s need to survive in the environment in which it is embedded. They map “perceptual space in fairly direct analogs” , and preserve “topologies of pitch, the retinal field, color, the parts of the body and so on”. Brains have, in effect, evolved based on enabling such a primordial meaning-making, in turn, based on the bodies we have and how they need to interact with the environment in order to survive and flourish.

The more abstract structures, “such as object shape, edges, orientation, direction of motion, and even the particular degree of the vertical or horizontal”, are a matter of subsequent maps. We, therefore, “*live in the world significantly (but not totally) defined by our maps*” (2007:130, emphasis in original). With reference to human beings, it is such patterns preserved in neural maps as structural features and relations that “define the contours of our world and make it possible for us to make sense of, reason about, and act reliably within this world” (2007:136). According to Johnson, meaning enabled by image schemas is that of just these patterns and structures of sensorimotor experiences, in other words, to be understood as depending on “activated neural connections” (2007:133). Image schemas are these very basic structures by means of which the world is encountered, to understand and act within; in human beings, “realized as activation patterns (or “contours”) in human topological neural maps” (2007:142). It is based essentially on how neural networks have individual functions in computing spatial orientation, detecting motion or edges and colour perception, in short, in determining “what stands out, for us, from a situation or scene” (2007:76). We discern here how selection, which was seen to be a function of attention and a cognitive ability in the discussion on construal operations at the beginning of this chapter, is “the focal emergence of

objects within a horizon of possible experience” in Johnson’s account. Objects stand forth or are disclosed, because of how we perceive the things we need. Sensorimotor capacities are enabled thereby. Given their nature as recurrent, stable patterns of sensorimotor experience, in the sense of preserving the topological structures of perceptually whole experiences, Johnson, thus, sees image schemas to be like images, both bodily and mental, linking these experiences to conceptualisation and language (2007:144).

Putting it this way, spatial orientation, shapes, sizes, positions, directions and other structural aspects seen to be meaningful elements, apparently have a primordial meaningful function for organisms. In other words, knowing the shapes and sizes of prey or predators, or spatial aspects, such as orientation, position, height, length, distance, and so forth, must be *existentially* important. Given the notion of selection Johnson defines, these properties get selectively attended to, as they emerge and lend themselves to the attention of each of the organisms based on the needs of the organism. And given the examples above, both attending to and lending to attention must be understood as operating at the level of various sensorimotor modalities. Finally, that they are experienced as structural aspects, is seen to be a matter of how neural structures or patterns get activated and have evolved as a result of the individual sensorimotor interactions with the environment.

Johnson coins the notion of meaning as *embodied* or *immanent meaning* (2007:11, emphasis in original), which resides finally in the sensorimotor capacities that have developed in interactions with the environment, which, in turn, are also connected with the bodies organisms have; in human beings, given by the human body’s specific build. The most obvious example is given with reference to VERTICALITY and BALANCE schemas (2007:135). The notion of verticality and balance are experiences given in the erect stance of the human body. Frogs would have other experiences of orientation. While these are surely the higher level of an image schematic structuring of sensorimotor *experiences* in a bodily way and based on the kind of bodies, there is at the same time the notion of sensorimotor *capacities* themselves having developed, or rather evolved in a phylogenetic sense, given the tracing of sensorimotor couplings from amoeba to higher organisms; essentially from simple or rudimentary to more complex capacities. Standing out here is, thus, an understanding of meaning, that while being rooted in a structuring of sensorimotor experiences, is also a matter of how sensorimotor capacities, as such, have developed based on the needs underlying body-brain-world interactions or organisms.

The discussion hitherto on a bodily basis of image schemas, thus, illustrates the relevance of sensorimotor experiences for the kind of structuring of experience that is seen to underlie meaning and conceptualisation, enabled essentially by the way the brain structures these experiences. But if we look even more primarily, sensorimotor capacities themselves have evolved to enable organisms in comprehending the world they live in, based on needs of the organism, fundamentally for survival purposes. It is, in this sense, concrete entities in the world, which have become meaningful in terms of their properties deemed necessary for survival. And sensorimotor capacities have evolved in conjunction with this and attending to the properties deemed useful. They lend themselves to being attended to just by way of the sensorimotor capacities, as the kinetic conceptualisation of gestural meaning illuminates, and was briefly discussed in Chapter 1.

Essentially, we see that structurally given sensorimotor experiences are based on both sensory and motor capacities; both must inform experiences in their own terms. In the examples cited, sensory interactions with the world essentially activate locomotion and actions. At the same time, the “sensorially” activated locomotion, however minute here, that results in engulfing its prey, must enable the amoeba in some primordial way to experience this engulfing and, so to say, the contours of the prey. And given the absence of visual perception at this primordial level, it rather clearly indicates what Sheets-Johnstone (2011:459) defines as tactile-kinesthetic bodies enabled by the very primal animation given in movement. It is interesting to note that experiencing an act of surrounding or moving around something must be rooted here. In the case of the owl revealing more complex sensorimotor capacities and assessing position of its prey through auditory and visual capacities, experiencing spatial aspects such as distances, trajectories and paths, must be based not only on the sensory input, but finally in actually executing the necessary diving down movement.

The notion of tactile exploration is demonstrated in another study, cited elsewhere (Bläsing et al., 2010), conducted on stick insects to test a gap-crossing behaviour (Bläsing and Cruse, 2004). Here it is discernible how assessing spatial aspects can primarily be a matter of trial and error through actually executing movement in conjunction with tactile input. The insects are seen to cross gaps successfully only after receiving tactile input from touching the far edge of the gap with their antenna or front leg. Also, a blindfolding is observed as not having significant effects on completing gap-crossing. This behaviour “independent of the state of

their visual system indicates that vision alone does not provide sufficient information“ (2004:1284). The tactile input is seen to not only provide information about the existence of a far edge, but also, “inherently, about gap size to climb across the gap successfully”. At the same time insects are observed to reveal explorative movements, of both antenna and front legs while investigating the gap and before successfully crossing over, whereby tentative and short steps are observed, in particular with the front legs, and in trials with larger gaps. In the tentative steps, the leg is pulled back during searching movements.

The study itself concludes with an emphasis on the relevance of tactile exploration in providing orientation for locomotion in complex environment. The function of both antenna and front legs thereby is underscored, with the function of the antenna itself as perhaps enabling a “working memory” (2004:1281), given successful gap-crossing is effected only after the antenna establishes a touch contact with the far edge of the gap, and middle and hind legs rarely or never reveal tentative steps. Also, the tactile input, in turn, is finally seen to inform the further course of movement behaviour in successfully crossing the gap, enabled by the stored memory. Yet the exploration as a trial and error through movement is also discernible. There is, for instance, another observation, that is of interest here, namely that the antenna does not necessarily play a role in insects with six or more legs, with the front legs taking over the tactile explorative function. Or that subsequent movement behaviour of slowing down is effected by a “non-contact” on the part of the front legs rather than the antenna when reaching the gap, which is perhaps due to joint angles of the legs having the ability to provide information “necessary for ground expectation“ (2004:1284). These point to tactile-kinaesthetic capacities related to movement as being finally essential in assessing environment and locomotion therein.

These examples of organism-environment couplings in a very basic sense reveal how sensory and motor experiences get linked in an inherent way. Sensory stimuli activate locomotion and actions, and these, in turn, inform sensory perceptual experience. There is thus a two-way process in how they inform each other. Coming back to the cognitive take on embodiment as discussed by Johnson (2007) and Gibbs (2005a/b), the role of motor actions or actions in general for perception, meaning and reasoning is approached by drawing from other studies such as neuroimaging.

2.4.2.3 The role of actions

The notion of explorative movement is echoed in some of the formulations by Gibbs, who discusses the relevance of actions for perception and the notion of embodied perception as “more global dynamics of interactions of brain, body, and environment” (2005a:48). It is observed that while brains and neural activity play a central role, perception itself is not given without action, and that this is not possible without an active exploration of the environment, without movement. That movement matters for perception is then discussed in terms of perceiving music or causality, or perceptions enabled by observing objects or other people’s actions and drawing inferences there from about anticipated actions, or anticipated embodied interactions (2005a:52-69). Movement or action informing sensory experience is, for instance, deduced from how when moving towards or around objects or events, or exploring or handling objects with our hands, we visually perceive details, hear more distinctly, assess sizes and weights, and so forth.

Johnson (2007:157-162) when discussing the brain’s role in enabling meaning, draws on the findings about mirror neurons by Rizzolatti et al. (2000), and on the *grasping* schema by Gallese and Lakoff (2005) to observe that “objects are not just visual or tactile or auditory shapes, nor are they merely things that support various motor programs for interacting with them”, but all these together. The studies accounted for reveal how an action such as grasping when both physically performed and visually perceived, activates the same motor regions in the brain. It is as Johnson’s quote from Gallese and Lakoff (2005:459) reveals, “neurally enacted using neural substrates used for both action and perception” (Johnson, 2007:161). The point that Johnson wants to underscore here is that there is an integration of sensory and motor modalities and, thus, action and perception – “*Perception at this level is multimodal*” (2007:161, emphasis in original). Therefore, “a central tenet of an embodied cognition theory of concepts is that concrete concepts (that is, concepts for concrete objects, events, and actions) are processed using sensorimotor areas of the brain” (2007:162). The role of motor actions is indicated in observations that define structures thus enabled at this basic neural level of the sensory-motor system as activated or “‘turned on’, by some actual perceptual or motoric event in our bodies” (2007:157), or thinking about an action without perceiving or performing it.

Gibbs (2005a/b) goes further and discusses the role of actions and motor actions as being primary, drawing from yet other studies on mental tasking, neuroimaging or

neuropsychology. The observations with regard to speech and gesture are of interest here. That they are defined as grounded in the same underlying conceptual processes and, thus, reveal a tight link (2005a:166), echoes findings from Linguistic Gesture Studies (Kendon, 2004/2013, McNeill, 1992/2005, Müller, 1998, 2008, 2009, 2010, Mittelberg, 2008, 2010, Müller et al, 2013/2014), also discussed in Chapter 1 of this study. As both Adam Kendon and David McNeill, the two pioneers in these studies, note, hand gestures co-occur naturally in a “reciprocal relationship, semantically,” (Kendon, 2004:169) with speech, at times revealing the same meaning, at times adding details or complimenting verbal expression (Kendon, 2013: 12). This constitutes the “two sides of a single underlying verbal-gestural process of constructing and presenting meanings” (McNeill, 1992: 24).

For McNeill (1992, 2005, 2013) cited earlier, meaning that gestures bring forth as visuospatial-actional images, is imagistic, determined by the thought processes of the speaker and the mechanisms of the brain. According to the brain model he postulates based on different studies, motor actions, manual and oral, would be assembled in the Broca’s area around visuospatial-actional images (2005:211f), and shaped by the linguistic content made available from Wernicke’s area of the brain (2005:229). Then Broca’s area is where movements are assembled into “performance packages unified by goals, meanings and adaptability” (2005:212) and where the orchestrated manual and vocal/oral/laryngeal actions “run off fluently” (2005:218), i.e. as speech and gesture images.

Gibbs suggests, drawing from neuropsychological studies, that the tight link is perhaps enabled by spreading activation between the brain areas responsible for speech production and those involved in motor actions, like those of the hands and arms (2005a:167f). Studies cited are, for instance, by Pulvermüller (1999) that show how motor areas of the brain are activated when people read verbs silently, or others that reveal how words for tools are retrieved (Grafton et al, 1997), and yet others that shed light on activation of the Broca’s area in different instances, such as during both language and motor tasks as when thinking about moving hands; or even generally, during one’s own motor execution, while perceiving other’s actions or in mental simulation. Thus, Broca’s area is not only involved in language production, as Gibbs underscores, but also with “any coherent sequence of body movement” (2005a:168). This is what gestures are about.

In a similar vein, Dodge and Lakoff (2005) also discuss studies where linguistic terms of actions are seen to activate the regions of actual performing of such action by corresponding body parts. In the context of image schemas, it is discussed how secondary sensory-motor brain areas that are responsible in computing image schemas use information received and processed by primary sensory-motor brain areas from sensory modalities. Tim Rohrer (2005) discusses in the context of image schemas, how there are responses in the sensory-motor cortices to imagined body parts movement when their terms are read. An interesting notion on this account is how it would help refine notions on language and cognition by getting to know how refined senses are. Coming back to discussions by Gibbs, an activation of motor areas of the brain when actions are imagined, physically executed or observed in others, highlights the fact that motor elements are recruited when “the perceived or imagined object is conceptualized in action-oriented terms” (2005a:132). Based on all these perspective, gestures would be an overt manifestation of such activation when produced, given both when actions are perceived, imagined or actually executed. The notion of activation was also indicated from the findings on motor schemas by Lakoff and Johnson (1999) cited above. That motor elements are recruited in conceptualising actions is evident in gestures that bring forth such meaning. At this point, let me go back to the gestural analysis being presented in this study to look yet again at what guides students of dance to bring forth meaning in terms of actions through manual gestures.

The student, while learning the first gesture variation for the phrase *brocade saris stealthily taking away* analysed at the beginning of Chapter 1, brings forth the upward goal-oriented curvilinear movement in the gesture for the phrase *taking away* in a pretty instantaneous manner by just being told the meaning and visually following the movement being shown. As analysed, the movement here involves the same trajectory as in the gesture for *onto a tree climbing*, namely in the act of a climb, here specifically a jump. The student however required several corrective instructions in the case of the gesture for *brocade saris*. Even if the circular going around movement or the rotation at the wrists seemed to be more or less known, the attempts with the semi-circular shape of the brocade border as it appears like a fan when the sari is draped in a particular fashion, followed by the, albeit reduced, action of holding and tying a sari around the waist, reveal that she did not know how to execute the action with the specific motor patterns of the hands it entails.

In other words, there was a knowing, which could be a bodily knowing about an everyday action such as jump, apparent in the instantaneous execution of the second part of the gesture without further and elaborate corrective instructions. However, given it is the spatial aspects of such an action that are highlighted in this gesture, it also indicates that knowing how the gesture needs to be executed could come from visually experiencing and thus knowing them. But the gesture for the draping and tying action is a fine-grained construal, necessitating an attending to typical object features, and at the same time presupposing, to draw further from the discussion on cognitive construal operations, an epistemic/cultural knowledge about saris and how they are draped. As apparent, there is no such domain of experience presupposed here. And as the gestural depiction requires the reduced gestalt of the actual action of tying to be depicted, it is clear that there is no domain of experience in terms of bodily knowledge of such an action, given the student's European origin. And this notwithstanding, a possible visual or imagined knowing of how saris are draped, or the fact that the movement was being shown to her.

In the case of learning this gesture as well, as was also seen in the examples discussed for the kinetic conceptualisation of meaning in terms of shapes and spatial aspects in the earlier chapter, specific instructions finally enabled an understanding and execution of the gesture. These included, apart from showing her the movement, an appeal to her imagination and talking her through the gesture in actual spatial, kinetic terms. She was told to keep the circular movement smaller and closer to the waist, because it is a tying around the waist; the hands should first go down and out to depict a fan, her wrists should be tight, palms facing forward, and so forth. She also kept looking alternately at the movement that was being shown to her and her own hands during her attempts. Finally, in one of the attempts, a fleeting movement of shaking hands/wrists is observed as illustrated in Figure 20a-b, with which she interrupts her gesture and attempts it again; as if becoming aware that the emerging movement in her hands was not bringing forth the movement needed for the referred meaning. In Figure 20a, one sees her at this point looking down at her own movement with a fleeting change in her facial expression as well. As was observed in earlier examples, both attending to and becoming aware of emergent movement is evident here.



Figure 20a-b

While several factors guided her to enable an understanding and execution of the referred action of draping/tying a sari, such as visually perceiving, auditory receiving instructions and an imagining of the same, it was yet again, as we see, the actual execution of the movement involved in the action that helped her to gain an understanding of the movement, both when the movement did not come through and for finally executing the intended action. Thus, just as with the spatial aspects, it was a doing in a bodily way that enabled knowing the action and executing it. The notion of doing for knowing is referred to by Johnson (2005, 2007) in discussions with regard to embodied meaning-making, a notion that is exemplified in gestural meaning construction. Learning the gestural meaning depiction at the same time reveals, how such a knowing comes primarily from movement itself, from actually executing the movement involved in any aspect of meaning, whether spatial aspects or actions, as illustrated above. from executing movement.

To follow up on the discussion by Gibbs based on neuroimaging studies, one also notices how there is most apparently no recruiting of motor elements specific for the action not known evident here. And no recruiting means no activation of motor areas of the brain. Then such an activation when actions are imagined, physically executed or observed in others, highlights a recruiting of motor elements action-oriented terms are conceptualised, as Gibbs cited earlier defines it. That there is no activation is evident also in the fact that neither visual perceiving nor imagining the action, nor hearing instructions as to how to execute seemed to help. In other words, that there was no recruiting of motor elements, means the student was not able to conceptualise the action, neither as perceived nor imagined. Only after actually executing the motor elements entailed in the specific action could the student conceptualise the action. In other words, a bodily knowing must first and foremost underlie a recruiting of motor elements, or for that matter even any activation of motor areas of the brain. This is in fact evident in the studies on grasping action cited by both Johnson and Gibbs and mentioned above. If perceiving a grasping action activates the same motor areas in the brain as when

executing it, one discerns that it must be so, because it is a known and everyday executed action or motor routine.

Another notion that Gibbs puts forward is of interest here, that people's previous and current embodied actions provide "the grounding for various aspects of imagination, memory and reasoning" (2005a:157). In this sense, we see that, on the one hand, previous actions, or precisely, knowing them, apparently informed executing the upward goal-oriented movement, or the rotating movement in the wrists or the roughly executed circular going around movement. On the other hand, however, it was the actual execution, or to put in terms of Gibbs, a current action, that enabled the student to know how to execute the tying action not known to her, in turn, enabling an understanding of, or any imagining or reasoning that may have ensued thereafter regarding the action. In fact, one discerns in her facial expression how imagining and reasoning were apparently happening *during* the attempts itself, in a bodily way and through movement; as she abruptly discontinues her movement, shakes her hands fleetingly and starts her movement again. This was also guided by attentional focus, which as discernible, was, yet again, at the level of emergent movement. And that it has gone down in her bodily memory is evident in her fluid execution of such a movement in the meantime and the fact that she can drape a sari pretty well.

At this point, it is interesting to briefly lay out how the notion of memory as functioning for a dancer is discussed by Bläsing (2010:82f) in a study on neurocognition of dance. Here, drawing from the notion of declarative and non-declarative memory discussed in psychology, movement learning is seen to be a matter of how these two aspects of long-term memory act in conjunction with each other. While, for instance, auditory inputs such as verbal comments or images given about movement would be stored in the episodic aspect of declarative memory, the information about how the movement is to be performed, or its spatial, dynamic and musical aspects are diverted to semantic declarative memory, which in turn enables the dancer to teach these movements to someone else. However, the sensorimotor information gained when the dancer practises the actual movement is what gets stored in the non-declarative memory, with every movement becoming more automatized and thus deeply anchored therein every time it is practised, similar to the automatized everyday actions and movements. Such a memory is not accessible to the conscious self. Finally, the movements therein also become independent of attention, so that the dancer can focus on other aspects such as artistic expression. This reflects what I noted when discussing the scope of dominion

and reference points defined by Langacker and the complex ways in which attention is seen to operate. A mature performer is capable of bringing forth more expressive details whilst actually executing movements, attending thus to more details in a non-reflective manner. There are, thus, as Bläsing cites from Tarassov (1977), three notions of memory, auditory, visual and motor memory, defined as what a dancer requires for moving in ways that are technically and artistically correct and for creatively forming movement. We may add here, also for the dancer to move in ways that bring forth the necessary meaning. And as the learning of gestural meaning exemplifies, a motor memory enabled through actually executing movement is most apparently indicated as primary for all other forms of memory.

Given the notion of current actions, an action is essentially always current in a gesture, explicitly activated and/or reproduced every time the gesture needs to bring forth such a meaning. While this indicates, given gestures bring forth imagery as McNeill formulates, the existence of an image of an action in the thought of the dancer, we discern how putting the action into the thought of the learner through verbally giving images and movement instructions, did not activate any memory from a semantic or episodic perspective. In the absence of a motor memory, these did not function either. There was no automatized or quasi automatized production of actions not apparently in the daily movement routines of the student and thus in motor memory, or anchored as sensorimotor experiences in memory, in, so to say, non-declarative memory. On the other hand, the other motor elements as those of the wrists, or even the spatial aspects involved in a known action such as a jump or climb, came easily. In other words, the actions gestures bring forth are those known by way of sensorimotor experiences.

That this is so is also demonstrated by the fact that if there are no prior sensorimotor experiences for any given action, students are unable to bring forth the action as intended. This reflects in a direct bodily manner what Gibbs (2005b:116) defines elsewhere as an embodied simulation of bodily experiences. Based on studies from the premise of psychology on a speeded response to metaphorical phrases after actually performing or imagining the bodily action contained in the phrase, it is observed that the reasoning image schemas enable is not because they are abstract and disembodied pre-existing mental representations, but that an embodied simulation of bodily experience is constructed, “recreated by the body as people continue to engage in sensorimotor behaviors related to BALANCE, RESISTANCE, SOURCE-PATH-GOAL, CONTAINMENT, and so on”. This is defined as an online image-

schematic construal. We have seen in Johnson's definition of the gestalt structures of image schemas, that there is "a recurrent pattern, shape, and regularity in, or of, ongoing activities" or "continuous structures of an organising activity" by means of which, according to Johnson (1987:29) one makes sense of the world. Every image schematic construal must thus given these findings, reflect an ongoing activity of being engaged in sensorimotor behaviour. In Johnson's understanding further, "*imagination is a form of simulation*" (2007:162).

Imagination, as was cited when discussing Johnson's postulation about image schemas, is the means by way of which the "bodily works its way up into the conceptual and the rational" (1987:XXI). In this sense, when conceptualising meaning in image schematic terms, which involves imagination and reasoning according to Johnson, imagination must fire an embodied simulation of bodily experiences.

Given image schematic structures are what manifest in gestures, and this in a direct bodily way, there is an overt embodied simulation of bodily experiences, or better said, the very manifestation of these. As was analysed earlier, gestures produce image schematic structures in a bodily kinetic manner. And in doing so they reveal directly the very structures that Johnson discusses as arising from embodied sensorimotor experiences. Then as the analyses in this chapter and previous chapter, in particular of the actual kinetic conceptualisation of gestural meaning, expose, gestures in bringing forth meaning always necessitate the actual bodily kinetic execution of the structural aspects that also relate to image schematic structures. Every gesture is a specific configuration of movement patterns with specific spatial structural aspects, whatever the meaningful elements being depicted are, whether spatial aspects and relations, shapes or actions. And in either case, it is seen how movement itself is required for bringing forth, an understanding, as well as attending and thus experiencing the specific structural configurations required for any given structural aspect of meaning.

Firstly, we have seen in the discussion on the kinetic conceptualisation of spatial aspects discussed at the end of Chapter 1, that they are not only inherently tied to movement, but were brought into awareness when they actually emerge in movement. In fact, an inability to direct the gaze in a specific direction was a matter of an inability to move the eyes in that direction. And it was only after the movement directed to the specific direction emerged, enabled after several attempts, did an understanding and reasoning about the direction also ensue. Even the depiction of shapes was a kinetic bringing forth of specific spatial configurations, with an attending to them enabled as they emerged in movement. Secondly, the same was evident

from the analysis of learning the gestural depictions of actions discussed in this chapter above. Actions are also constituted of movement with specific spatial configurations, whereby as the example analysed illustrated, specific motor actions are a matter of simple low level movements executed in more complex ways, and with specific structural aspects. And here as well, in bringing forth a specific action not known to the student, the actual kinetic execution of the movement involved in the action enabled an understanding of the structural aspects of the action, and thus reasoning about it. In other words, the action became meaningful only upon execution of the structural spatial aspects of the action, which specific movement configurations produced.

Thus, analysing the form features underlying all gestural meaning, we discern how structures that are seen to bring forth meaning, essentially basic structures that inform basic meaning, are, firstly, those produced by movement, and secondly, actually executing them in movement enables understanding and reasoning about them. And these are finally structural spatial aspects that, as was discussed earlier, also define what Johnson discusses as basic gestalt structures of image schemas, arising from sensorimotor experiences. We have seen how this reflects what Johnson defines as structures “analogous to spatial manipulation, orientation, and movement” (1987:25) that are always involved, irrespective of sensory modalities. Another notion in terms of defining the structuring of experience indicated in gestural meaning, we not only discern how defining actions is essentially defining movement, but also, and yet again, that defining attention is also defining movement.

Gestural meaning depiction thus exposes, in revealing a manifestation of sensorimotor experiences, essentially, an actual dynamic engagement in sensorimotor behaviour, as Gibbs postulates it. It is thereby not just a simulation of embodied experiences, recreated by the body when thus engaging, but a dynamic, i.e. actual recreating as well as creating of embodied sensorimotor experiences when conceptualising meaning, given there is an engagement in sensorimotor behaviour both in the sense of experiences already there, as well as those that emerge by way of actual kinetic execution that gestural meaning necessitates. When gestures bring forth meaning, there is, in as much, an ongoing organising activity to put it in Johnson’s terms, out of which continuous structures, as image schematic structures are defined to be, are produced; in gestures as concrete structures in gestural form features. In thus being engaged in sensorimotor behaviour, there is the notion of a bodily working its way

up of imagination, here into the bodily itself in a direct manner. Imagination is taking place in a bodily sense, at the level where it is understood as being grounded.

We, thus, also gain an understanding that, if gestures produce images or imagery as McNeill (2005) postulates, they are to be understood as grounded in embodied experiences. In specific terms, if gesture is meaning in actual motion, where the movement itself is a dimension of meaning, as McNeill (2005:98) also concedes, and further states that this is possible only if it is an image, such an image is rooted in embodied experiences, as discussed in Cognitive Linguistics. Here we see how it is structurally enabled, arising from sensorimotor experiences. Most importantly, however, the discussions and analyses presented so far from the perspective of gestural meaning depiction, particularly instantiate the notion of movement itself as being primary for embodied sensorimotor experiences, and finally for imagination, memory and reasoning that stem from them. Then, sensorimotor experiences, out of which image schematic structures are discussed as arising, are a matter of knowing through and in movement.

Coming back to the discussion on actions, and an activation of motor areas of the brain that Gibbs defines as highlighting the fact that motor elements are recruited when conceptualising meaning in action-oriented terms, we discern in gestures, given actions here are not just terms but directly evident in the movement the hands execute, motor elements as movement elements, essentially in the spatial structural aspects of actions inherent to movement. Thus bodily knowing that was observed earlier as having to underlie such activation first and foremost, must be understood as a bodily knowing given through movement. It was also discernible in how the motor elements for an everyday action or routine movement known to the body such as a jump were executed easily, whereas an unknown action, as in the specific kind of tying, there was no recruiting of motor elements specific for such an action. Yet the student nevertheless easily executed basic movement units entailed in it, such as simple low level movements of the wrists, when the movement involved in the action was shown. This indicates not only an overt activation of motor schemas already present, but that both known everyday movement routines and inherent movement of body parts were there by default and produced easily, indicating in turn a knowing in movement terms. Finally, a knowing of the specific action was enabled by way of actually executed movement, and not necessarily by perceiving or imagining an action, revealing how knowing comes from movement, and knowing actions comes primarily from moving in specific ways.

Gestures, in as much, illustrate that even from the perspective of an activation of motor areas of the brain, which in turn is understood as indicating the role of actions for conceptualising meaning, or a dynamic engagement in sensorimotor behaviour, how it is a bodily knowing of the actions, or better said, the movement involved in the actions, that must underlie such an activation. Furthermore, it tells us that, while both Johnson and Gibbs are right in placing the role of actions as central to perception, there is need to differentiate the notion of actions or motor actions from movement which is inherent to them. By looking only at actions and motor elements as discussed from the perspective of specific studies, we do not get an indication of how movement itself might play a role.

Thus, even if movement in terms of locomotion may be informed by sensory inputs, as was seen in the examples cited by Johnson (2007), or specific studies on brain activation are seen to evidence the role of actions for perceptual experiences, by analysing both the image schematic and the kinetic conceptualisation of meaning in gestures, and the learning process involved in the kind of explicit gestural meaning depiction as practised in Indian dance theatre traditions, we thus arrive at the insight as to how movement itself might play a primary role in sensorimotor experiences. Movement experiences as themselves perceptual experiences are in this sense not just an add on to perception in terms of sensory perceptions, as Johnson's definition of experiences out of which image schemas arise, indicates.

By looking at the very structural aspects of meaning, the analyses exemplify how there is not only an image schematic construal, but also something dynamically embodied in gestural meaning construction. And if structural spatial aspects are the very basis of image schematic structuring of experience, and are as gestural meaning depiction clearly illustrate, inherent aspects of movement, gestures in kinetically embodying meaning, in effect underscore the image schematic operations that Johnson defines as “analogous to spatial manipulation, orientation, and movement” (1987:25) that are always involved, irrespective of sensory modalities. Essentially, we begin to understand how basic movement itself might be fundamental for bodily sensorimotor experiences underlying image schemas and in turn a conceptualisation of meaning. In other words, the structuring of experience, the structuring of sensorimotor experiences to be precise, seen to underlie meaning, is fundamentally a structuring of what movement brings forth. Given this, the notion of bodily knowing grounded in movement must finally also hold for the understanding of neural structures as

structures that enable sensorimotor experiences, and thus are central for a structural nature of experience and finally meaning, as Lakoff and Johnson (1999) and Johnson (2007) formulate.

Johnson (2007:19-24) does refer to the primary relevance of movement by drawing from Sheets-Johnstone's (1999) phenomenological perspective on movement and its primacy, to then move on from there to discuss many of the above cited studies, and laying out, yet again from a primarily cognitive take, what more is necessary for formulating his notion of embodied or immanent meaning. In the following I will look at how this perspective on movement is interpreted, to then consider what becomes necessary to flesh out the notion of movement in actual movement terms.

2.4.3 The role of movement for experience?

In discussing movement as basis for meaning, Johnson (ibid) defines how movement is “one of the conditions for our sense of what our world is like and who we are” (2007:19). Attention to bodily movement is seen to be central for both how things and experiences become meaningful via sensorimotor capacities, though this is not considered to be the whole story, stating temporality as an example that is “equally primordial”. In looking at this understanding of the relevance of movement, Johnson discusses Sheets-Johnstone's (1999) postulations. Citing one of the postulations, namely, that movement is what we are born with, and as animated beings we are infused with movement, which gives us our aliveness with which we learn to make sense of the world and live in it in the first place, Johnson interprets this as involving an “ongoing, intimate connection and interaction with aspects of some particular environment” (2007:20). In movement as experience, there is, thus, no “*radical separation of self from world*” (ibid, emphasis in original). In this sense there is “no movement without the space we move in, the things we move, and the qualities of movement, which are at the same time both the qualities of the world we experience and the qualities of ourselves as doers and experiencers” (ibid).

In terms of how movement matters in experiential terms, Johnson cites the four dynamic qualities of movement that Sheets-Johnstone describes, interpreting how these then matter for conceptualisation of meaning. There is a tensional quality to movement, because it involves effortful actions requiring tension in the musculature. Thus there is some degree of exertion and energy demanded of movement. This is then discussed in terms of anticipation. Of

anticipating how much energy to exert when lifting a suitcase for instance, and how the anticipation might be wrong if one thought it was full, but it were actually empty. Or it is heavier than anticipated. This leads to a recalibration of exertion required, and unconscious adjustments with body positioning and movement. Thus, knowing the world needs such recalibrations enabled by the felt bodily tensive qualities that movement provides.

Secondly, there is a linear quality to movement, because movement creates linear, curved, jagged or other kinds of paths, both actual and projected. Infant studies are cited here as evidence for the fact that babies learn to imagine possible trajectories of object motion based on speed, direction of motion and previous location, all of which point to visual perception. Thirdly, amplitude is another dynamic quality depending upon whether a movement is restricted or contracted or more expansive. Johnson cites differences in how boys and girls would execute a throwing movement, based on studies by Young (1980), stating that even if these reflect cultural norms or socialisation, there is the notion of amplitudinal quality of movement that needs to be considered. Finally, a movement can have a projectional quality, depending on how force is exerted, as in a sudden propulsion or in a gradual, continuous manner.

Johnson essentially considers the discussion on the phenomenological description of movement given by Sheets-Johnstone and the relevance of movement indicated therein as the starting point to expound on the discussions on embodied immanent meaning in the further course of the book, many of which were cited in the earlier section. The point of emphasis in citing the phenomenological descriptions of movement, is that they will come to play a crucial role in how things can be meaningful to “creatures who have bodies like ours and move in environments like ours” (2007:24). At the same time, it is stated that while Sheets-Johnstone as a phenomenologist focuses on how they are *felt* and *experienced*, our bodies are, “however, even prior to conscious experience”, “inhabiting, and interacting meaningfully with, their environments beneath the level of conscious awareness” (ibid, emphasis in original). Johnson postulates the notion of “immanent meanings”, or “meanings-in-the-making” (2007:25) at this nonconscious level, where the thus discussed movement characteristics are forming the basis simultaneously for both what is defined as “meaning of our movement”, and for “meaning of the world that we move within“.

As Johnson states, Sheets-Johnstone's description of movement are discussed to drive in the importance of movement for our capacities to experience the meaning of things. Essentially, the four basic qualities of movement are considered to be part of what we mean by, and experience as force, effort, manner of motion and direction of action. Thus the description of how our movement can reveal linear, curved, twisted, diagonal or other spatial dimensions, or create circular or zig-zag patterns is cited to define the grounding of concepts such as *curved*, *twisted*, *circular*, *vertical* and so on. It is the posture, movement and the logic of these that are primary for these spatial aspects to get their meaning (2007:26). The notion of image schemas as recurring patterns and structures of meaning is stated as an instance of how movement is manifested.

Furthermore, Johnson observes that the statement about the primacy of movement, namely if, as Sheets-Johnstone postulates, our sense-making about the world unfolds upon how we make sense of our bodies first and foremost, which is in and through movement, or animation, this is not meant to exclude other bodily acts such as sensory ones that give rise to meaning, "but it does emphasize the importance of movement for our learning about our bodies and our world (2007:27). The "profound truth" about the bodily basis of meaning cannot, however, be demonstrated by a phenomenological analysis of experience, as meaning does not reside only in felt experiences and conscious processes, but at levels below conscious experience. This suggests that the notion consciousness that Sheets-Johnstone postulates is not enough to define the notion of immanent meaning. While conceding that Sheets-Johnstone is right in how the phenomenology of the qualitative aspects of self-movement leads to the very concepts foundational to our human lives, Johnson sees the necessity to survey other empirical evidence for the embodiment of concepts and reason, in order to develop the notion of immanent meaning he proposes. The further discussions continue such a survey, by way of the afore-mentioned infant studies, for instance, or the studies cited in the earlier section above, or studies about the felt dimensions of experience to underscore how feelings matter for meaning.

In discussing from the perspective enabled by infant studies, as mentioned earlier, the further course looks at the importance of these experiences as instances for how meaning entails intersubjective, cross-modal and body-environment coupling or interactions. In general, babies not gain early bodily experiences by interacting with their care-givers right from birth, as in shared visual experiences, or imitation of facial expressions. But given their range of

motion in space is limited in early infancy, they learn to know their world through the sensory modalities of hearing, touch, vision, taste and smell, in essence by observing objects and learning to manipulate them. Locomotion later gives them an expanded range of possibilities or affordances to thus gain an enriched knowing of the world and thus meaning in a bodily way (2007:49f). In this sense Gibson's (1979) notion of an optic array is cited, that is available to us and based on which we learn to make unconscious adjustments to our movement. Essentially, while sensorimotor and conceptual capacities are thus seen to be given to infants, setting constraints on experience and thus meaning, these have to be activated through experience in turn, and developed continuously, "in certain ordered sequences and within certain time frames" (2007:35). In other words, the stages of growth matter for experience and how sensorimotor and thus conceptual capacities develop.

Felt qualities of experience are finally diverted to discussions on the role of emotions, feelings and consciousness. Damasio's (1994, 1999, 2003) neurocognitive account on emotions is cited as example for how emotions have evolved as fundamental components of complex processes of bodily perception, assessment, internal monitoring, motivation, action and so forth, as a result of the organism's need to survive. Johnson asks: "What could be more meaningful or significant to us?" (2007:66). Johnson sees in the felt aspects of experience, or the qualitative degrees of intensity and feelings thus enabled by the brain's monitoring capacity and appraisal of situations, and the subsequent bodily states that constitute emotional processes, both experiences that operate below the level of conscious awareness, and the felt dimensions that image schemas must be understood as having. Thus the role of emotions is given a central place for embodied experiences, as providing this level of experience, given a monitoring, initiating and executing change in the body as life-sustaining function occurs before emotions are felt as mental experience, all happening below the level of conscious awareness. The unveiling of an immanent embodied notion of meaning is finally continued essentially from such discussions on basic bodily experiences, with brief mention of the bodily aspects of emotions, such as neural activation, chemical releases, changes in viscera and musculoskeletal states, essentially those aspects that Damasio (2003) discusses as the process of an emotion, which leads to experiencing these bodily states as feelings.

Having discussed Damasio's postulations, Johnson (2007:67ff) draws extensively from John Dewey's (1925/1981) account of how it is situations as a whole that are characterised by emotions. Then if they were a matter of individual or private feelings, or responses, locked in

one's own mind, they would not tell us about the objective world. They become meaningful, because they are processes of organism-environment interactions. The role of emotions for experience is thus seen again in the role they play in these organism-environment interactions, or enactions, a notion that as mentioned earlier as well, is cited from Varela, Thompson and Rosch (1991). Based on Dewey's postulations, Johnson defines experiences as coming as a whole, and it is the pervasive qualities of situations within which objects, properties and relations are discriminated, that is primary to experience (2007:75). In this sense, we should understand the meaningfulness of these as given in experiencing the qualitative aspects of situations. And this discrimination is enabled by emotions. Based on Dewey's insights as cited above, concepts are defined as arising selectively from the ongoing continuous flow of experience that is fundamentally whole and unified. At this level there are no distinctions between experiences defined as emotional, bodily, intellectual and so forth, no objects and their features. And from such a qualitative whole of experiences arising from situations that are the afore-mentioned organism-environment couplings, essentially sensorimotor by nature, distinctions are made and patterns abstracted.

Johnson finally moves on to discuss how image schemas are grounded in cross-modal perceptions. And given their major function in enabling bodily experiences, they have meaning, which itself is that of these recurring structures of sensorimotor experiences. Meaning structures of this sort, given they operate below levels of conscious awareness, are part of the *cognitive unconscious* (2007:139, emphasis in original), a notion he and Lakoff postulated earlier (1999:9ff). As opposed to this, Sheets-Johnstone's explications on movement qualities are apparently considered to be consciously felt processes of experience. And emotions are the non-conscious aspects of felt processes in which experiences are rooted. We discern from the discussions, that Johnson is essentially looking at the larger picture to then move up to the notion of cognition. Gibbs (2005a:267ff) also refers to these movement qualities and studies on emotions from the perspective of consciousness and enactment. This account from Cognitive Science is to underscore how consciousness is grounded in bodily feelings and becomes relevant for the notion of embodiment. Consciousness is finally defined as an experience at different levels, each of which is constituted of its "own sensations of felt movement" Gibbs (2005a:273). To hold at this point, is the role of emotions in meaning-making.

Finally, based on the cited studies, Johnson postulates the understanding that there are levels in the fullest manifestation of the human body as the source of embodied meaning (2007:275ff). There is thus the body as biological organism, that in functioning as a whole by way of its various systems, makes qualities, images, feelings, emotions and thought patterns, makes the grounding of meaning possible. There is the ecological body which is characterised by the organism-environment interactions or couplings discussed earlier. Or the phenomenological body that we experience. Johnson sees herein the tactile-kinaesthetic body that Sheets-Johnstone defines; of how we experience our sense of being by way of our movements and become aware of our inner bodily states through emotions and feelings. Finally, there are also the social and cultural dimension of experiences, that manifest what Johnson coins as social and cultural body, based on aspects such as intersubjectivity, cultural norms and social interactions.

Importantly, the discussions cited here as Johnson and Gibbs explicitly and extensively lay out, provide insights into understanding the nature of an embodied process of meaning-making. At the same time, as the analysis of gestural meaning indicates, there is, I think, yet to be fleshed out, the understanding of the bodily underpinnings of meaning in terms of movement itself, which means a going down from the perspectives provided by Johnson and Gibbs with regard to how bodily movements really matter as defined by Johnson in structuring experiences at the basic level of “bodily movements and interactions in various physical domains of experience” (1987:XIV). This requires other analytic conventions, as will be discussed in the next chapter, where the notion of movement qualities will be addressed to take the discussion further.

Summarizing the discussions laid out in this chapter, gestural meaning analysed in Chapter 1 has been traced here from cognitive conceptual processes that define a conceptualisation of meaning (Langacker, 1991; Croft and Cruse, 2004) to image schematic structures and an embodied notion of meaning (Johnson, 1987/2007; Lakoff and Johnson, 1999; Gibbs, 2005a/b). The central findings from a cognitive semantic and cognitive linguistic perspective revealed how gestures in bringing forth basic meaning, identified as shapes, spatial aspects and movement, take advantage of specific construal operations involving what Croft and Cruse define as a universal tendency to structure experiences. There is thereby the of a structuring of experience, or a conceptualisation of experience relative to domains that bottom out to embodied experiences. A form-based analysis using the criterion that Müller defines as

Motivation of Form illustrated that basic structures which constitute basic meaning and are evident in the gestural form features, relate to basic image schematic structures. On Johnson's account, these are pre-conceptual, pre-linguistic structures that arise from bodily sensorimotor experiences enabled at the level of daily activities and perceptions, giving coherence and meaning to experience.

The analysis using current gesture analytic conventions, in effect, indicates in a bodily manner that gestural meaning is not only embodied meaning, but also reflects an embodied processes of meaning-making Johnson (1987/2005/2007) defines. The notion of a structuring of experience, tells us not only how, but also *why* the physical properties evident as gestural meaning make sense as they do. And also, how evoking such a meaning indicates more than invoking it for the purpose of communication. When examining further discussions about the bodily grounding of image schemas and, thus, meaning (Johnson, 1987/2007; Lakoff and Johnson, 1999; Gibbs, 2005a/b), an image schematic construal of meaning, essentially a conceptualisation enabled by a structuring of embodied experiences, is seen to be a matter of neural structures that enable sensorimotor experiences. The discussions presented trace the nature of primordial experiences that are simultaneously cross-modal, i.e. not based only on a single modality, sensory or motor, but on sensorimotor couplings with the environment. In this sense, the kind of structural aspects of meaning that gestures reveal as shapes, spatial aspects and movement, are in effect, a matter of how and why these physical properties must lend themselves to attention, which is based on the needs of the organisms, in Johnson's terms, to survive and flourish. There is essentially the notion here, of how brains have evolved to structure experiences given through sensorimotor interactions with the world in a bodily way. At the same time, one discerns how tactile-kinaesthetic experiences enabled by movement must constitute a primary aspect of these capacities.

There is a discussion by both Johnson (2007) and Gibbs (2005a/b) on the role of actions informing perceptions, again mostly drawing from the perspective of studies that look into neural activation. At the same time, the kinetic and image schematic analysis of gestural meaning depiction, coupled with the analysis of learning the explicit production of gestural meaning practised in Indian dance theatre, clearly illustrates again, how the structures, evident as form features in bringing forth meaning, whether shapes, spatial aspects, or characteristic movement of actions, are inherent to movement, emergent in movement and are also brought to awareness through movement. Image schematic operations that Johnson defines as

“analogous to spatial manipulation, orientation, and movement” (1987:25), that are always involved, irrespective of sensory modalities, are revealed in the kinetic embodying of meaning in gestures. And yet, spatial aspects constitute actions as well. And while involving cognitive capacities discussed in the cognitive take such as bodily situatedness and attention, these aspects involve movement itself. Movement is what defines all these, whether spatial manipulation, orientation, or manipulation of objects, all of which constitute motor actions. Looking beyond the discussions on actions informing perceptions, or accounting for these in terms of moving around, toward objects and the like, that Gibbs drawing from several studies notes, the analyses of gestures clearly exemplifies, that actions are not movement per se, and thus do not define it.

What becomes evident in the discussions in this chapter is that, gestures in revealing the very structures that are understood as arising from sensorimotor experiences, do so in a tangible, corporeal and kinetic manner. They point to how a structuring of experience is enabled by movement itself. It is, thus, not a question of bodily movements being an add-on in the list of experiences, as several definitions indicate. If image schemas are schematic versions of images of experiences, specifically sensorimotor experiences given in body-brain-world interactions, we discern in gestural meaning depiction the workings of imagination itself; to put it in Johnson’s words, how the bodily may work its way up imagination, but here discernible in movement terms.

To conclude, the discussions presented in this chapter are important insights to understand how meaning as given in gestures must be fundamental and basic, reflecting embodied processes of meaning-making grounded in bodily experiences. What is required, as gestural meaning indicates, is, however, a focusing on not just the “phenomenology of human body in action” as Gibbs (2005b:116) postulates, but of body in movement. It calls specifically for an examination of bodily experiences from a movement perspective itself. The discussion by Johnson (2007) on the primary role of movement, where the movement qualities as postulated by Sheets-Johnstone are referred to, can, in my opinion be further fleshed out in movement terms. Given this, I propose to henceforth take up the discussion from the point these studies have enabled arriving at, by going further down from there essentially. To do so, the next chapter will provide an additional analysis of gestural meaning based on Sheets-Johnstone’s notion of dynamic qualities by applying other analytic methods.

3 Moving on with movement

The approach based on a form-based linguistic analysis of gestural meaning depiction discussed in this part of the study has offered, as evidenced so far, an inroad that exposes how gestural meaning is also a matter of various conceptual processes and their embodied underpinnings. In particular, we have seen in the last chapter, how the image schematic structures that make experience coherent and, thus, meaningful, and are emergent “at the level of our bodily movements, our manipulation of objects and our perceptual interactions” (1987:29), are evident not only in language, as discussed in *Cognitive Linguistics*, but also gestures. Yet the approach from the perspective of gestures enables a different insight, than the cognitive linguistic discussions, which are not only based mostly on analysing linguistic terms, and, as Johnson (1987, 2005, 2007) concedes, structural, exposing the predominance of visual perceptual experiences. As also revealed from examining the insights provided by both Johnson and Gibbs (2005a/b), there is essentially a cognitive top down approach, that essentially refers to the dimensions of embodied experiences that would account for a pre-conceptual level of meaning, and the basic bodily experiences thereby, but then continues on with the cognitive take on how these provide the basis for embodied meaning and cognition. In this sense, there still remains in my opinion, despite the expounding on an embodied notion of meaning, that rock-bottom level of experiences, to use Johnson’s term, that needs scrutiny at the level of movement and in terms of movement itself.

Gestures, in kinetically embodying meaning, however, underscore the image schematic operations that Johnson defines as “analogous to spatial manipulation, orientation, and movement” (1987:25) that are always involved, irrespective of sensory modalities. These are spatial aspects that while involving cognitive capacities such as bodily situatedness discussed in the cognitive take, must involve movement itself, given spatial aspects are inherent to movement, as analysing gestural meaning depiction clearly exemplifies. It is, thus not a question of bodily movements being an add-on in the list of experiences, as these definitions indicate. Movement is what defines all these, whether spatial manipulation, orientation or manipulation of objects, which are essentially motor actions. There is thus a primary role that movement plays, in not only how gestures embody meaning, but also an embodied process of meaning-making they reflect; a process that Johnson sees as the basis for meaning in its broader sense.

Furthermore, felt or kinaesthetic qualities integral to the movements that bring forth the structural aspects, also becomes evident in the analysis of gestural meaning. It must be a tactile-kinaesthetic experience of movement itself that is seen to be primordial, and also central for how spatial aspects underlying structural features that constitute meaning lend themselves to attention and, thus, how physical properties gain salience or meaning; a clear indication of how basic cognitive capacities may also be tied to movement. That a felt or kinaesthetic quality is a dimension of experience is mentioned by both Johnson and Gibbs, and listed by Langacker as well in defining domains. In this context, both Johnson (2007) and Gibbs (2005a) cite the notion of movement qualities as explicated by Sheets-Johnstone (1999, 2011) to emphasize the relevance of movement for embodied meaning-making. They discuss this not to examine movement per se, but to discuss the conscious experience or consciousness it is seen to enable.

I will draw on the four dynamic movement qualities that Sheets-Johnstone defines, as also cited by Johnson and discussed in the last chapter, to illustrate in a concluding movement-based analysis for this part of the study, how these also inform meaning. The movement qualities discussed thereby expose other aspects of gestural meaning not considered in the structural analysis so far.

3.1 Meaning as understood from the perspective of movement qualities

Sheets-Johnstone (2011:121-134) discusses kinesthetic consciousness in terms of qualitative dynamics of movement which are spatio-temporal energetic, specifically in terms of the four aspects Johnson discusses. This has to do with the sense-making movement enables as it emerges forth. Specifically they are qualities that are concurrent with movement, when the body moves with certain dynamics identified as four basic kinetic qualities, linear, amplitudinal, tensional and projectional (2009:205). They are always there in every movement, as everyday experiences, if one paid attention to them in one's movement. In this sense, even temporality, that Johnson sees as another primordial aspect of experience, as was cited in the earlier chapter, is an outcome of movement. How they might inform meaning will be analysed here. Their analysis necessitates, as will be illustrated, other analytic and descriptive conventions that enable the analysis of some of these movement qualities not

necessarily observable through visual means of analysis, that are not only predominant in a structural analysis, but also the form-based linguistic analysis.

A central tenet of Laban Movement Analysis (LMA) that I propose to also use in this study, is to actually execute the movement that one is observing and analysing. As briefly defined in the Introduction, it is a movement analytic convention that, together with Bartenieff Fundamentals (BF), offers approaches to understanding movement principles by considering four main categories of movement, namely Body, Effort, Shape and Space. All of these have several nuances, thus, enabling the broadest statement one can make about movement. The analytic system entails both observing and attending to one’s own movement and describing movement qualities therein, but also understanding what is happening during any movement in structural, functional and expressive terms. In this sense, what Sheets-Johnstone (2009, 2011) refers to as spatio-temporal-energetic qualities can be categorised under Effort and Space, given how the four dynamic qualities are defined.

Taking the stance from these approaches and integrating them into the analysis of gestural form features, as in the earlier chapters, several features hitherto unaccounted for become evident, over and beyond the structural meaning identified and discussed hitherto, but which are, nevertheless, part of such a meaning. I will take two examples here: the gestures for *stealthily* and *taking away*, in which, by using both the observational approach as is the convention in linguistic form-based analysis, as well as an approach that calls for executing the movement oneself, it becomes evident in what ways the aforementioned four kinetic qualities are involved in constructing meaning (Table 4).

Gesture	Description of Form	Motivation of Form	Spatio-temporal-energetic qualities
<i>taking away</i> ,	upward leftward movement in a curve	Spatial relations concepts <i>up</i> and <i>onto</i> . SOURCE-PATH-GOAL, UP, CURVE, FORCE/PROPULSION. Motor action of jump.	Temporal, curvilinear, amplitudinal, projectional
<i>Stealthily</i>	Hands: clasp each other, elbows apart. Eyes/head: horizontal right-left movement. Chest: advancing forward	ENCLOSING, SIDE-SIDE, BOUNDED, ADVANCING	Tensional, temporal

Table 4

A temporal quality of quickness²⁰, a linear quality that can be defined as curvilinear, and amplitudinal qualities as evident in the peripheral range of the movement are observable in the spatiality seen in the movement for *taking away* as it curves upward and leftward as illustrated in Figure 5 in Chapter 1, to convey the cognitive linguistic concepts *up* and *onto*. If one performed the movement observed in these configurations and paid attention to it, a forceful projectional movement could be experienced with a tensional quality that relates to the temporal quickness of the upward curvilinear movement. This can be further tested when the movement is repeated once with a quick and once with a slow movement. One notices that it is the quickness in relation to a tensional quality that conveys propulsion in referring to a jump. In thus analysing the actually executing of the movement, an energetic quality is experienced as inherently integral to the quick upward movement that is executed, in other words into the projectional quality itself. These are the qualities one experiences in the motor action jump as a propulsion. The gesture, thus, embodies both the spatial and spatial dynamic properties of a jump, which are essentially energetic and temporal as well, and this in a direct bodily manner. In other words the movement experiences a jump enables are manifested directly in the gesture of the hands depicting such a jump.

These qualities, while revealing according to LMA/BF, factors from the Space and Shape Category that are perceivable visually, also reflect Weight and Time Factors of Effort Category that are only partly visually observable. Weight, specifically the factor Active Strong Weight, is necessary to stem off the ground, revealing at the same time what is seen as source in the gestalt structures underlying a FORCE image schema. And a Quick Time Effort defines the projectional propulsion thus enabled. In terms of Space Category, there is a Vertical Plane in the sideward and upwards oriented movement, which at the same time reveals a Curvilinear or Arc-like Directional Mode of Shape Change. It is Directional, because of the goal-oriented movement on to the tree that the gesture entails. The Shape Category here is a matter of spatial features as well.

There are also spatial and temporal qualities that are observable in the movement for *stealthily* (Figures 4 and 7), with the energetic quality again revealing itself only when executing the movement. The linear quality is observed in the horizontal or side to side eye movements, an Advancing Shape Quality in LMA in the slight advancing upper body that reflects a slight

²⁰ Though not observable in the stills presented in Figure 6 and 7, the video reveals this quality.

projectional quality, and an Enclosing Shape Quality is evident in the clasping of the hands. The elbows, which need to be positioned in conjunction with the alternately clasping and enclosing hands, are kept apart and away from the body horizontally. When one executes all these configurations of various body parts in relation to each other while changing the orientation of the palms in the clasping movement, a tensional quality is revealed, that can be defined here as a Bound Flow Effort quality. It comes essentially from the degree of pressure in the clasping movement. The best description for its experience is a feeling of keeping the insides in and the outside out. Again, when one actually executes the movement with changing configurations, the tensional quality and its varying degrees can be assessed. There is also a temporal quality in holding the gaze briefly in each direction, which is a Sustained Time Effort. In this variation, as opposed to the one analysed at the end of Chapter 2, there is no lowering of the body to the extent that the spatial intent of the gaze must be towards side-high. There, it was the highlighting of the gathering action. Here, however, one observes how the concept of stealth is being conceived through specific movements, positioning and orientation of the various body parts in a way that there is also a qualitative aspect to it of staying low key.

In thus drawing from Sheets-Johnstone's notion of movement qualities by applying a movement analytic methodology, it has been possible to assess that there are other aspects of movement, over and beyond the structural aspects perceivable through visual sensory modalities, and that these are kinetically felt through one's own movement becoming discernible. There is a kinaesthetic experience involved that has been analysed differently here than in earlier examples. Firstly, there are also energetic qualities in the spatio-temporal qualities that are observable, each informing the other and varying with each other. Secondly, it also becomes evident that there are other qualities in gestural meaning construction that contribute to meaning in their own way. Even here, leaving out or altering any of the movement dynamics changes the spatio-temporal-energetic qualities of the gesture and the meaning it embodies. There can be alternate construals of the movement based on the motor action jump, for instance, as long as the same dynamic qualities are in play. If not, it could just be a casual climb onto a tree. In the gestures referring to stealth, on the other hand, while hand configurations could vary or not be present at all, the eye gesture and body stance in conjunction with perhaps the placement of the elbows for the hand gesture are what enable the furtive and bounded cautious movement of not giving away too much, suggesting a bodily behaviour or attitude.

We can now identify, based on the movement qualities, that in executing a quick forceful propelling movement with the hands, meaning for *taking away* is conceived as a *quick* propulsion *onto* a tree after taking away the saris. However, the gesture for *stealthily* reveals bounded cautious movements of advancing and keeping the surroundings in sight, so as not to be noticed. There is, as evident, nothing amplitudinal, projectional or linear, i.e. nothing that makes the movement big, about it. Rather, there is a bounded quality of not giving away what one is doing. The enclosing gesture of the hand itself, in depicting the very restricted attitude, suggesting, as analysed while discussing in cognitive semiotic terms in Chapter 1, a keeping the desire of stealing concealed. Based on this, one sees how the act of stealing is a stealthily executed action with a subsequent forceful quick or hurried jump onto a tree so as not to get noticed. There is an affective or emotive connotation to the meaning when thus analysed, which is both furtive and hurried.

The analysis, therefore, unveils yet again the significance and fundamentality of movement and its aspects for conceptual processes, here in terms of movement qualities as well, analysable in bodily movement terms as kinetically felt qualities when actually executing the movement. At the same time the meaning they project is informed or derived from not only structural aspects, but also qualitative aspects. Every meaning to get embodied requires one or the other nuance of these qualities, which come in a known way, only if kinetically felt, and not necessarily observed. What we essentially see here is that there is, as Sheets-Johnstone (1999, 2011) defines it, a kinetic-kinaesthetic as well as an affective-kinetic relevance given in movement qualities. The inherent intrinsic nature of an affectively informed primal movement is the generative source of what is defined as experiences in their totality as affective-kinetic/tactile-kinaesthetic experiences (2011:454, 2009:213)). Drawing from Jacobson (1970) and thus from the premise of psychology, and other sources, Sheets-Johnstone (2009:195-216) refers to how neuromuscular tension is emotionally laden. In this sense there would not separate mental act as differentiated from neuromuscular activity. There is a dynamic congruence between emotions and movement. It is also observed how “Labanalaysis and Labanotation” would allow empirical study of whole-body kinetic process. As this study will reveal, there is more to it than this observation may suggest.

Finally, Sheets-Johnstone argues from the premise of consciousness research and evolutionary history that there is an intrinsic biological disposition towards iconicity and

semanticity in corporeal representations that resides in this primarily kinaesthetic dimension of experience to be communicated. Concepts, which are fundamentally corporeal, arise from experiences grounded in movement qualities that are affectively *and* kinetically determined, since movement and emotions concur; that is in the kinetic-affective qualitative dynamics of movement. Referring to Johnson (1987) and Lakoff and Johnson (1999), it is argued that corporeal-kinetic forms would thus account for nonlinguistic experience than embodied image schemata would (2009:220). The very notion of embodiment is questioned, calling it a packaged form. However, living forms are animate forms, and given this are “*primed for meaning*” (2009:219, emphasis in original). There is a foundational animation, as is further postulated, which anchors concepts such as *pre-reflective, self-awareness* in the dynamic realities of kinesthesia and the affective/tactile-kinesthetic body (2011: 457, emphasis in original).

Gestural meaning points to these fundamental corporeally given concepts. By directly embodying the specific qualitative ways of moving in any given action or situation, gestures reveal an iconic similarity to the action, object or situation being depicted, as we have seen earlier, while, at the same time, also revealing similarity to the qualitative dynamics that are related to what is seen as affective or emotive meaning. The analysis above only brings two examples. But all gestures can be analysed thus. Then meaning emerges forth only if the gesturer/performer is bringing forth movement qualities related to any meaningful element. As Müller observes (1998:104), there is not just a representational, but also an expressive function in a gesture. This is evident in the movement quality. Citing the use of affective expression in the rhetorical use of gestures by orators, it is noted that just learning the repertoire of gestures, such as a fist for anger or placing the hands in front of the face for ‘reue’ in a theatrical fashion, is not enough to show the expressive dimension of gestures in a convincing manner. The appropriate gesture with a quality of movement and its execution at the right moment play an important role here. While the form-based analysis does not provide tools to analyse this, the analysis above, it becomes evident that the very action, which is a representational gesture in the sense of classifying them as discussed in Chapter 1, has an affective connotation, revealing the overlapping that Müller mentions and that I briefly discussed earlier in Chapter 1 as well.

Another important aspect that becomes evident here and I would like to briefly mention, is that the affective-kinetic aspects in movement qualities are also seen to be fundamentally

significant as experiences underlying meaning in terms of previous knowing or knowledge that is presupposed. Just as the student does not require specific instructions or corrections to depict the jump in her hand gesture, as was analysed earlier, she needs no further inputs as to the dynamics involved therein either. Also noteworthy is the observation that while the hand gesture for *stealthily*, which is a very specific stylised gesture, needs corrections, the body stance and gaze that reflect what is apparently a behaviour pattern during an act of stealthily approaching something, are executed without any corrections. In other words, there is a primary kinetic-kinaesthetic knowledge of these, reflecting the kind of commonly shared experiences that Johnson (1987:62) mentions, which, as seen here, is perhaps not just a matter of the physiology, but more than that, necessitating further examination. At the same time, conscious experience, which both Johnson and Gibbs discuss when referring to movement qualities or the role of movement, can be very differentiated as I will discuss below.

3.2 Felt qualities - a matter of bodily awareness in movement

While citing Sheets-Johnstone's phenomenological perspective on movement qualities and the felt and experienced thereby, Johnson continues by stating that "*However*, even prior to conscious experience", i.e. at non-conscious levels of interacting with the environment, "these characteristics of movement are forming the basis for both meaning and our movements and, at the same time, the meaning of the world that we move within" (2007:24, emphasis added). A differentiation is apparent in further statements between conscious enquiry and the interactions that operate beneath the level of felt awareness; that meaning is not "*what is consciously entertained in acts of feeling and thought*", but given in "*our corporeal encounter with our environment*" (2007:25, emphasis in original). One discerns from these that the felt awareness of movement that is enabled when attending to it, as Sheets-Johnstone postulates it, is considered to be conscious experience. Since he is explicating on "*embodied meaning and immanent meaning*" (2007:11, emphasis in original) that arises at non-conscious levels, Johnson moves on from there to expound on other studies and the interactions or corporeal encounters that I have cited earlier in Chapter 2.

Gibbs (2005a:267) also discusses Sheets-Johnstone's definition of movement and the experiences it enables under consciousness and enactment. Though Sheets-Johnstone's approach falls under consciousness research, I do not think the explanations about primal experiences enabled by movement discussed there are conscious in the sense of not falling

under the non-conscious. Yet, when attending to movement qualities in one's own movement and then reflecting about or defining them, as will be evident in the analysis below, or as Johnson quoting Sheets-Johnstone does as well (2007:21ff), it becomes a conscious experience. However, what in a bodily way is essentially a sensate awareness or sensing, a term that Sheets-Johnstone uses as well, and that comes with movement, need not be a conscious experience, in the sense of a conscious awareness, as the examples analysed at the end of Chapters 1 and 2 indicate.

In the example analysed at the end of Chapter 1 (Figure 16) under kinetic conceptualisation, the student's marked reaction when she stops, laughs, points in the direction to where her gaze turned, finally mumbling something about becoming aware of it, when spatial aspects of the furtive glance entailed in stealth emerge in her movement after her several attempts to move her eyes accordingly, reveals both a bodily kinaesthetic awareness for her movement as well as a conscious reflective becoming aware of the aspects that emerged with movement. Her awareness is surely enabled as apparent by or through her attempts to get the gaze right, i.e. by attending to executing the movement accordingly. This, in turn, was enabled surely by the instructions she was being given as to how to execute her movement with the necessary spatial configurations. Apart from this, one may say, based on the discussions in Chapter 2 on embodied concepts and brain structures, that motor commands must have been in operation in her intention to move her eyes in specific ways. Nevertheless, it was only when the actual emergent movement itself brought forth the spatial aspect that it lent itself to her attention, specifically in this case, where 'side high' for the gaze *is supposed to be*, as her pointing hand indicated. Her instantaneous reaction, even before she verbalises it, reveals that there was an emergent bodily way of becoming aware immediately and concurrent with the movement, exposing there was first a sensate kinaesthetic awareness that the movement itself gave her. This was an unexpected sensation as evident from her reaction. And a reflecting about it in a conscious way came in the aftermath of thus experiencing movement.

In the example analysed at the end of Chapter 2, illustrated in Figure 20a-b, the student, in a similar vein, is seen to interrupt a gestural movement she is attempting for the tying action unknown to her, shake her hands/wrists and continue with the movement. Here, the spontaneity of this, which is very fleeting and hardly observable, reveals in an interesting way that there was, in that moment, a bodily sensation in the wrists, as if the wrists themselves wanted to undo and redo the movement. I must add here, based on my movement analytic

assessment, that the conventional hand shapes used in Indian performing arts cannot be executed without an anchoring in the wrists. It is often particularly noticed that just the kind of gestures being corrected on the student with the hand form *catura hasta* are difficult when students do not get the tightness required for such an anchoring. A tensional quality so to say has to be integral to the hand gesture. One also sees in Figure 20b how the hand form is momentarily not evident during the shaking.

While thus revealing that there is a bodily sensate experience, this example also illustrates that there is no reaction that would indicate a reflective or conscious awareness. There is apparently only a bodily awareness, the reaction, a bodily one, fleeting and not noticed by the student herself. Her attentional focus on her movement is, nevertheless, there, more about executing the movement, almost as if she is getting her brain to *give the right commands*. It is particularly interesting to note that until then she was executing the gesture with a pleasant expression, often looking at the movement being shown to her. At this point, however, her eyebrows are pulled together, her lips tight, a facial expression that people have when concentrating on getting something done.

What I would like to demonstrate with these examples is that there is a bodily kinaesthetic experience of movement in a sensate way at the level of its emergence in both the cases. It is felt in an immediate and instantaneous way; the spontaneous bodily reactions indicating this. And this, whether such a felt sensation or becoming aware of movement leads to conscious awareness or not. One sees how any conscious or reflective kind of awareness it may entail is in the aftermath of its execution, and often about the structural aspects that emerge with movement. The students are focussed on attending to what the movement brings forth, which one can define as a conscious scrutiny. However, neither of them were consciously scrutinising a felt experience, nor how the movement feels, nor mentioned anything about feeling the body parts being moved, nor about movement qualities experienced. Nevertheless, they had a felt sensate experience concurrent with the movement, as indicated by their reactions, with any conscious felt experience being an aftermath of its emergence with movement.

Consciousness itself is, therefore, a subject of its own, multi-dimensional, and not the subject of my scrutiny here. I had cited Gibbs in the earlier chapter, who considers it as having different dimensions, depending upon the felt sensation of movement. The Indian world view

has always discussed it at three levels at least. And yet, I would like to demonstrate that a felt sensate experience given in movement can still be relevant for embodied-meaning making and can still constitute what has been coined the “cognitive unconscious” by Lakoff and Johnson (1999:9ff) and Johnson (2007:139). For now, it suffices to say that in analysing gestural meaning construction in this chapter, both structural and kinaesthetic qualities that are part of the movement signature, in other words, in terms of an affective-kinetic/kinaesthetic quality, are seen to be relevant for meaning. And such a meaning reveals both structural and affective dimensions. This calls for further scrutiny both in terms of movement and emotions, and how they may relate to each other in enabling meaning, rather than being discussed separately and unrelated to each other as in the discussions cited in the earlier chapter from the cognitive take, even if both are referred to from the premise of conscious experience and a felt quality relevant for meaning and cognition.

3.3 Conclusion and taking forward

Surmising on the findings in this first part of the study, gestural meaning as conceived and depicted in the Indian dance theatre traditions was traced from the premise of Linguistic Gesture Studies and using the form-based analytic convention put forward by Müller (1998, 2009, 2010a/b; Müller et al., 2013), revealing how these also reflect a linguistic notion of meaning and conceptualisation.

In Chapter 1, the form-based analysis of examples drawn from data collected while teaching gestural meaning construction to students of the dance theatre form Bharatanatyam revealed how manual gestures are conceived to bring forth meaning, the notion of basic meaning revealed thereby and its conceptual underpinnings. Firstly, the same gestural form parameters observed in the study of spontaneous co-speech gestures and classified under referential gestures, namely hand shape, position, orientation and movement, are seen to be semantically relevant. They consistently carry meaning in terms of shapes, spatial aspects and movement that are physical properties of the objects, events and actions being referred to, of mimetic objects of the concrete world as defined by Müller in the notion of Gestural Mimesis. There is also a “conceptualisation of reality” (2010a:183) in these gestures, in physical terms, where mimetic objects are “mediated by a process of conceptualization, interaction, and the depictive possibilities of visible bodily movement” (2009:512).

Secondly, these conceptual processes were seen to follow the mimetic/cognitive semiotic principles put forward by Müller (2009, 2010a/b) and expounded on by Mittelberg (2008, 2009, 2010a/b, 2013). The mimetic aspect is evident in how meaning is essentially depicted by means of what Müller calls Modes of Mimesis, generally classified as acting and representing modes. These modes become evident in how hands essentially either represent an object in its characteristic shape or act out a characteristic action. There are, at the same time, tracing and moulding Modes of Mimesis that are subsumed under acting in Müller's later discussions. In these as well, while the hands reveal motor patterns of tracing, sketching, moulding or holding, it was discernible that a characteristic shape of an object or movement pattern of an event, such as the flow of water, or the spatial aspect, such as that of a path, is either two-dimensionally traced or voluminously moulded. I noted that in terms of meaning, gestures in all modes refer to mimetic objects by way of their physical properties, in doing so indicating how meaning is primarily a matter of what features or details are highlighted in what ways.

Features thus highlighted were seen to be, in cognitive semiotic terms, metonymically profiled reduced gestalts of actions, or entities where parts define wholes or vice versa. The object-sign relationship thus evidenced as predominantly iconic or indexical, is, as the analysis based on explications by Mittelberg revealed, a matter of the associative function of the two fundamental semiotic modes: similarity and contiguity. Together with the mimetic modes, they are seen to constitute the inherent mechanisms that guide gestural form *and* thus meaning. The explicit meaning construction analysed here especially indicates in the various ways of conceiving and depicting the characteristic shapes, spatial aspects and movement with both iconic and indexical ground, as classified by Mittelberg, that similarity in conjunction with inner and various outer contiguity relations is primarily operative. There is thus in all the instances, some kind of similarity, either to a shape, a motor or movement pattern, or spatial aspect or relation that are also contiguity relations.

Thus, in terms of understanding what guides the gesturer, one discerns a metonymic abstracting of object features of the concrete world and then presenting them as meaning through the various mimetic modes. Basic structures, that Müller (2010b) defines as informing basic meaning albeit the final intended meaning gestures may carry, are seen to be driven by the very physical properties that reveal to be meaningful elements in gestures, guided by similarity in relation to various contiguity relations. These basic structures not only

constitute the visuo-kinesic form that gestures on this account are, but in doing so, unveil how gestural meaning reflects the very fundamental means by which the physical world becomes meaningful, as further discussions unveil.

Thirdly, as the next step, a further analysis that investigated the actual learning process of gestures in class sessions was offered at the end of Chapter 1, exemplifying what was defined as a kinetic conceptualisation of meaning. It was seen how bringing forth the characteristic spatial aspects, shapes or movement required a diligent execution of specific movement. Then, it is movement that gives a tangible form to these properties. Thus, if a change in form is seen to change meaning, as observed in Linguistic Gesture Studies, this is because any change in movement configurations changes form and, thus, meaning. Therefore, whether meaning is guided by similarity or various contiguity relations, or presented through various mimetic modes, it is finally a kinetic conceptualisation that matters.

Furthermore, while thus analysing how meaning resides in the kinetics of movement and unveiling the centrality of movement in the creative dynamics of constructing gestural meaning, its role in the very conceptualisation of meaning was tangibly illustrated. Physical properties that become relevant for meaning, as meaningful elements that are extracted from the physical world, as Müller formulates it, are properties that are tied to, integral to and emergent in movement. Particularly evident in discernible movement terms is also how both shapes and the actions or motor patterns that constitute meaning are tied to spatial aspects given in movement. Movement in space creates shapes (cf. Ramesh 2014). Specific motor or bodily actions are also defined by specific spatial aspects. A gathering action, for instance, is not given if the hands do not move in the spatial configurations required for this.

This may be the most obvious statement to make about movement. However, analysing movement in this way was the first step toward drawing attention to how it may matter for meaning, and what analysing gestures can offer in movement terms. Apart from revealing how meaningful properties are primarily emergent properties of movement, emerging in the very act of moving in specific ways, the analysis also clearly instantiated the notion that it is in doing so that they lend themselves to attention. This reflects what Croft and Cruse (2004:3.2) define as “natural properties of perceived phenomena” in the concrete world that “lend themselves to being attended to”, thus, enhancing “those phenomena’s salience to the human beings’ attention”. Perceived phenomena such as objects, actions and events of the

concrete world, evident as mimetic objects that get referred to in the case of gestures by way of their properties, revealing how they gain salience in one's attention by way of just these physical properties, thus lend themselves to attention in and through movement. We saw particularly how the student, who kept attempting to get the spatial aspects of the gaze right by attending to her movement, showed a marked reaction when the side-high necessary for it emerged in her actual movement. The spatial aspect literally revealed itself to her in a bodily way, just as it emerged in her movement. Thus, her perception of and finally knowing about it was informed by her own movement.

An important point to hold in mind at this point of examining gestural meaning is that Müller's notion of depictive possibilities of visible hand movements are not only used to their utmost potential, but that movement itself in some fundamental way is crucial for meaning. Thus, and yet again citing Müller's definitions, the "rudimentary" ability to analyse form that enables the extraction of meaningful elements from the perceived world to transform them into perceivable objects through different Modes of Mimesis (Müller, 1998:125) must lie essentially in how these features lend themselves to attention by way of movement. This is where the associative modes similarity and contiguity must also become operative in some fundamental way. The first chapter, thus, enabled essentially an insight into 1) what meaning gestures basically bring forth, 2) how this is a matter of mimetic/cognitive semiotic conceptual processes of metonymically abstracting certain features for meaning, 3) and how gestural meaning is, finally, a matter of kinetic conceptualisation, with movement playing apparently a more fundamental role.

The notion of conceptualisation was further discussed in Chapter 2, here, from the premise of cognitive semantics and cognitive linguistics. Meaning seen in gestures in indicating in a literal sense a shaping and construing of meaning, to use Langacker's (1991) terms, reveal the postulation that meaning equates conceptualisation. The conceptualisation of experience to be communicated which is a matter of construal operations relative to four basic cognitive abilities and their various dimensions given in human experience, Croft and Cruse (2004) drawing from Langacker's dimensions of imagery (construal), is revealed in gestural meaning construction is specific ways, that point to a universal tendency to structure meaning. Specifically the analysis revealed the very role of attention to spatial aspects, or shapes, or the kind of properties that gestures reveal as basic meaning. Even the metonymic profiling is a variation of attention. In fact, as the spontaneous depictions of entities by workshop

participants reveal, moving entities, such as water, must lend themselves by way of their movement pattern. Whereas a static entity, such as a tree, is seen to lend itself by way of its characteristic shape, depicted in representing mode. Attention as a cognitive function is, thus, seen to constrain meaning in any given gestural variation in a very basic, but also varied way, and this in conjunction also with a bodily situatedness.

Essentially, how mimetic modes become operative and an object-sign relationship is established in cognitive semiotic terms, or whether there must be cultural, epistemic or other knowledge that presupposes gestural depictions, one discerns that finally, meaning is based on how entities apparently lend themselves to attention by way of one or the other of their physical properties. If gestures reveal a foregrounding in bringing forth object properties by way of different mimetic modes, as was discussed, by Müller, Bressemer and Ladewig (2013), then such an ability must lie in what is more pronounced or primary, but also what is attended to from the properties of natural phenomena that lend themselves to attention and thus salience. This is also reflected in the notion of fine- or coarse-grained scalarity. The rudimentary ability to abstract form, must in this sense also entail degrees of differentiation.

Gestures, at the same time, expose a dynamic function of attention. In analysing the kinetic conceptualisation of gestural meaning, it became evident that physical properties lend themselves to attention through movement, emerging to attention as they emerge in movement. Movement must, therefore, itself constrain attention and inform how properties become meaningful. It is attending to movement in some more fundamental way that must inform attention, and that needs to be unveiled.

Finally, gestures reflect most essentially the notion of meaning as profiled against domains of knowledge presupposed, that are hierarchical in nature and bottom out when experiences become grounded, i.e. are embodied. As Croft and Cruse (2004:3.1:687) define it, domains are embodied when they give rise to images that are representations of specific, embodied experiences. Image schemas are the “schematic versions” of these images, or schematic patterns that arise from the imagistic domains, structuring at the basic level bodily experiences. Gestures must *invoke* these very images. Drawing yet again from the form-based analysis, here based on the criterion Motivation of Form, it was subsequently illustrated how gestural form features under scrutiny here relate directly to image schematic structures, specifically to gestalt structures of image schemas explained by Johnson (1987, 2005, 2007)

as recurring patterns or contours given in everyday actions and perceptions, i.e. arising from sensorimotor experiences. In doing so they directly manifest the sensorimotor experiences that underlie any particular meaning. They are the structures given in the very actions and objects they depict. Then, as the analysis of gestural meaning continues to underscore, all meaningful elements are finally the outcome of specific configurations of structural aspects that are spatial structural aspects. And these as the kinetic conceptualisation of meaning instantiates, are a product of movement, emergent and lending themselves through movement.

This brought the discussions finally to the cognitive take on the embodied experiential grounding of meaning indicated through the workings of image schemas. In terms of understanding the bodily grounding of these structures, some fundamental insights from discussions by Johnson (2007), Lakoff and Johnson (1999), and Gibbs (2005a/b) were gathered. Essentially, it was seen how embodied concepts, such as gestalt or spatial relations concepts, evident also in gestures, are neural inferences based on the sensorimotor capacities' neural mechanisms enabled in the brain. These relate, as we gather in Johnson's explanations, to structures or patterns that arise at the neural level from sensorimotor couplings in body-brain-world interactions, having thus evolved in dynamic organism-environment couplings and based on the needs of organisms to survive. Image schemas are essentially the activation patterns of these structures. The individual functions of neural networks determine what stands out in any situation or scene in terms of what are listed as physical properties that we have also seen in gestures as well: namely shapes, spatial aspects, motion and so forth.

Putting it this way, the conceptualisation of reality in physical terms is a matter of how properties such as shapes, sizes, spatial aspects of orientation, position, etc. have evolved as lending themselves to organisms based on how sensorimotor capacities have evolved relative to the organism's needs. It is revealed how their assessment with the help of effective sensorimotor capacities or couplings, as Johnson formulates it based on several studies, is of primordial relevance for survival. Apart from indicating the primordial function of attention, one also discerns how similarity discussed as an inherent associative mode in cognitive semiotic terms must then be given at the level where the body-brain-world interactions take place. Then neural organisation, in terms of neural structures, are seen to be structural correlations to features given in sensory stimuli; neural structures relate, as the structuring of spatial relations in the visual cortex or the example cited with experiments on frogs indicate, to the structural aspects given in the outside world. The profiling of any of the specific

meaningful aspects or elements in gestures must be rooted in this kind of structuring. Meaning evident in gestures is in this sense indicated to be structural and primordial.

The understanding that stands out here is that the primordial preconceptual non-propositional nature of meaning that Johnson formulates and coins “*embodied*” or “*immanent meaning*” (2007: 11, emphasis in original), resides finally in the sensorimotor capacities that have developed in dynamic body-brain-world interactions, which, in turn, are also connected with the bodies organisms have, in human beings, given by the human body’s specific build. And most essentially, there is the notion of locomotion and tactile-kinaesthetic as relevant to these capacities, leading to the discussion on movement as discussed by Johnson (2007), but also Gibbs (2005a/b). While the relevance of motor actions or actions in general is indicated from discussions based on neuroimaging studies and those pertaining, for instance, to mental tasks, a further analysis of learning gestural depiction, here of actions, reveals, how firstly actions are also a matter of the spatial configurations movement brings forth. And secondly, their depiction necessitates a knowing in bodily terms, which is essentially also a knowing that comes from bodily executing the action as movement. While a known action is easily depicted, an unknown action necessitates learning the actual movement configurations that it entails, with neither perceiving nor imagining being helpful thereby. If motor areas of the brain get activated, revealing a recruiting of motor elements, in conceptualising action-oriented terms, as Gibbs formulates and considers as an instance of actions being relevant for conceptual inferences, one sees by way of analysing gestural meaning depiction, how this can only be enabled if there is a bodily movement-based knowing of these actions in the first place.

Gestures, are not only primarily both past and current actions that, according to Gibbs, inform imagination and reasoning, are apparently relevant. Given gestures are always current in kinetic terms, the actual kinetic conceptualisation relevant for any meaning to be brought forth, they reveal a dynamic construal in movement terms, with an engagement in ongoing sensorimotor behaviours underlying basic image schemas, when these are recruited for meaning, just as Gibbs (2005b) formulates it from the premise of studies on mental tasks. Gestures however give tangible indication for bringing forth directly the very structures enabled by sensorimotor experiences, and in doing so expose how they are the manifestation of these given in and through movement, as the analyses I have presented further illustrate.

Chapter 1 revealed how spatial aspects and shapes are a matter of the movement that defines them. In Chapter 2 the analysis illustrated how actions are also a matter of movement.

Thus, if actions, as indicated, matter as embodied experiences for meaning-making, then movement itself needs to be considered and not actions as such. I think the notion of actions, or the focus on them in the discussions, whether by Gibbs or Johnson, stems from the kind of studies currently available and are drawn from. Actions do not define movement, but are defined by movement. A reading of Sheets-Johnstone's postulations also reveals this. In precisely referring to the notion of enaction put forward by Varela, Thompson and Rosch it is observed that, if movement is packaged into a specific deed of some kind, thus reducing kinesthetic/kinetic dynamics to an act like walking or hammering, it does not do justice to the spatio-temporal-energetic qualities of experience that comes from a congruence of affect and movement (2011:455).

I must add here, nor can actions account for the shapes and spatial aspects seen to also constitute meaning in gestures, in spite of the current understanding that the conceptualization of meaning in gestures is grounded in instrumental actions (Kendon, 2013; Müller et al., 2013). In this sense, actions may tell us how gestures take on meaning, by way of tracing and moulding modes or acting out motor actions; hands are acting. However, it is in considering movement itself that one can account for all the meaningful elements, in terms of how sensorimotor experiences may be relevant for the kind of embodied meaning-making they reveal. The properties are inherent to movement, emerge through movement and are also seen to come to attention or awareness through movement. In fact, only considering sensorimotor experiences per se also does not suffice.

Essentially, if at the core of image schematic structuring, the structuring of spatial aspects is defined, then it is in movement inherent aspects that one should seek the embodied experiential underpinnings of meaning. Movement is what defines all these, whether spatial manipulation, orientation or manipulation of objects, which are essentially motor actions. A structuring of experience, seen to underlie meaning, is a structuring of movement experiences. In other words, the conceptualisation of gestural meaning, as a conceptualization of reality in physical terms, whether approached from a mimetic/cognitive semiotic perspective as discussed in the earlier chapters, or cognitive conceptual perspective in this chapter, reveals a structural meaning that is rooted in how movement enables it in the first place. The structures

relevant for meaning are not only an integral part of one's own movement signature, but are emergent therein, and are seen to best lend themselves to attention or reveal themselves to attention when they actually emerge in one's own bodily movement. In this sense, there is a felt and kinaesthetic aspect of movement, and also a felt dimension of image schemas that Johnson (1987, 2005, 2007) postulates time and again, and listed by Langacker as well in defining domains, with the structuring of experience formulated therein, indicated in the discussions in this part of the study as a structuring of movement-based experiences.

In this context, both Johnson (2007) and Gibbs (2005a) cite the notion of movement qualities as explicated by Sheets-Johnstone (1999, 2011), to emphasize the relevance of movement for embodied meaning-making as was laid out at the end of Chapter 2. Given the animated nature of life, and that one is born in movement, the most basic experiences are gathered by way of movement. Yet, as I observed, the discussion was not about examining movement as such, but to discuss the conscious experience or consciousness it is seen to enable. Sheets-Johnstone's phenomenological descriptions of the four dynamic movement qualities are considered by Johnson as revealing felt and conscious experience, while meaning is itself defined as a matter of experiences below the level of consciousness. And the notion of nonconscious experience is sought for through other studies ranging from infant studies, to neurocognitive research on emotions and finally the cited studies on neuroimaging and neural structures. Thus, the cognitive take on how embodied experiences contribute to meaning continues to be a cognitive take, that while bringing several insights into the basic bodily experiences, calls for the need to still flesh out these in terms of the movement that is postulated there.

The analysis and the subsequent discussion on what gestures reveal in terms of conscious experience that both Johnson and Gibbs relate to movement and emotions, reveal thereby the fundamental significance of movement experiences thus exposed for both meaning and meaning-making. As the gestural analysis illustrates, there is nevertheless the need, but also possibility to take a perspective based on movement itself. Then the form-based linguistic analysis is based on analysing form features that gestures reveal. And these are essentially features that are kinetically enabled. Given studying gestural meaning, as has been analysed in the two chapters hitherto is an analysis of movement in enabling meaning, in this chapter, this analysis was furthered, by, yet again, taking advantage of the analytic possibilities enabled by such an explicit gestural meaning construction under scrutiny here. By applying a movement analytic convention based on LMA/BF exemplarily to gestural meaning depiction,

just the four dynamic qualities that Sheets-Johnstone postulates, that are essentially spatio-temporal-energetic qualities always given in any movement, were exemplarily identified in two gestures. This revealed how these qualities to varying degrees are both informed by and inform meaning, enabling most importantly, an insight to meaning that is simultaneously a kinetic and affective conceptualisation.

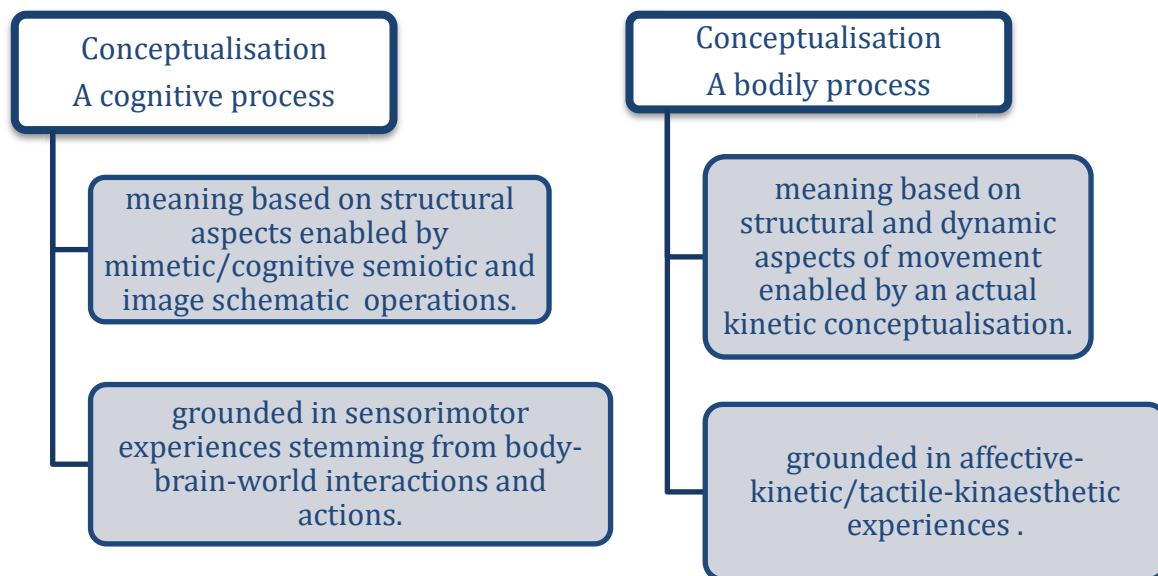
There is in other words an affective-kinetic/kinaesthetic notion of bodily experiences that Sheets-Johnstone (2009, 2011) postulates underlying the conceptualisation of meaning, as the analysis exemplifies. It opens further frontiers, unveiling how meaning and underlying embodied experiences entail more than the structural aspects hitherto analysed and discussed. To be carried over to the next part of the study is the understanding that it is not a question of bodily movements being an add-on in the list of experiences, as these definitions indicate. Gestures in kinetically embodying meaning, in effect underscore the image schematic operations that Johnson defines as “analogous to spatial manipulation, orientation, and movement” (1987:25) that are always involved, irrespective of sensory modalities. At the same time, the felt dimensions of image schemas are indicated, in particular as being rooted in the kind of nonconscious experiences emotions enable. To be carried over for the discussion to follow as the further course of this study, is thus the need to examine both movement and emotions, and in their relation to each other, in informing meaning.

Bringing this part of the study to a close, we have arrived at this conclusion by looking at the movement itself and its qualities, that the overlapping of structural and affective meaning is a very important aspect of gestural meaning construction in Indian performing arts. At the same time, there has been a two-way implication evident therein. Placing the notion of meaning conceived through gestures used in Indian performing arts in the framework of Linguistic Gesture Studies and the analytic conventions put forth by Müller et al. that best define these gestures, enabled insight into how meaning construction follows the tenets put forward in these studies. In directly manifesting image schematic structures, such a gestural meaning was also seen to reflect the kind of embodied meaning-making discussed in this context from a cognitive linguistic and cognitive science perspective, as discussed particularly by Johnson and Gibbs. Gestures reveal to be the very manifestation of embodied sensorimotor experiences. Thus, gestural meaning depiction also tells us that image schemas do play a role, however clearly in how the bodily works its way up. I think it is from where it works its way,

that needs further fleshing out; essentially down from where the studies cited here are in terms of enabling insight into a movement-based embodied grounding of meaning.

While the several insights provided in the analyses hitherto, also by considering Sheets-Johnstone’s movement qualities, are important leads for taking up the further course of the study, all discussions so far argue based on other studies, that do not relate directly to movement in movement terms. Even Sheets-Johnstone’s discussions are grounded in discourses from philosophy or psychology. But movement requires looking at it in movement terms, as rightly conceded by Sheets-Johnstone in referring to Labananalysis. Also, there is an important point that is brought forth with regards to emotions, and which is what the next part will examine both in terms of movement and emotions. “*Emotions move through the body at the same time that they move us to move*” (2011:456, emphasis in original).

To sum up, Graphic 2 reflects how the insights discussed in this part compare.



Graphic 2

How the affective or emotive itself becomes relevant in its own right will be the subject of scrutiny in the following Part II. Then, the kind of meaning that is considered primary in the theory and practise of performing arts rests in how emotions provide it. And, this notion points clearly to movement-based experiences enabling such meaning; a notion that I propose to examine both in terms of emotions and movement. The insights gathered thereby will then be brought to relate to the insights in this part of the study.

Part II - Meaning embodied – emotive

A reading of Nāṭyaśāstra (Bharata, ca. 3rd C BC – 5th C AD), the ancient treatise on performing arts, reveals a perspective on meaning which when analysed as I propose to in this Part II of the study, sheds light on both structural and felt/kinaesthetic dimensions of meaning, residing specifically in movement-based experiences enabled by emotions. The theoretical discourse in the treatise regarding defining meaning, expounding on emotions and their classifications, their physical manifestations and, finally, the detailed descriptions of bodily gestures that are associated with these, will be examined here. These revelations that, as the discourse exposes, stem from what were apparently practised traditions even earlier than the probable date of this treatise, compare with current discussions on emotions and their relevance for experiences, meaning and cognition, particularly from the perspective of brain research put forward by Damasio (1999, 2003, 2010). A comparative study along these lines was part of the subject of my Master's thesis (Ramesh, 2010). Expanding upon this reveals how emotional processes described in detail in Nāṭyaśāstra are innate processes, classified by Damasio in evolutionary terms. They are essentially bodily processes or changes that manifest themselves as feelings and mental experiences due to their mapping or representations in the brain according to Damasio. On this account, it is these that finally build the substrate for abstract thoughts, signs or mind in general. The understanding in Nāṭyaśāstra of felt quality as relevant for meaning compares with this notion of feelings rooted in bodily processes enabled by emotions, as will be discussed. Chapter 1 examines the explanations in the Nāṭyaśāstra. The specific detailed descriptions of the stages in emotional states, including their physical manifestations, towards the emergence of meaning as experience are of particular interest here. Chapter 2 places these in the perspective of Damasio's brain research on emotions. Having thus established the fundamentality of bodily states of emotions for experience to arise in the first place, I move on in Chapter 3 with an analysis of the physical manifestations of emotions and their descriptions in the Nāṭyaśāstra in terms of gestures, gaits, bodily postures, facial expressions and behavioural patterns, which are on Damasio's account, essentially, bodily states that run off automatically. I then analyse them from the perspectives on movement offered by LMA/BF, drawing yet again from examples of actual executed movement from class sessions, here from several years of experimenting with methodologies that enable students to move with an awareness of where movement needs to be executed, particularly for emotive expression to emerge. This detailed inroad into movement enables insight into not only how emotional processes *are inherent* or *innate movement* processes,

with movement itself defining them, but also helps identify *what* movement defines them at a basic and emergent level. As we will see, such an approach and analysis thereof, unveils two important aspects that are intrinsically tied to each other in tangibly analysable terms: 1) the nature of primordial movement, emergent, non-conscious, *inner to outer*, given in emotions, and 2) how it is in such movement that a *sensing and shaping* so to say, are inherently integrated, revealing the very structural and felt-kinaesthetic dimensions of experience seen to be relevant for meaning. These observations enabled by a detailed movement analysis will be further substantiated from the perspective of current fascia research. This sets the bedrock for returning in Chapter 4 to the discussion on the embodied grounding of meaning discussed in Part I and taking it forward with the implications it may hold for various studies. Nāṭyaśāstra will now continued to be referred to as NS in the text. The English translations by the Board of Scholars and Manomohan Ghosh are used. Neither indicates the dates of publication. The latter is a reprint in 2007. The preface for the second edition mentions 1967. References will generally only indicate chapter numbers and, where applicable, verse numbers that pertain to the NS. When quoting any specific translation, I will indicate which translation is used and the page numbers. Thus, it is not by name, date and page number, as is the usual convention, but will be, for instance, (Ch.7), (Ch.6:17), (Ghosh:119) or (Ch. 7:1-3, Board of Scholars:86).

1 *bhāva* to *rasa* – a reading of meaning in Nāṭyaśāstra

Instilling meaning through physical expression of emotional states is a central concept in NS, the ancient Indian treatise on performing arts. It is attributed, as I will discuss here, to a physical-mental experience that stems essentially from corporeally expressing emotional states, which, in turn, is specifically attributed to a felt quality enabled by the physical manifestations of emotional states. The descriptions of these physical manifestations in detailed movement terms, give a clear indication that such meaning must be ascribed to movement-based experiences stemming from emotions.

1.1 Meaning defined

What becomes apparent in the reading of the description and definition of terms in the NS (Chapters 6 & 7) is that meaning is something that is instilled in the context of a performance when the emotional content of a dramatic idea or theme given by a poet or playwright that is to be conveyed or communicated is made to pervade. Emotional connotations given therein are, in effect, seen to be the basis for meaning, and emotional expression through corporeal means, in turn, the basis for the emergence of such a meaning. The following discussion will throw light onto this understanding of meaning.

The term *bhāva* is used in the context of meaning, translated as an emotional fervour or state (Board of Scholars) or psychological state (Ghosh). It is defined as stemming from *bhāvayanti* – to instil or infuse – and in the sense of “to pervade”. “The word thus connotes the instrumental cause” (Ch. 7:1-3, Board of Scholars:86), then it instils the meaning “of the theme of the literary composition into audience”. *Bhāva* is given specifically when the theme conveyed by *vibhāva* is brought to realisation through *anubhāva* by means of the gestures, whether they are *vācika*, *āṅgika* or *sāttvika*, and meaning is made “to pervade”.

The three gestural means mentioned here are verbal, corporeal and temperamental/conceptual. These three modes constitute the central tenet of *abhinaya*, the art of expression in Indian performing arts. I will come back to this in Chapter 3 below. *Vibhāva* and *anubhāva* are defined as determinants and consequents, respectively (Ch. 7:4-6). Words, gestures and conceptual aspects of representation or expression depend on what they are determined by as denoted in the verb “*vibhāvṛte*” (Ghosh:119). Therefore, they are called *vibhāva*, that what

determines the modes of expression. While *anubhāvas* are called thus because through them, meaning is brought “to be felt by the spectators” (Ch. 7:5, Board of Scholars:87), as understood in “*anubhāvyate* (made to be felt)” (Ghosh:120). Furthermore, these two are defined as factors known from the world, closely related to human nature, and having evolved in the world. As we will see in their descriptions later, they are respectively factors, which evoke emotions, and are the outcome or physical manifestations of an emotion. They are also stages of the *bhāva* itself. *Bhāvas* themselves are defined as emotional states, 49 in total, classified based on their function.

Bhāvas in the dramatic context, as further defined at the beginning of Ch. 7 of the NS, need to be known by the sponsors of or those who produce dramas, because they enable *rasas* related to different gestures (Board of Scholars:86) or histrionic representations (Ghosh:119) to “pervade (the comprehension of the audience)” (Board of Scholars). The NS opines that there can be no meaning without relish. The core concept of meaning is relish. Such a relish is the *rasa*, translated as sentiment. It is through the 49 *bhāvas* when combined with the “common qualities”, referring here apparently to the *vibhāvas* and *anubhāvas* mentioned above, that *rasa* arises (Ch. 7:6, Board of Scholars:86). The “Psychological State proceeding from the thing which is congenial to the heart is the source of the sentiment” (Ch 7:7, Ghosh:121), that pervades the body like fire through dry wood. Or, as also translated, just as “the physical body is pervaded by *Rasa* which is congenial to the heart” (ch.7:7, Board of Scholars:87). It is not clear from the two translations, which interpret the same verse slightly differently, what is congenial to the heart: whether it is the *rasas* or the things from which the psychological states proceed; the latter also apparently implying the determinants and consequents. However, it can apparently be interpreted either way, considering consequents enable a felt quality and determinants are factors that lead to emotional experience in the first place, as the descriptions that we will see further below indicate.

In answer to the question to what entity *rasa* is, Bharata²¹ explains it by drawing parallels to the relish of well-cooked food with tasty ingredients (Ch. 6:32-38). *Rasa* is a relish, because, as we gather from the translations, sophisticated or cultured people derive from the taste or relish of *sthāyibhāvas*/dominant emotional states, the same satisfaction, pleasure, delight that the “noble minded” (Board of Scholars:73) or the “well-disposed” (Ghosh:105) gain when eating well-cooked food. Such of *sthāyibhāvas*, which as we will see below are eight of the 49

²¹ As mentioned in the introduction, NS is in the structure it reveals, a scholarly discourse where Bharata is replying to questions of other scholars.

bhāvas, are experienced when *bhāvas* are generally produced through “verbal, physical and temperamental activities” (Ch. 6, Board of Scholars:74). *Rasa* is, thus, a matter of relish, ‘tasted’ or experienced specifically in the “heart (*manas*)” (Ghosh:106) and pervades the whole body. Furthermore, there is an intrinsic relationship between *bhāvas* and *rasa* revealed in the definitions, as mutually informing each other. There is something primordial about *rasa*. It is essentially the root in which *bhāvas* are stabilised (Ch.6:38). However, it can be experienced only through *bhāvas*; “relish of the *rasas* is from the *bhavas*” (Ch. 6:33, Board of Scholars:74) and not vice versa.

Such a meaningful experience is defined as congenial to the heart, pervades the body, but also implies an experience in the mind. We see here how meaning is understood as an experience that pervades in a holistic way, non-differentiable where physical and mental or body and mind, and, for that matter, felt dimensions, are concerned. As we can conclude from the definitions thus laid out from the NS, meaning here equates with experience, specifically felt experience. At the same time, the bodily basis of experience underlying meaning is clearly indicated. While defining meaning in terms of *rasa* indicates the aesthetic experience of meaning, of interest in thus examining the definition of meaning in NS, is the centrality attributed to *bhāva* for meaning to emerge. It instils or infuses meaning and is, therefore, understood as instrumental or causative for it. At the same, it pervades as meaning, coming into existence or being manifested only when instilled through *vibhāvas* and *anubhāvas*. In thus pervading, which is in itself something experienced, it enables the ultimate meaningful experience of *rasa* to emerge. It is, in turn, rooted in the *rasa*, indicating that all experience must be rooted therein in the first place. *Bhāva*, based on the definitions or the experience it is, is essentially, first and foremost, central for meaning to emerge and, therefore, of interest for scrutiny here.

In the definitions of the notion of *bhāva* as meaning from the perspective of performing arts the following factors become apparent. The factors that establish a *bhāva* are the *vibhāvas* or determinants, the very first aspects leading to *bhāva*, given in the content to be conveyed or depicted. Given their definition, the determinants can be inferred from or found in the dramatic content to be portrayed, and are known generally, because they are observable in the world. Then there is the notion of *anubhāvas*, which enable the felt quality of meaning attributed to the *bhāvas* when brought forth by means of verbal, physical and temperamental activities, the three modes of expression. While the definition of *anubhāva* as cited above implies an

experience, its descriptions, as further examination exposes, reveal these very gestures, verbalisation and temperamental activities. Finally, the *bhāvas* – 49 in total – together with all these factors entailed in them, enable the experience of *rasa* to arise.

Having briefly laid out the notion of meaning as experience and some of the implications of understanding it thus for what was discussed in earlier chapters, I will now continue by examining each of the essential factors that have become evident in the definitions above as relevant for meaning, beginning in this chapter with the 49 *bhāvas* and their categorisations, and the detailed descriptions of the *vibhāvas* and *anubhāvas* related to them.

1.2 Classification of *bhāvas* – emotional states

Chapters 6 and 7 in the NS look into the classification of emotions as a progression from what are defined as transient states to the mental experience of emotions as *rasa* or feelings. They are classified into three categories, based on their relations to each other and/or nature and function. Bharata starts off in Chapter 6 with differentiating between sentiment, namely the *rasa*, and emotional states, the *bhāvas*, to then first discuss in detail what the *rasas* are comprised of before going on to discussing the various classifications of the *bhāvas* and their stages in Chapter 7. I will, however, begin this section with the classifications of the *bhāvas* given in the later chapter, before discussing the ultimate goal given in *rasas*, to enable a better understanding of how *rasas* emerge from various *bhāvas*.

The total of 49 *bhāvas* mentioned earlier, out of a combination of which the *rasas* are manifested, are classified into three categories that give rise to 8 *sthāyibhāvas*, 33 *sañcāri* or *vyabhicāri-bhāvas* and 8 *sattvaja* or *sāttvika-bhāvas* (Ch. 6:16-22), defined in the NS based on their usage in the performing arts context. These classifications also reveal distinct functions, as will be illustrated. A hierarchical relation is also discussed.

1.2.1 *Sthāyibhāvas* – Permanent/Dominant emotional states

The *eight sthāyibhāvas*, translated as permanently dominant states (Board of Scholars) or Durable Psychological States (Ghosh), are, as the name suggests, dispositions of longer duration, eight in number. Listed under them are *rati* – love, *hāsa*-merriment/mirth, *śoka*-sorrow, *krodha*-fury/anger, *utsāha*-enthusiasm/energy, *bhaya*-terror, *jugupsā*-disgust,

vismaya-astonishment (Board of Scholars:71/Ghosh:102).

These being dominant states are explained in the NS yet again by way of a metaphor (Ch.7). If all 49 states, by coming into mutual contact with each other and being manifested or represented by determinants and consequents, bring forth *rasas*, how is it that only *sthāyibhāvas* are considered as enabling these? That they gain prominence is compared to how, even if people have same bodies, and many the same conceptions and notions, only a person of noble birth, manners, learning skills in arts and crafts and so forth can become the king, while others with lesser intellect become subordinates and his attendants, depending on him. Similarly, the determinants, consequents and transient states are the subordinates of and dependent on the dominant states. Just as the king surrounded by attendants and giving them shelter stands forth as such, the dominant states surrounded and followed by all the factors become a sentiment. The *sthāyibhāvas* are, thus, defined as the “lords” (Board of Scholars:88) or “masters” (Ghosh:121).

It is suggested in the initial definition cited above that the factors *vibhāvas* and *anubhāvas*, and other emotional states, are a retinue, understood as depending on *sthāyibhāvas*. This implies that it is the *sthāyibhāva* that determines which of them in their many variations, as we will see in the next section, become relevant in any given context. Only when thus accompanied does *sthāyibhāva* become manifested and enable *rasa*. At the same time, it points to the relevance of these dominant states in more fundamental terms; they are the ones that finally stand forth as experience; as emotional states that are prominent, universal and permanent.

1.2.2 *Vyabhicāri-bhāvas* – Transient emotions

Vyabhicāri-bhāvas, also called *sañcāri-bhāvas*, are translated as moving or transitory states (Board of Scholars) or Complementary Psychological States (Ghosh). I will refer to them as transient states. The term *vyabhicāri* is, yet again, explained based on its grammatical construction. The root *car* entailed in it, is defined as to denote to move, to go, and the verb *caranti* as meaning to carry. In this sense, these are states that take the “things that are connected with words, gestures and temperament towards Rasa” (Ch. 7, Board of Scholars:93). We see here the three modes of expression again, and the understanding that transient states are carriers that lead or take the objects connected to these towards the

experience of *rasa*. Ghosh (Ch.7, 127) translates this as “those that move in relation to Sentiments towards different (kinds of objects)”. As the description given in this prose passage further indicates, transient states are to be understood as carrying or leading, just as the sun leads or carries a star, not to be understood, as pointed out, on “arms or shoulders”.

Therefore, transient states lead towards the *rasa*. This is also evident from defining them in relation to the dominant states and *rasas*, specifically in defining which of them enables each of these, as the Tables in the next section illustrate. The 33 transient states listed in the NS (Ch. 6:18-21) are given below, together with the English translations placed after, which reflect at times different terms given in the Board of Scholars (72) and Ghosh (102). I have placed them respectively before and after the slash. The Sanskrit terms are in block letters for better reading.

nirveda-despondency/discouragement, **glāni**-weakness, **śaṅkā**-suspicion/ apprehension, **asūyā**-envy, **mada**-inebriation/intoxication, **śrama**-exhaustion/ weariness, **ālasya**-lethargy/indolence, **dainya**-depression, **cintā**-anxiety, **moha**-delusion/distraction, **smṛti**-recollection, **dhṛti**-fortitude/contentment, **vṛidā**-bashfulness/shame, **capalatā**-inconstancy, **harsha**-joy, **āvega**-excitement/agitation, **jaḍatā**-stupefaction/stupor, **garva**-arrogance, **viṣāda**-despair, **autsukya**-impatient curiosity/impatience, **nidrā**-sleep, **apasmāra**-loss of memory/epilepsy, **svapna**-dreaming, **prabodha**-wakening/awakening, **amarṣa**-indignation, **avahittha**-dissimulation, **ugratā**-cruelty, **mati**-self assurance/assurance, **vyādhi**-sickness, **unmāda**-madness/insanity, **maraṇa**-death, **trāsa**-fright, **vitarka**-deliberation.

The different terms used to denote these states regarding the degree or range of meaning reflect the range within which they are used for representations in the performing arts field. Whether, for instance, *moha* is delusion in terms of the playfulness distraction implies is based essentially on the context or content in which it is given. The explanations themselves are essentially references for the performer to understand what needs to be used to bring forth meaningful experience. As we will see, these references are pretty fluid, with these transient states being used interchangeably with both *anubhāvas* and the further category classified under *sāttvika-bhāvas* discussed next. Several states that are evidently bodily states are also given in the list above.

1.2.3 *Sāttvika-Bhāvas* – physical forms

Coming to what are called *sāttvika-bhāvas* (Ch.6:16, 22, Ch.7:92), they are understood as originating in the physical form, but also mind and, thus, temperamental. One sees in the list that these are bodily changes. This category of eight states entails *stambha* – paralysis, *sveda* – sweat/perspiration, *romanca* – horripilation, *svarasada* – feebleness in/change of voice, *vepathu* – trembling, *vaivarnya* – change of colour, *asru* – shedding tears/weeping and *pralaya* – loss of sense/fainting.

It is explained that these are called *sāttvika-bhāvas* because they are enabled by the mind through mental concentration. They are desired in a play because they imitate human nature. They should be portrayed in accordance with the temperament behind them, so as to appear realistic. Since one is not oneself happy or unhappy when portraying joy or sorrow, horripilation or tears need to be portrayed by being mentally in the corresponding states. In other words, a mental ability to bring forth a reaction, such as tears, paralysis or trembling, is necessary by concentrating on the blood vessels of the face and applying pressure on them so as to bring forth a change in colour. However, even if these are mentioned here separately as a category of *bhāvas*, in the descriptions of how to portray the individual states, they get subsumed under *anubhāvas*, or transient states.

Temperamental or conceptual means of bringing forth meaning is also mentioned under modes of expression. This is coined *sāttvika abhinaya* there. There is in an implicit understanding, therefore, that these states cannot be brought forth by way of the other modes, such as gestural or verbal means, as is also evident from their definition. Their separate categorisation under *sāttvika-bhāva*, coming from temperament or *sattva* ‘mind’, appears to be given perhaps because of the different mode in which they need to be depicted or brought forth; in other words, due to the performing arts context in which emotions are being discussed. Nevertheless, how they may be different needs elucidation and will become apparent as I continue to analyse these descriptions.

Having thus laid out what the 49 *bhāvas* and their classifications are reveals the distinct categories they are placed in based on their nature and function. There is a hierarchy evident thereby of leading towards the *sthayibhāvas* or dominant states, with these being given a prominent status, indicating their significance or prominence in terms of experience itself. The experiences that the *vyabhicāri-bhāvas* and the *sāttvika-bhāvas* enable must be more

specific, such as a specific situation that calls for let us say envy, fright or impatience. Or connected to the bodily. Then a bodily basis is evident in many *vyabhicharibhāvas* and all *sāttvika-bhāvas*. One sees in their descriptions to be presented that they are often mentioned in the same vein as *anubhāvas*. They all converge into the *rasas*, as we will see below.

A point of interest in the definitions being given for the terms is how they are explained. Not only does one discern the scholarly discourse, but also a clarification of what the various terms given for the categories of emotional states mean and why they are being used as such in the performing arts context. In thus defining and presenting metaphors, something essentially intangible and understood as given only by way of subjective experience is being defined. The transient states carry or lead, like the sun does, but not by way of hands or shoulders, indicating that it is an experience they must illuminate and carry forth. That a *sthayibhāva* stands forth like a king reflects the prominence or significance of the experience it enables. The experience of a *rasa* is compared to a more commonly given and pleasant experience of relishing well-cooked food. As we will see, a *rasa* is a sum of many *bhāvas* in conjunction with their determinants and consequents.

1.2.4 *Rasa* – the convergence of all *bhāvas*

Going back to the discussion on *rasas*, we now get a picture of what goes into producing these. By definition, the cause of the manifestation of such a relish are the *bhavas*, all of them as classified above and leading to it. “Just as through molasses and other articles, spices and herbs six kinds of tastes are produced, so also the *Sthayibhavas* in combination with different *bhāvas* attain the state of *Rasa*” (Ch. 6, Board of Scholars:73). Finally, it is the establishing of the dominant state of *sthāyibhāvas* that enables a corresponding *rasa* to arise. Just as there are eight of them, there are eight corresponding *rasas* discussed in the NS in detail in Chapter 6. In the descriptions of the *rasas* we see how they are related to all the *bhāvas* above.

Table 5 illustrates the *rasa* that corresponds and, thus, arises from each of the eight *sthāyibhāvas*, and the transient states each entails. Here again, a difference in English translations between the sources I am drawing on is indicated with a slash. The Board of Scholars also gives the original terms of the transient states at times. Some are contextualised differently to the ones seen in the translations above or named differently, or new ones are mentioned. In such cases, I give these names as well. There are also other states mentioned at

times in Ghosh. I place these in parentheses. For some *rasas* these are called *anubhāvas* – I have indicated the same. These observations have the purpose of illustrating the fluidity evident often between transient states and *anubhāvas* and, as will become evident, *sāttvika-bhāvas* as well. The many nuances they apparently encompass, thus, revealing how the list is not necessarily exhaustive. *Moha*, for instance, is seen to take on the meaning of fainting/stupefaction in the transient states leading to fear and terrible sentiment. Delusion represents loss of sense/fainting, leading to disgust and odious sentiment.

Rasa / sthāyibhāva arising from	<i>Vyabhicāri-bhāvas</i>
<i>śṛṅgāra rasa</i> – erotic sentiment. Arising from <i>rati</i> – love	Love in union: all except fright/fear, lethargy/indolence, ferocity/cruelty and disgust. Love in Separation, <i>anubhavas</i> : dejectedness/indifference, languor, apprehension/fear, jealousy, weariness/fatigue, anxiety, <i>autsukya</i> – yearning, <i>nidrā</i> – drowsiness, <i>supta</i> – sleep, dream, <i>bibboka</i> – feigned anger, (awakening), illness, insanity, forgetfulness/epilepsy, sluggishness/inactivity, (fainting), death and others.
<i>hāsya rasa</i> – humour/comic sentiment. Arising from <i>hasa</i> – merriment, laughter/mirth	Lethargy/indolence, dissimulation, <i>tandra</i> – drowsiness, sleep, <i>anidrā</i> – sleeplessness, dreaming, waking up, (insomnia), envy and others.
<i>karuṇa rasa</i> – pathos/pathetic sentiment. Arising from <i>soka</i> – sorrow, grief	Dejectedness, indifference, languor, anxiety, yearning, excited state/excitement, illusion/delusion, loss of sense/fainting, sadness, ailment/illness, lethargy/indolence, sluggishness/inactivity, (insanity), epilepsy, fear, death, paralysis, tremor, pallor/change of colour, shedding tears/weeping, loss of speech/speech and kindred feeling and the like.
<i>raudra rasa</i> – impetuous anger, wrath/furious sentiment. Arising from <i>krodha</i> – fury, anger	Tumultuous battle, (presence of mind), energetic enthusiasm, (determination, energy), impetuosity/impulsiveness, wrath/fury, restlessness, ferocity, (indignation), restlessness, profuse perspiration, trembling, rising of hair/horripilation, choking voice and others.
<i>vīra rasa</i> – heroic sentiment. Arising from <i>utsaha</i> – energetic enthusiasm/energy	Fortitude/contentment, intellect/judgement, pride, (agitation), <i>vega</i> – impetuosity/energy, <i>augrya</i> – ferocity, (determination of purpose), indignation, recollection/remembrance, horripilation and other features.
<i>bhayānaka rasa</i> – terrible sentiment. Arising from <i>bhaya</i> – terror, fear	Paralysis, perspiration, choked voice, horripilation, trembling, change of voice, lack lustre/change of colour, suspicion/fear, <i>moha</i> – fainting/stupefaction, dejection, agitation/excitement, <i>capala</i> – restlessness, (inactivity), fright/fear, loss of memory/epilepsy, death, etc.
<i>bībhatsa rasa</i> – odious	Loss of memory/epileptic fit, agitation, <i>moha</i> – delusion,

sentiment. Arising from <i>jugupsa</i> – disgust	loss of sense/fainting, illness and death.
<i>adbhuta rasa</i> – wonderment/ marvelous sentiment. Arising from <i>vismaya</i> – astonishment, wonderment	Shredding tears/weeping, paralysis, perspiration, choking of voice, horripilation, excitement/agitation, hurry, sluggishness/inactivity, sinking down/death and others.

Table 5

We see specific *rasas* that arise from each of the eight *sthāyibhāvas*, and how different *vyabhicāris* lead to them. They are, in effect, to be understood as representing the breakdown of each *rasa* into specific emotional states that enable elaboration in dramatic presentations; this is also given by their being labelled as *sañcāri-bhāvas*. It is, thereby, the sum of transient states and the naturalistic depiction the physical forms enable that must lead to the manifestation of the dominant states, and these, in turn, of the corresponding *rasa*.

At the same time, there are nuances of transient states depending upon or, as necessary, to bring forth *the sthāyibhāva* related to the *rasa*. Apart from the ones I mentioned above, there are other instances that tell us about the range of possibilities the transient states are understood to have. Where *rati* – love leading to *śṛṅgāra* is concerned, though these have been called *anubhāvas*, we see that almost all the transient states, except the ones most obviously not attributable, are involved, revealing it is a dominant state that incorporates many transient phases. Additionally, while fear or fright as a bodily state is not involved, there is fear in terms of apprehension that is a specific instance of fear, as when waiting for the beloved, and, therefore, attributed to the state of love in separation, as is often depicted. That *śṛṅgāra* involves all states, including ones such as those based on pathos, is explained in the difference of the notion of separation. It is not a separation caused by loss of wealth, death, captivity and so on, but as a condition that is of hopeful reunion and the yearning and anxiety that comes with it. It is a happy pleasant state of experience.

Essentially, the degree, range or intensity that is involved in the transient states is in relation to *the sthāyibhāva* and final state of *rasa* that they are found to be leading to. Thus, we see in fear the extreme physical forms and bodily transient states that are revealed to be states related to the *sthāyibhāva* they establish; specifically seen in the primarily bodily nature here and the number of *sāttvika-bhāvas* subsumed under transient states. Even *moha* is, as mentioned above, referred to in a bodily dimension. The *sāttvika-bhāvas* thus included reveal that even if these are classified separately, as I noted earlier, there is no distinction made when discussing the phases of a *sthāyibhāva*. Interestingly, states leading to astonishment and

wonder are such *sāttvika-bhāvas* or bodily transient states as well, reflecting the intensity of experience attributed to the dominant state and the *rasa* it produces. More on this later.

Even disgust and the odious *rasa* it gives rise to are apparently ones that stem from extreme bodily states, as listed, that involve, for instance, convulsions. The dominant state and *rasa* here must be established as a reaction to some of the states listed, to a depiction of these. In terms of an experience, it could also be the other way around. Disgust for something could cause extreme bodily reactions. In the states stated for *hāsa* – mirth leading to humour, it is apparently the depiction of these states that should bring forth laughter and humour. Then the states listed are not in any way attributable to laughter, nor, as we will see, to the *anubhāvas* listed for both the dominant state and *hāsyā-rasa*. Here is an example, seen from the performing arts context, of depicting emotional states to bring forth certain experiences as reactions among spectators. Nevertheless, as further examination and analyses illuminate, there is a more fundamental notion of emotional states themselves as *stages of experience* or *experiential states* that must lead to meaning as experience. The transient states mentioned for *hāsyā* to emerge thus reveal here, in my opinion, rather the notion of *vibhāvas* for the dominant state of *hāsa*, as will be examined below.

For the pathetic state of *karuṇā* that arises from sorrow, we see both states that relate to sorrow, such as dejectedness, sadness or the *sāttvika-bhāvas* listed, as well as those that are apparently depictions to bring forth the experience of sorrow, as in death, for instance, or even fear. Looking at what leads to enthusiasm and *vīra* or heroic *rasa*, the states are all seen to relate to being energetic, enthusiastic or heroic, i.e. they relate directly to the dominant state and the *rasa* that emerges from them; some are seen to be energetic in a bodily way, as in impetuosity or ferocity, or more in a mental way, as in pride, or fortitude that could be an instance of mental strength. The same can be said about the states leading to anger; they are all states relatable to the experience of anger not only in a performing arts context, but also states of being angry in various ways.

Therefore, while all transient states can be understood from a performing arts context of depiction as enabling the experience envisaged in the form of a corresponding dominant state and the *rasa* arising from it, one does discern that, for the most part, these are states that can be defined as being related to the final experience envisaged. They must lead to the experience itself. They also depend on the dominant state, as it is these that characterise them.

If one is not in love, all the retinue of transient states would not have been there. If one is not in a state of fear, the bodily states related to them would not be there. These states are as evident, not necessarily bound to only one *sthāyibhāva*. Nevertheless, they feed in and out of the *sthāyibhāva* they relate to in various nuances and ways. This will become more apparent when considering how they are brought to depiction, which will be presented in the next section below.

We see how the relation established between transient states, dominant states and the so-called *sāttvika-bhāvas* to enable the *rasas* would account for the definition of each category. The term *vyabhicāri* can be accounted for both transient states and the separate category of the *sāttvika-bhāvas*. They must be understood as not of a permanent nature, but stages within dominant states that finally manifest themselves as experience in permanent dominant states; all of the 33 transient states and the eight physical forms leading to dominant states that are only eight in number, giving rise to eight *rasas*. The permanent dominant *sthāyibhāvas* are what finally stand forth or shine forth, so to say, as the sum of experiences provided by *bhāvas* in both these categories, thus, compared to a king in the definitions. These must hold forth, given the term *sthāyi* or permanently dominant.

Coming to the *rasas* themselves, we see how they arise when a sum of *bhāvas* becomes a *sthāyibhāva*, with each *sthāyibhāva* bringing forth a specific *rasa*. This is evidenced as its own dimension and is a sum of experiences provided at all levels, but understood as arising when the dominant *sthāyibhāvas* manifest themselves and essentially hold forth. This is the understanding in actual practise even today. It lies, finally, not only in the ultimate ability of the performer to bring forth, but also enable the sustenance of this state. It is in this context that the NS recommends what the means are in enabling this, as we will see in the next section/chapter. At this point, I would like to add that while today the traditions practised define nine *rasas*, called *navarasa*, to include the state of *shanta* or peace, this was not apparently in practise at the time the NS was compiled, as is evident.

Finally, the *rasa* itself is seen to be its own cause and effect, though intrinsically related to the *sthāyibhāva* it emerges from, because its emergence is dependent on the *sthāyibhāva* being manifested. We have seen how it is understood as the root of the *bhāvas*. It is also evident above how the 49 *bhāvas* are defined in the NS from the perspective of the *rasa* that should emerge. However, Bharata also defines how the eight *rasas* are based on four of them giving

rise to the other four. It is defined briefly that *hāsya* – the humorous arises or originates from *śṛṅgāra* – the erotic, *karuna* – the pathetic from *raudra* – the furious, *adbhuta* – the marvellous from *vīra* – the heroic and, finally, *bhayānaka* – the terrible from *bibhatsa* – the odious (Ch. 6:39-41). Interestingly, an imitation of *śṛṅgāra* is seen to result in *hāsya*. The activity of *raudra* results in *karuna*. This makes sense; then anger and destruction must lead to misery and suffering, which brings forth pathos. Just as the activity of *vīra* is “glorified as *adbhuta*” (Board of Scholars:75), i.e. causes wonder, or the sight of the odious “transforms into *bhayānaka*”. *Rasas* are also attributed to colours and to deities – the forms they manifest evoking the *rasas*. While this is not the subject of scrutiny in this study, the association to colours is, nevertheless, interesting, given a more fundamental relevance *rasas*, and for that matter the very notion of *bhāvas* and their factors, reveal, not only from the perspective of performing arts as understood and practised in India and handed down in history, but when placed in another framework which is the aim in this part of the study. This is discussed in the next chapter.

In this section, we have seen the classification of the *bhāvas* and how they finally sum up to enable *rasa*. In the next section, I propose to examine their descriptions in terms of the *vibhāvas* and *anubhāvas* that enable them. The physical forms, called *sāttvika-bhāvas*, are subsumed here in the *anubhāvas*. The NS, therefore, only discusses *rasas*, and dominant and transient states.

1.3 *Bhāvas* and *rasas* – a matter of determinants and consequents

Finally, each of the eight *rasas* and the *bhāvas* are discussed in detail in terms of the *vibhāva* and *anubhāva*, or those aspects that bring forth *bhāva* as meaning and give it a felt quality, respectively.

Vibhāvas, considering the definition cited earlier, can be inferred from or found in the dramatic content to be portrayed. In defining the term *vibhāva* as being synonymous with, for instance, *kāraṇa* (Ch.7), one recognises it as something that is causative, as being the reason for meaning as *bhāva* to get established. In further explaining what this term means, a verse (*śloka*) is cited. It is called *vibhāva* or determinant, because “many things dependent upon the verbal and the physical gesticulations are determined by this” (Board of Scholars:87). Alternatively, “*vibhāvya*te (determined) by this through Words, Gestures and the

Representation of the *Sattva*” (Ghosh:7). These differing interpretations sound, yet again, ambiguous. However, *vibhāva*, as I will examine below in the detailed descriptions of these for each *bhāva*, and underscore by placing this factor in the perspective of emotions research in the next chapter, denotes what is cause for *bhāva* to be experienced, with the “many things” apparently referring to what carries an emotional connotation or are the triggering factors for *bhāva* so to say. The NS is seen to refer to them, and the *anubhāvas* as well, as guiding factors for the performer in bringing forth *bhāva*.

Anubhāvas, on the other hand, bring the meaning “to be felt by the spectators by means of words, gestures and dramatic presentations” and are “remembered as relating to words, gesture and ancillary Angas” (Ch. 7:5, Board of Scholars:87). As Ghosh puts it, it is called *anubhāva* because “in it the play (lit. meaning) is *anubhāvyate* (made to be felt)” and it relates to “words as well as to (gestures and movement of) major and minor limbs” (Ch.7:5, 120). In this *anubhāva* connotes felt experience. The experience as *bhāva* is tied to them. At the same time, *anubhāvas* listed as will become evident in their descriptions below, are the very aspects related to the emotional states in question. Finally, they are the source for the modes of expression, *abhinaya*, in terms of specific gestures, verbalisation and other corporeal aspects the performer needs for depiction of a *bhāva*. The NS elucidates in Chapters 8 to 13 on the corporeal gestures in minute terms, while discussing the notion of *abhinaya*. *Abhinaya* itself is inherent to life. It is emotive expression inherent to human nature, then emotions when experienced are *anubhāva*, when imitated as in the performing arts context there is *anukarna*, and their conceptualisation is defined as *anubhuti*²². *Vibhāvas* and *anubhāvas* are defined in the NS as being known, because they are observable in the world, evolved or created by human nature and following the ways of the world.

In the following each of these aspects will be examined in detail, starting with the hierarchical classification of the emotions and the *vibhāvas* and *anubhāvas* they are associated with. Finally the *anubhāvas* will be discussed in detail, given they build the core aspect for an understanding of the corporeal basis of meaning as discussed in the NS.

²² As explained by vedic scholar Viwanadham Satyanarayana – personal correspondence. Scholars who study the ancient scriptures interpret them by way of discourses mostly. I had the opportunity to have a personal seminar with the said scholar, who specifically has insight into the aesthetics of performing arts, at the University of Hyderabad in July-August 2009.

1.3.1 *Rasas, sthayibhāvas and their factors*

The following Table 6 illustrates the *vibhāvas* and *anubhāvas* attributed to the *rasas* (NS, Ch. 6, Board of Scholars/Ghosh). I also include any additional definitions regarding their origin that has to do with entities in the first column on the left. One sees additional attempts to explain the same, particularly in instances such as *śṛṅgāra* – the erotic. I have also marked in violet those *vibhāvas* and *anubhāvas* that are listed for the corresponding *sthayibhāva*, from which they arise, given most of them are entailed in the factors that relate to the *rasas*. There are distinctions or additional details listed under the *sthayibhāva* in certain cases; I have either mentioned them below each list or marked these instances with an *, briefly discussing, when relevant, after the Table. A separate table of the *sthayibhāvas* is included in the Appendix 2 for reference purposes. In addition to this, there are transient states mentioned, which I have underlined and will discuss further below.

<i>Rasa</i>	<i>Vibhāvas</i> – determinants (caused by)	<i>Anubhāvas</i> – consequents (represented by)
Śṛṅgāra. The term is defined as connected to everything pure, clean, worth looking at, pleasant to all, such as a well-dressed man or excellent young woman as a source of origin. Essentially refers to a man richly endowed with all desirable things, enjoying the pleasure of the company of a youthful maiden and making full use of seasons, garlands, etc. (Ch.6:46, Board of Scholars:77).	Love in union, for instance, is manifested by things and activities such as favourable seasons, garlands, healing ointments, ornaments, being with persons near and dear/beloved, being in or frequenting parks and gardens, sporting activities, excellent mansions, objects of pleasure and senses/sensual objects, desired objects, experience of pleasure, seeing beautiful things, play, sports, and listening to a sweet voice, music or poetry. Love in separation is defined as involving hopeful expectation of reunion, and the yearning and anxiety related to it.	Love in union: Significant and clever movements of eyes, eyebrows/ glances/desirous looks, graceful movements of limbs, sweet dance figures, sweet smiles, pleasing words, expression of delight, fortitude, serene composed eyes, beaming face, etc. Love in separation: defined here in terms of transient states mostly: dejectedness/indifference to worldly joys, languor, apprehension, jealousy, weariness, anxiety/worry, yearning, drowsiness, sleep, dream, feigned anger, illness, insanity, forgetfulness, sluggishness, death, and so forth
Hāsyā – self laughing and making others laugh, ridiculing.	Impudence, covetousness/greediness, quarrel, near-obscene utterances, pointing out others’ faults and other factors that make people laugh for themselves, such as unseemly behaviour, faulty dress, display of misplaced ornaments, faulty words or strange movements. Making others laugh, namely, irrelevant utterances, distortion of face,	Biting of lips, throbbing nose/cheek, opening eyes wide, or contracting them, perspiration, colour of face, holding sides. And depending upon social rank – high, middle, low, women, six forms of depiction ranging from smile, slight, open, obscene and boisterous laughter to ridicule: 1) gentle smile where teeth not seen, slightly blown cheeks, elegant glances, 2) smile with blooming eyes, face and cheek, teeth slightly visible, 3) gentle laughter befitting occasion through slight

	display of strange/deformed movement of limbs and odd dress. Imitation of others' actions, incoherent utterances, annoyance, foolish actions, etc.	sound with sweetness, contraction of eyes and cheeks, cheerful lustre of face (joyful), 4) ridiculing laughter through expanded nostrils, squint eyes, bent shoulder and head, 5) obscene/vulgar laughter does not befit occasion, is through violent shaking of shoulders and head, tears in eyes, 6) excessive, boisterous with expanded eyes with tears dropping from them, boisterous loud sounds, hands holding sides.
Karuna – arising from sorrow at sight of death or adverse impact of unpleasant words. The result of activity in Raudra – the ferocious.	Curse, affliction, distress, calamity, separation from near and dear ones, loss of wealth, misfortune, murder, death of beloved person, imprisonment, flight, accidents and other misfortunes and hearing unpleasant, adverse words.	Shedding tears, weeping loudly, fainting, sighs, or striking body, lamentation, parched throat and mouth, change of colour or pale face, drooping limbs, gasping, loss of memory/sense, etc. In addition, for śoka – sorrow: Death, madness/insanity, change/loss of voice, writhing and squirming. Three types of crying: out of joy, distress and jealousy.*
Raudra – connected to haughty human beings and rakshasas, with regular battle as an immediate cause.	Anger, violation of modesty/rape, abuse, insult, false allegations or harsh utterances, animosities, battle, quarrel, dispute/ threatening revengefulness, jealousy, etc. Here, actions are mentioned in addition, such as beating, striking/breaking/cutting, crushing, tearing, maiming and mutilating, drawing of blood (during battles). Listed for <i>krodha</i> – anger: Heated arguments, adverse remarks and abusive words.	Making eyes red, knitting eyebrows and widening them, perspiring profusely, defiance, clapping hands, grinding teeth, biting lips, throbbing cheeks, hitting palm with fist, hurling missiles, frightening and terrible utterances, and chopping off head, arms and trunks. Listed for <i>krodha</i> – anger are more details such as swelling of nostrils, or haughty upturned eyes and distinctions as well.**
Vīra – from exhibition of energy, enthusiasm, perseverance, by persons of high rank.	Composure/presence of mind, absence of delusion, grief and surprise, perseverance, good tactics/diplomacy, humility/discipline, valour, power, aggressiveness, reputation of might, influence, energy, optimism, enthusiasm. In addition, listed for <i>utsāha</i> – energy: readiness to sacrifice, absence of distress, patience and heroism	Display of firmness, patience, heroism, bravery, vigour, enthusiasm, diplomacy, proficiency and aggressiveness, readiness to sacrifice, pride, energy, influence, censuring words, etc. For <i>utsāha</i> – energy: Fortitude/steadiness, munificence (generosity)/ astuteness (cleverness/ perceptiveness), boldness/readiness in an undertaking and acts of vigilance.
Bhayānaka , terrible sentiment (implying a terrified state)	Outcome of/created by terrifying/hideous noise, sight of ghosts, panic on hearing cries of	Trembling of hands, feet/limbs, body in general (tremors), movement of eyes, hairs standing on ends/horripilation, change of

	<p>jackals and owls, entering/wandering through/staying in empty houses and forests, sight or news of or discussing death, murder/captivity of kinsmen, offensive behaviour against preceptors/kings, sight of battle, etc.</p> <p>In addition, for <i>bhaya</i> – fear: seeing mountains, snakes, elephants, cloudy days, dark rainy night and hearing/seeing terrible things.</p>	<p>colour/pale face, change of voice/tone, looseness of limbs. Natural fear to be depicted by various movements/agitation/looseness of limbs, face, eyes, stunned sensation in thighs, looking nervously and uneasily around, dejected feelings, tired face, dry/parched mouth, throbbing heart/palpitation and paralysis. Feigned fright also thus, but with gentler movements of limbs (Board of Scholars:82).</p> <p>In addition for <i>bhaya</i> – fear: licking with tongue, perspiration, seeking safety, flight/running away, apprehension, panic, and widely opened/suspended movement of eyes/twinkling.***</p>
Bībhatsa – odious	<p>Seeing, hearing or discussing unpleasant, impure, offensive and harmful things, seeing what is unwholesome or displeasing, undesirable sight, tastes, smell, touch and sound that cause disgust and uneasiness.</p>	<p>Squeezing/contracting or stopping movement of all limbs, shaking head and rolling or closing/ narrowing eyes, narrowing down of mouth, covering nose, vomiting, spitting, expressing disgust, bending head and walking imperceptibly.</p>
<i>Adbhuta</i> – wonderment /marvellous	<p>Seeing a heavenly being, attaining cherished desire/desired objects, upon approaching excellent park or temple/entering superior mansions, audience halls, palaces, seeing magical tricks and creations that cannot be imagined. Arises from words/marvellous statement, character/conduct, deed and personal beauty.</p> <p>For <i>vismaya</i> – astonishment the above noted is given with specific examples: illusion, extraordinary feats and art-work.</p>	<p>Gaping, dilating of eyes, staring without winking/looking with fixed gaze, horripilation, tears (of joy), perspiration, expressing delight, uttering words of congratulation and admiration, making gifts, shouts of <i>ha ha</i>, movement of hands, feet, fingers, also through gesture of feeling sweet smell/perception of touch, joyful shaking of limbs/earnest display of laughter, tremor, choking voice, etc.</p> <p>In addition, for <i>vismaya</i> – astonishment: fainting, distortion of eyebrows.</p>

Table 6

These explications reflect how *rasas* themselves can be directly brought to depiction and, thus, experience, even if primarily defined as arising from the *bhāvas*. This is of interest for the discussion later on regarding how which stage of experience is enabled in the progression from *bhāva* to *rasa*. At the same time, as illustrated, many concur with the *sthāyibhāvas* they arise from, pointing to the function of the dominant states as the emotional states themselves essential for *rasa* to arise. Often having more variations and often less. The non-exhaustive nature of the lists is evidenced, on the one hand, and, on the other hand, one sees how there are distinctions made in some of the dominant states, as I marked and lay out below,

particularly where *anubhāvas* are concerned. These differences exemplify the understanding for the various, but specific ways in which *sthāyibhāvas* are manifested corporeally and in different situations.

The distinctions listed are:

*Three types of crying for the *sthāyibhāva śoka* – sorrow: 1) out of joy: blooming cheeks, words of recollection without concealing tears, horripilation; 2) tears of affliction/distress: profuse loud shedding of tears, uneasiness in limbs, **falling**, rolling, **lamenting**; 3) out of jealousy (cry of women): violent throbbing of lips/cheeks, shaking head, **deep sighs**, angry crooked eyebrows/glances. Superior and middling types of people are distinguished by sorrow accompanied by courage, inferior ones (including women) by weeping.

** Five kinds of anger and their depictions for *krodha* – anger as *sthāyibhāva*:

1) Against enemies when open resistance: **knitted eyebrows**, ferocious face/fierce look, **biting of lips, clasp hands**, threatening with/touching arms, shoulders and chest.

2) Against venerable/superior persons when controlled: slightly downcast eyes and bowed head, wiping off slight perspiration, no violent activity.

3) Against beloved approaching with love: very slight movement of body/advancing, shedding tears, frequent sideways glances with throbbing lips and **knitted eyebrows**.

4) Against servants/attendants: threats, rebukes, opening eyes widely, casting angry looks in various ways.

5) Feigned anger is when it is realised with its own/ulterior motive and moves between two *rasas*.

*** *Anubhāvas* for the *sthāyibhāva bhaya* – fear distinguished between fear due to embarrassment/offending of superiors, seeing terrible objects and awful things, which need representation as **tremors, parched throat, agitation**/hurried movement/panic, widely opened eyes and such actions. While fear arising from terrifying objects is through **slacking of limbs** and suspended movement of eyes/twinkling.

The distinctions exemplify that the context the dominant states are placed in, given by the *vibhāvas* or determinants, matter for the kind of *anubhāvas* to be depicted. Essentially, we see the idea of the underlying dominant state that needs to emerge finally for meaning in any given situation to establish itself. However, that corporeal distinctions are given due to

various factors need to be considered. Then it is the corporeal means, as evident from the *anubhāvas*, that need to be depicted. These bodily means of depiction reveal a wide range from glances to some actions such as running or shaking limbs to mostly very specific descriptions such as writhing, fainting, stunned thighs, dilating of eyes and so forth, to verbalisations as in shouts or proclamations. There are also characteristics such as patience or vigour mentioned. The descriptions when outward expression needs to be more controlled are of interest, with the relevance then given to facial aspects such as eyes or eyebrows, posturing or other aspects that were seen to be the *sāttvika-bhāvas* emergent in physical form.

One generally sees exact descriptions of the various ways in which a *sthāyibhāva* and its emergent corresponding *rasa* are brought to manifestation in physical terms in all the instances; the experience of *rasa* itself often requiring even more nuances, as indicated in the *anubhāvas* that do not concur with the *sthāyibhāva* descriptions. Notwithstanding the fact that the list here is not exhaustive and should be understood as examples, one does discern the bedrock provided by the actual physical manifestation by way of the factors called *anubhāva* to enable experience and, thus, meaning. What is understood as providing the felt quality of meaning, that is connoted in the term, is essentially such a physical manifestation. *Anubhāva* defined as consequent is the means *and* consequence.

Similarly, in the notion of *vibhāvas*, the listing sheds light on what is seen as primary for *rasa* to emerge by way of the corresponding *sthāyibhāva*. In each instance, they can be objects, events and actions, or situations of various kinds one finds oneself in. Thus, garlands, empty houses, different people one is associated with, accidents, magical shows, acts of violence, various situations, such as being with or separated from loved ones, misfortunes and so forth, are the *vibhāvas*. They hold emotional connotation in various ways. Perceived entities of the world given by the senses are discernible in descriptions such as seeing, smelling, touching and hearing.

One may raise the point that there is primarily a performing arts context, in these descriptions, as in the others as well, and an embeddedness of these in the kind of narratives to be depicted. Nevertheless, there is a more fundamental understanding underlying the notion of *bhāvas*, *vibhāvas* and *anubhāvas* and their relation that is of interest here and will be further examined. In the mention of *rakshasas* connected to the furious sentiment, for instance, there are both contexts. *Rakshasas* are characters in the mythological narratives and epics with

qualities that Bharata explains whilst defining the ferocious *rasa raudra*. A question is posed as to whether it should be assumed from the definition that only they give rise to this sentiment, and if it does not occur in others. While answering that it does relate to others as well, Bharata explains why *Rakshasas* have a special function. It lies in them being naturally furious or violent in physical form, movement, speech or any other activity.

Thus, while we see here that in the performing arts context it was seen to be essential to portray characters which would help manifest the necessary emotive meaning in what one can define perhaps as a kind of instantaneous manner, it is, nevertheless, the emergence of such a meaning that is the primary motive. The *rasas* can emerge from other sources as well, from other corresponding *vibhāvas*. They are, as defined, given in the world and need not be elaborated in the NS, as Bharata notes in Chapter 7. In addition, as an added note, descriptions of *vibhāvas* and *anubhāvas* are seen to refer to social ranks, women or a “mean/inferior” type of people, that are reflective of the times in which the treatise or parts of it stem from, with social norms and, at times, discriminatory aspects therein. While these reveal other dimensions for study enabled by this treatise, for the current study it is the relations that the descriptions expose, of the notion of *vibhāvas* and *anubhāvas* to *rasas*, *sthāyivibhāva* and, as will be laid out below, to the transient states; the very process that enables *bhāva* as meaning to emerge and the fundamental relevance of such a process that it is indicated.

Finally, we see in the *anubhāvas* the mention of both transient states and all the temperamental *sāttvika-bhāvas* of perspiration, paralysis, shedding tears, tremors, horripilation, change of colour or voice and loss of sense that appear across the *rasas*. While this may appear like an inconsistent way of defining *anubhāvas* as something different, it essentially reveals, I would say, how all these are integral in what leads to the *rasas*, particularly in bodily terms; defined essentially through gestures, temperamental activities and verbal aspects stated in all the definitions. In this sense, *sāttvika-bhāvas*, bodily states themselves, and considered temperamental activities as we can gather from their definition, are an important aspect of the *anubhāvas*. Transient states become relevant by way of their *anubhāvas* and the situated or specific *vibhāvas* to be differentiated and presented in the context of a performance, as I will examine below. We see in the listing above how the transient states listed as *anubhāvas* for love in separation in *śṛṅgāra-rasa*, as was noted earlier, are reflected. Thus, dejectedness is more about an indifference towards worldly aspects. What was seen to be impatience or impatient curiosity is yearning here. In other

rasas as well, the transient states mentioned must, therefore, have specific connotations as context requires. Death, insanity, fortitude, apprehension, joy, jealousy or embarrassment, mentioned in relation to *sthāyibhāvas*, reveal, for instance, that suspicion is more about apprehension, or shame about being embarrassed. While bashfulness would be the aspect relating to *rati* – love and, thus, *śṛṅgāra*. Such differences finally become apparent only in the context of a performance. This is how their generalised mention as an *anubhāva* needs to be understood.

1.3.2 *Vyabhicāri-bhāvas* and their factors

A reading of the descriptions of the transient states and their determinants and consequents sheds light on these different dimensions and the fluidity in defining each state with different terms, which has to do with what and how they would lead or carry towards the *rasas*, as their definition as *vyabhicāri-bhāvas* is explained. I will illustrate this in the following Table 7 by laying out the descriptions for some of the 33 transient states and the translations given by both Board of Scholars and Ghosh. The complete Table with all *vibhāvas* and *Anubhāva* can be referred to in the Appendix 3.

<i>Vyabhicāri-Bhāva</i> Transient states	<i>Vibhāva</i> – determinants	<i>Anubhāva</i> – consequents
<i>Nirveda</i> – dejectedness, despondency	Poverty, insult, verbal abuse, beating, separation from beloved persons, sickness, excess misery, seeing other’s prosperity, acquiring ultimate knowledge (Yogin)	Meditative state, eyes flooded and miserable, face drooping, sighs deep and frequent. “Women and mean persons” portray this by crying, sighs, deep breaths, fraudulence (deception).
<i>Śāṅkā</i> – <i>fearful suspicion – basic feature doubt (“with reference to women and persons of low status”)</i>	Offending king, committing sinful deeds, stealing, etc. Arises from self or due to others.	Constant apprehensive looks in all directions, keeping face veiled, licking tongue due to parched mouth/lips or thick stuck-up tongue, pale face, trembling of limbs, loss of voice, gloomy facial appearance, etc. When state arises from self, eye movement is used.
<i>Dhṛti</i> – fortitude	Heroism, perfect knowledge, acquiring vedic/spiritual knowledge, affluence, cleanliness, good habits, devotion to the preceptors, getting surplus funds, various sports, occurs when one enjoys the acquired like sound, touch, taste, beauty of form or fragrance, but not sad when not acquired.	Enjoying what is achieved, not regretting what is not yet acquired, lost or destroyed. To be produced by good people by omitting fear, grief, agony.
<i>Vrīdā</i> – bashfulness, shame	Basis is doing what should not have been done. Originates in disobedience or insult to elders, not keeping promise, denial or regret	Hiding/concealing face, bending head down, thinking, pondering, drawing lines on ground, touching

	over deeds. When observed doing an improper action and therefore regretting it.	ring, clothes etc., biting nails, tearing something with nails.
Capalatā – inconstancy, coming from <i>capala</i> , one who acts without thinking.	Produced by passion, hatred, rivalry, excessive anger, jealousy, lack of restraint. Doing things without proper decisions, thinking over it, and carries out activities such as killing, imprisoning, etc. These are described as acts carried out by people who do not think before acting, therefore, revealing inconstancy.	Harshness of words, rebuke, thrashing, killing, imprisoning, beating, reminding, etc.
Harsa – delight	Getting something inaccessible, union with beloved, mental satisfaction, divine favours, royal appreciation, preceptor’s affection, good food, obtaining and benefiting from wealth. Realise aims, get cherished, desired, fulfilled.	Bright face and eyes, sweet/loving speech, embracing, horripilation, tears of joy, sweet/gentle stroke, delicate movement of limbs, perspiration, etc.
Garva – arrogance	Excessive affluence, nobility of birth, handsomeness/beauty of form, youth, academic distinction, influence, sudden wealth, etc.	Contempt for others, teasing/vexing everyone, avoiding replying or conversing with others, glancing at shoulders, roaming around, derisive laughter, harsh words, disobedience to elders, slighting them, etc. Represented through movement of limbs.
Apasmāra – epilepsy, loss of memory	Malignant possession of an evil deity, serpent, <i>yaksha</i> , <i>rakhasa</i> , <i>pisaca</i> , <i>bhutas</i> ²³ and others, or recollection of these, eating food left by others, frequenting empty chambers, going to vacant houses, unclear forests, being crossed, derangement of bodily humours, non-observance of proper timings, lack of cleanliness, etc.	Throbbing, trembling, sighing, running, falling, perspiration, foaming in the mouth, hiccups, licking with the tongue, etc. Silent features of the state are falling down suddenly, shivering, foaming in the mouth, getting up during state of loss of sense, etc.
Amarsa – anger, indignation	When person, particularly, energetic person rebuked or insulted by someone superior in learning, affluence, prosperity and strength. Or dishonoured in open assembly.	Shaking head, perspiration, downcast face, reflecting, mental apprehension, meditation, looking for means of remedies, etc.
Avahittha – dissimulation	In the nature of concealment of appearance, produced by shame, fear, defeat, deceit, undue aggressiveness, etc.	Explaining away, looking elsewhere, pretending as though it has not been seen, breaking of talk, feigned patience, indifference and the like.
Ugratā – ferocity, cruelty	Incarceration of the thieves, when thieves are caught and bound/arrested, offence to the kings, speaking offensive words,	Slaying, arresting, lying up, beating, threatening, rebuking, binding, etc.
Mati – self-assurance, intellect	Thinking of the purport of scriptural texts, considering inferences/conjectures, occurs when equipped with the mastery of/well-versed in many scriptures.	Imparting instructions to pupils, ascertaining meaning, clarification of doubts, etc.
Unmāda – insanity	Death of/separation from beloved ones, loss of wealth, accidental injury, upsetting/derangement of bodily humours ²⁴	Laughing, crying, lamenting, groaning, etc. without justification, irrelevant talk, lying down without

These are spirits and other beings referred to in mythological narratives. *Rakshasas* were defined earlier.

²⁴ Relating to the body constitution as defined in Ayurvedic medicine.

	in diverse ways. May result when struck suddenly or due cumulative effect of this.	reason, sitting, standing, running, dancing, singing, smearing the body with ashes and dust, wearing/taking grass, soiled clothes, rags, senseless acts like imitating others, etc.
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Table 7

Again, it becomes evident how the transient states and their descriptions are embedded in the context of Indian performing arts and the narratives therein, particularly from the period in which the discourse in the NS must have taken place. After explaining the transient states, Bharata explains therein that all these *vyabhicāri* or transient states need to be produced by men or women, superior or inferior in status, “with proper conformity to place, time and situation” (Ch. 7, Board of Scholars:109). In effect, practise itself entails, as even today, a wide range of depictions that are closely connected to the context and content relevant at any given time, place and situation. Such context need not be the same as in the NS. Yet, the explanations are of interest here, given the insights they provide on emotive expression and emotional states in general.

Examining the *vibhāvas* or determinants at the offset, it firstly becomes evident here that they pertain to objects, actions, events or situations. At the same time, many *vibhāvas* for the transient states are quite specific in the sense of being situated. They are specific entities and, thus, specific instances that carry the emotional connotation related to any particular transient state, as I will identify based on some examples below. We see what kinds of situations given in the world would lead to which transient states. Secondly, one sees several parallels to the *vibhāvas* given for *rasas* and dominant states. While these are surely not exhaustive, as the constant mention of “etc.” reveals, the transient states are, nevertheless, seen to constitute a stage or category of *bhāvas* that would account for the *vibhāvas* described in the dominant states and *rasas*, thus, leading to them. The following Table 8 establishes the relation between the *vibhāvas* of the transient states in correspondence to those of the *rasas* they are described as related to and, thus, essentially also to the dominant states the *rasa* arises from. I also mention two or more transient states related to each *rasa*, to illustrate in what ways the *vibhāvas* of several transient states feed into the *rasa* and/or the dominant state.

<i>Vibhāvas-determinants</i> of <i>Vyabhicāri-Bhāva</i> Transient state	<i>Vibhāvas - determinants</i> of <i>Rasa</i>	<i>Vibhāvas – determinants</i> of <i>sthāyibhāva</i> Dominant state
<i>Dhṛti</i> – fortitude:	<i>Vīra</i> – heroic:	<i>Utsāha</i>- energy,

<p>Heroism, perfect knowledge, acquiring vedic/spiritual knowledge, affluence, cleanliness, good habits, devotion to the preceptors, getting surplus funds, various sports, occurs when one enjoys the acquired like sound, touch, taste, beauty of form or fragrance, but not sad when not acquired.</p> <p>Mati – self-assurance/also defined as intellect here: Thinking of the purport of scriptures, considering their inferences/conjecture. It comes when one is well-versed with the scriptures.</p>	<p>Composure/presence of mind, absence of delusion, grief and surprise, perseverance, good tactics/diplomacy, humility/discipline, valour, power, aggressiveness, reputation of might, influence, energy, optimism and enthusiasm.</p>	<p>enthusiasm: Composure/presence of mind, readiness to sacrifice, absence of distress, patience, heroism, valour and power.</p>
<p>Capalatā – inconstancy: produced by passion, hatred, rivalry, excessive anger, jealousy, lack of restraint. One who acts in inconstancy, i.e. does things without proper decisions or thinking over it, and carries out activities such as killing, imprisoning, etc., is called a <i>capala</i> (Ch. 7:60, Board of Scholars:99-100).</p> <p>Ugratā – ferocity: Incarceration of the thieves, when thieves are caught and bound/ arrested, offence to the kings and speaking offensive words.</p> <p>Amarsa – anger/indignation: When a person is rebuked or insulted by someone superior in learning, affluence, prosperity and strength. Along with enthusiasm when rebuked or dishonoured in open assembly, by persons superior, and physical strength.</p>	<p>Raudra – ferocious: Anger, violation of modesty/rape, abuse, insult, false allegations or harsh utterances, animosities, battle, quarrel, dispute/ threatening revengefulness, jealousy, etc. Here actions are mentioned in addition, such as beating, striking/breaking/cutting, crushing, tearing, maiming and mutilating and drawing of blood (during battles).</p>	<p>Krodha – anger: Insult, harsh utterances or adverse remarks, abusive words, quarrel, dispute or heated arguments.</p>
<p>Nirveda – dejectedness/dejection: Poverty, insult, verbal abuse, beating, separation from beloved persons, sickness, excess misery, seeing other’s prosperity, acquiring ultimate knowledge (Yogin)</p> <p>Apasmāra – epilepsy/loss of</p>	<p>Karuṇa – pathetic: Curse, affliction, distress, calamity, separation from near and dear ones, loss of wealth, misfortune, murder, death/of beloved person, imprisonment, flight, accidents and other misfortunes and hearing unpleasant, adverse words.</p>	<p>Śoka – sorrow: Loss of wealth, murder, death/of beloved person and imprisonment.</p>

<p>memory Malignant possession of an evil deity, serpent, <i>yaksha</i>, <i>rakshasa</i>, <i>pisaca</i>, <i>bhutas</i> and others or recollection of these, eating food left by others, frequenting empty chambers, going to vacant houses, unclear forests, being crossed, derangement of bodily hormones, etc., non-observance of proper timings and uncleanliness.</p> <p>Unmāda – insanity: Death of/separation from beloved ones, loss of wealth, accidental injury. May also strike suddenly due to the upsetting/derangement of bodily humour, defined as wind, bile or phlegm (Ch.7:84, Ghosh:242)²⁵ in diverse ways.</p>		
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Table 8

One can discern from the table how the *vibhāvas* listed for the transient state *dhṛti* – fortitude and *mati* – self-assurance relate to specific kinds of situations and, in doing so, indicate the kind of specific instances from which the *vibhāvas* of the heroic *rasa* and their corresponding dominant state *utsāha* – energy/energetic enthusiasm must themselves arise. The *vibhāvas* defined for these, such as composure/presence of mind, absence of delusion or distress, tactics/diplomacy, power or reputation of might, can stem from having perfect knowledge, vedic/spiritual knowledge or even practising various sports, the *vibhāvas* for fortitude. Reputation of might or, for that matter, power, influence and aggressiveness can also stem from affluence or a surplus of funds. Humility/discipline, perseverance or readiness to sacrifice, on the other hand, from devotion to preceptors. In other words, fortitude occurs in or is related to situations or persons having the kind of characteristics or assets mentioned in its *vibhāvas*. In a similar vein, we seen in the transient state *mati* how here as well, apart from revealing how a dimension of this state as intellect becomes the *vibhāva* for the heroic *rasa*, we see the specification of the kind of person who would get self-assurance based on intellect enabled by expertise in scriptures. Such an expertise is evident as *vibhāva* in both fortitude and self-assurance.

²⁵ These refer to terms used in Ayurvedic medicine, *vāta*, *pitta* and *kapha*, together called *doṣas*, that determine the basic constitution of the body. Their imbalance is the cause of ailments.

A situated depiction of a person or situation as specified in the *vibhāvas* for these two transient states, enables the states fortitude and self-assurance to be brought forth – the meaning at this level. This sets the stage for further *vibhāvas* or sources that lead to the related *sthāyibhāva* and *rasa* to be manifested as the final meaning. Interestingly, the *vibhāvas* that are mentioned for these stages to be finally manifested, such as composure, humility, strength and so forth, are themselves only the mention of characteristics that are related to energy or energetic enthusiasm and, finally, heroism itself. The transient states here would, thus, provide the tangible means of producing a baseline level of meaning that leads or sums up finally to the *rasa*. This occurs by enabling situated or specified depictions of persons, situations or objects.

In the case of the next set of transient states taken as examples for the ferocious *rasa* and its dominant state anger, I see in impetuosity/impulsiveness, the transient state *capalatā* – inconstancy listed for them. It can be understood as a dimension of this transient state, given the definition for *capala*. We see here how passion, anger, hatred, jealousy and other states, themselves transient states or dimensions of them, are listed as producing acts and actions that relate explicitly and implicitly to the ones listed as *vibhāvas* for the ferocious *rasa* and its dominant state, anger. While here persons with specific characteristics defined as inconstancy would produce such actions, in the other two transient states presented as examples for the same *rasa*, namely *ugratā* – ferocity and *amarṣa* – anger, there are specific situations mentioned. These would involve one or the other of the acts or actions, such as insult, abuse, threatening, abusive words, etc. At the same time, one also sees under rebuke or insult, a dimension of anger that is more in terms of indignation, indicated in rebuke in open assembly of a kind of person essentially related to the heroic *rasa*. Thus, we see here as well how the *vibhāvas* of transient states provide the specific situations that would set the stage for those at the higher levels. It is the very acts and actions related to emotional states and given in specific situations or occurring in persons with specific characteristics that provide the emotional connotation the *vibhāvas* must produce.

From the three transient states *nirveda* – dejectedness, *apasmāra* – epilepsy/loss of memory and *unmāda* – insanity, there are several *vibhāvas* that relate to those for the pathetic *rasa*. Thus, insult, verbal abuse and beating, for instance, would relate to imprisonment. Some of them like death, loss of wealth or accidents relate directly. Others, such as ailment, sickness or poverty, specify reasons for affliction, distress and calamity. Epilepsy/loss of memory as a

transient state is also relatable to affliction. As we will see below, in this case, it is the *anubhāvas* or consequents that tell us most directly how this transient state may relate. There are also certain *vibhāvas* that relate across the transient states. On the other hand, when placing loss of memory and insanity in the context of other *rasas*, one sees the range and dimensions in which they would apply. In *śṛṅgāra* – the erotic, for instance, where almost all transient states apply, these would be the outcome of separation from the beloved.

Epilepsy/loss of memory/fainting mentioned in other *rasas*, such as the terrible or the odious, would pertain in the case of the former to some of the *vibhāvas* mentioned under epilepsy, such as frequenting empty chambers, houses or forests, as factors leading to fear. In the latter, considering the *vibhāvas* given thereby have to do apparently with the odious or disgust arising from also seeing things that would lead to them, the mention of this transient state must have to do with seeing the kind of *anubhāvas* connected to it. The examples generally presented here illustrate how the *vibhāvas* of transient states enable the specification of either the reasons for the *vibhāvas* for the related dominant state and *rasa*, or the kind of acts that would be involved in the situations mentioned there.

Thus, we see the multifarious ways that are sometimes very specific in which the *vibhāvas* for transient states are discussed and how they relate to the *vibhāvas* for corresponding *rasas* and/or dominant states. They relate to persons, situations and events that when depicted, bring forth transient states that either directly or indirectly set the stage for the acts, actions, characteristics, states and other aspects that constitute the *vibhāvas* for the dominant states and *rasas*. In doing so, they provide tangible means of producing a baseline level of meaning that leads eventually or sums up to the *rasa*. Simply put, transient states can be understood as being related to specific situations, events, actions or objects that, in turn, specify what can carry an emotional connotation for the dominant states and *rasas* to become established as meaning. The function of transient states can also be understood in the range and dimensions that they enable, based on their emergence in specific and, thus, multifarious situations such as *situated* emotional states; I will define these from another perspective in the next chapter.

There is, however, a central role for the *anubhāvas* themselves in this process as well, which I propose to examine in the following. I noted in the case of *rasas* and *sthāyibhāva* how these consequents are both means and consequent. This is underscored when examining their function within the process toward the *rasas*, for the purpose of which I will place the *anubhāvas* of each stage now in relation. From Table 7 above that lists examples of transient

states with its *vibhāvas* and *anubhāvas*, we discern the latter as bodily depictions that reveal a lot of actions and activities, such as licking tongue, concealing face, rebuking, thrashing, running, singing, falling, teasing, gently stroking, and so forth. Under the *anubhāvas* are again the *sāttvika-bhāvas*, such as perspiration, trembling, horripilation, etc. Table 9 below looks at how these activities relate to the other stages.

Consequents <i>Vyabhicāri-Bhāva</i> – Transient states	Consequents – <i>Rasas</i>	Consequents <i>Sthayibava</i> – Dominant states
<p>Inconstancy/Impetuosity: Harshness of words, rebuke, thrashing, killing, imprisoning, beating, reminding, etc.</p> <p>Cruelty/ferocity: Slaying, arresting, beating, threatening, rebuking, binding, etc.</p> <p>Anger: Shaking head, perspiration, downcast face, reflecting, mental apprehension, meditation, looking for means of remedies, etc.</p>	<p><i>Raudra</i> – ferocious: Making eyes red, knitting eyebrows and widening them, perspiring profusely, defiance, clapping hands, grinding teeth, biting lips, throbbing cheeks, hitting palm with fist, hurling missiles, frightening and terrible utterances, and chopping off head, arms and trunks.</p>	<p><i>Krodha</i> – anger Swelling of nostrils, or haughty upturned eyes, knitting eyebrows, clapping hands, biting lips, throbbing cheeks, ferocious face/fierce look, biting of lips, clasping hands, threatening with/touching arms, shoulders and chest. In addition, the following distinctive states of anger: slightly downcast eyes and bowed head, wiping off slight perspiration, no violent activity. Very slight movement of body/advancing, shedding tears, frequent sideways glances with throbbing lips and knitted eyebrows. Threats, rebukes, opening eyes widely, casting angry looks in various ways. Feigned anger is when it is realised with its own/ ulterior motive and moves between two <i>rasas</i>.</p>
<p>Dejection: Meditative state, eyes flooded and miserable, face drooping, sighs deep and frequent. “Women and mean persons” portray this by crying, sighs, deep breaths and fraudulence (deception).</p> <p>Epilepsy: Throbbing, trembling, sighing, running, falling, perspiration, foaming in the mouth, hiccups, licking with the tongue, etc. Silent features of the state are</p>	<p><i>Karuṇa</i> – pathetic: Shedding tears, weeping loudly, fainting, sighs, or striking body, lamentation, parched throat and mouth, change of colour or pale face, drooping limbs, gasping, loss of memory/sense, etc.</p>	<p><i>Śoka</i> – sorrow: Shedding tears, weeping loudly, fainting, sighs, lamentation, change of colour or pale face, drooping limbs, gasping, loss of memory/sense, death, madness/insanity, change/loss of voice, writing and squirming. Joyful crying with blooming cheeks, words of recollection without concealing tears, horripilation, distressed crying through profuse loud shedding of tears, uneasiness in limbs,</p>

<p>falling down suddenly, shivering, foaming in the mouth, getting up during state of loss of sense, etc.</p> <p>Insanity: Laughing, crying, lamenting, groaning, etc., without justification, irrelevant talk, lying down without reason, sitting, standing, running, dancing, singing, smearing the body with ashes and dust, wearing/taking grass, soiled clothes, rags, senseless acts like imitating others, etc.</p>		<p>falling, rolling, lamenting. Crying out of jealousy (cry of women): violent throbbing of lips/cheeks, shaking head, deep sighs, angry crooked eyebrows/glances. Superior and middling types of people are distinguished by sorrow accompanied by courage and inferior ones (including women) by weeping.</p>
<p>Harsha – delight: Bright face and eyes, sweet/loving speech, embracing, horripilation, tears of joy, sweet/gentle stroke, delicate movement of limbs, perspiration, etc.</p>	<p>śrṅgāra – the erotic: Love in union: significant and clever movements of eyes, eyebrows/ glances/desirous looks, graceful movements of limbs, sweet dance figures, sweet smiles, pleasing words, expression of delight, fortitude, serene composed eyes, beaming face, etc.</p>	<p>Rati - love Significant and clever movements of eyes, eyebrows/ glances, graceful movements of limbs, sweet smiles and pleasing words.</p>

Table 9

One discerns in relating the *anubhāvas* of transient states to the dominant states and *rasas*, in the case of the *anubhāvas* for inconstancy and cruelty, that they do not necessarily relate directly to the *anubhāvas* of anger as dominant state and of the ferocious *rasa*, except in the case of situated anger. This is evident from the similarities in the *anubhāvas* of the transient state of *amarṣa* – anger with the downcast eyes and perspiration for the controlled anger defined as against venerable/superior persons. We saw in the *vibhāvas* for this transient state that it occurs when a person, essentially energetic by nature, is rebuked or insulted by someone more superior in various ways. The harshness of words and rebuke given under inconstancy relate to threats and rebuke for anger against subordinates, but otherwise, one discerns rather a relation of the *anubhāvas* to *vibhāvas* for the dominant state and *rasa*. Actions such as beating, striking, slaying, threatening, harsh words or rebuke were seen above to be their *vibhāvas*. In other words, these actions serve as the cause for anger and the ferocious state to establish themselves. However, the ultimate meaningful experience they enable is seen to be given by other *anubhāvas*, which, as seen here, are not the violent actions as such, indicated in the transient states, but rather an expression of anger through facial means and other actions. The exact aspects the *anubhāvas* are thus of interest.

Taking another example of a transient state that is not explicitly mentioned as related to the ferocious *rasa*, but can be understood as one, particularly considering its *anubhāvas*, is *garva* – arrogance. Some of the *anubhāvas* mentioned here, such as contempt for others, teasing/vexing everyone, derisive laughter or harsh words, would relate to similar *vibhāvas* for both the *rasa* and dominant state. These examples instantiate something interesting to note, both in terms of the function of transient states, as well as of *anubhāvas*; specifically of the bodily means given in the latter. We see here that when transient states lead to *rasas*, it is by way of the *anubhāvas* they are depicted in. The bodily depictions serve as the *vibhāva*, the causative or determining factor for the *bhāva* and, thus, *rasa* to pervade. Or can be directly entailed in the *anubhāvas* of the dominant state.

In the next example, the *anubhāvas* of dejection, epilepsy/loss of memory and insanity are reflected in the dominant state sorrow and the terrible *rasa*, even if many of the activities are not evident with the same intensity I would say. Feeding into them as necessary, befitting what is needed for sorrow to be manifested and the *rasa* to emerge. One sees here the relevance of *anubhāvas* directly for the *anubhāvas* themselves. To take another example, *anubhāvas* of *harsa* – delight are partly evident in the ones for *rati* – love and the emergent *śṛṅgāra* – *rasa*, but also in the *vibhāvas* for these. This is a more complex *rasa* entailing almost all the transient states. However, for the *anubhāvas* defined for love in union, one sees *anubhāvas* of the transient state, such as bright face and eyes, sweet/loving speech or delicate movement of limbs, reflected in significant glances, pleasing words, expression of delight or graceful movements of limbs. At the same time, one also sees how the *anubhāvas* can yet again serve as *vibhāvas* for the *rasa*. Then the sporting activities mentioned for the *rasa* can be understood as sweet/gentle stroke or embracing, and the listening to sweet voice as related to sweet/loving speech produced as *anubhāva* in the transient state.

Another perspective on the relevance of *anubhāvas* is given in why certain dominant states and *rasas* do not emerge from the transient states that would relate to them, but are described as arising from states that would rather be accountable from the performing arts context the descriptions are placed in. Of particular interest would be to go back to the comic or humorous *rasa* related to laughter or mirth. We saw that the transient states mentioned there, lethargy/ indolence, dissimulation, *tandra* – drowsiness, sleep, *anidrā* – sleeplessness, dreaming, waking up, (insomnia), envy, etc., do not reflect states that would themselves relate

to laughter. Nevertheless, they are mentioned as transient states (cf. Table 7), and their *anubhāvas*, as apparent from their descriptions, as *vibhāvas* for mirth and the comic/humorous *rasa*. In the following, I present the *vibhāvas* and *anubhāvas* for lethargy/indolence, dissimulation and envy, respectively.

Natural inclination towards lethargy, sorrow, walking, pregnancy, physical or mental strain, sickness (attributed to women and ‘mean’ natured persons).	Aversion towards all forms of activities, lying down or sitting quietly, drowsiness or falling asleep, etc.
In the nature of concealment of appearance, produced by shame, fear, defeat, deceit, undue aggressiveness, etc.	Explaining away, looking elsewhere, pretending as though it has not been seen, breaking of talk, feigned patience, indifference and the like.
Various offences, hatred, other’s wealth, prosperity, sportive display, learnedness or the like.	Proclaiming others’ faults or disapproving good qualities openly, speaking contemptuously, meaningful stares, distortions of eyebrows, ridiculing, arrogant face, turning away face in anger or envy, etc.

We see that the *vibhāvas* would not in any way be causative for anything related to laughter in the first place. Nor do the *anubhāvas* reflect any bodily condition in laughter or merriment, or, for that matter, ridiculing either. We find impudence, covetousness/greediness, quarrel, near-obscene utterances, pointing out others’ faults, strange movements or distortion of face in the *vibhāvas* for the humorous or comic *rasa*, which would relate directly or indirectly to the *anubhāvas* of the transient states above. Imitation of others’ actions, incoherent utterances, annoyance, etc., as stated for the dominant state mirth, must also relate to the imitation of instances of these *anubhāvas*. Any of the bodily actions of sleeplessness, dreaming, waking and so forth, would also be unseemly movements to imitate.

Even in such cases, if transient states lead towards the *rasas*, it is by way of the consequents that are the bodily manifestations of these states. I cannot imagine that the *anubhāvas* here can account for a felt quality, however. Imitating actions here is more about external factors. However, the *anubhāvas* of mirth or the *rasa* themselves reveal that they must provide a felt quality. Anyway, the notion of felt quality is something that I will examine and analyse in more detail in Chapter 3 below. Of interest is, nevertheless, to note that enabling laughter is not a matter of laughter, like enabling the pathetic state would be a matter of sorrowful or otherwise afflicted transient states, or the ferocious state by way of anger would be, of states that are themselves manifested by acts of anger, cruelty, impetuosity, etc.

Thus, as was noted in the earlier section while discussing how *rasas* are a sum of the various *bhāvas*, we see here that all transient states can be understood from a performing arts context

of depiction, as enabling the experience envisaged in the corresponding dominant state and the *rasa* arising from it, but also related to the final experience itself. The exemplary examination of the *vibhāvas* and *anubhāvas*, the factors related to *bhāvas* at all stages, reveals that what one sees as leading from the transient states to the dominant states and *rasas* are the *anubhāvas* themselves; and this, as we see, by informing the *vibhāvas* and/or *anubhāvas* of these. They, in effect, also establish the very function of the transient *vyabhicāri-bhāvas* at the primary level. Given this, the transient states are indeed stages within dominant states, stages of experience as understood from the definition of *anubhāvas*. They feed in and out of not only the dominant states, as was noted earlier, but also the *rasas*.

1.3.3 Relevance of *anubhāvas* – physical manifestations of emotions for meaning

Thus, as seen in this section, the *rasas*, *sthāyibhāvas* and *vyabhicāribhāvas* are described in terms of the *vibhāvas* and *anubhāvas* that enable them, with *sāttvika-bhāvas* or the physical form, subsumed in the *anubhāvas*. Looking at each of the categories sheds light in as much and in clear terms, that bringing forth the necessary emotional states, including the *rasas* themselves, are stages enabled by both 1) specific situations that are the *vibhāvas*, or those carrying an emotional connotation, as well as, and most essentially, 2) the corporeal aspects themselves, that as evident can be defined as the very gestures, verbalisations and temperamental activities, the three modes of expression. On the one hand, it is illustrated how the *rasa* is a sum of the *bhāvas* leading to it, essentially underscoring what was noted in the earlier section, a sum of experiences provided at all levels. On the other hand, one also sees how a *rasa* has been described in its own terms, enabled by *vibhāvas* and *anubhāvas*, which, while relating to the transient and dominant states, also reveal additional factors. That it is an experience more complex, collective and more universal is, thus, discernible, given, nevertheless, by tangible means as the descriptions of the factors enabling it reveal. Bharata finally calls them *sthāyī rasas*, that what gets established and is related to the main theme, combined with *vibhāvas*, *anubhāvas* and *sañcāris* (Ch.7:119-120), the last referring to the transient states. Such a *sthāyī rasa* should, nevertheless, be brought forth with an excessive amount of the *sāttvika* – which as we have seen in the context of defining the *sāttvika-bhāvas* that pertain to the physical form, as being the temperamental, originating in the mind. And the *sañcāris* or transient states should be depicted merely by gestures and postures to support the *sthāyī rasa*.

Sattva itself, thus understood as the mental, is also explained as that which is not manifest, but yet the main basis and, thus, supportive of the *bhāvas* and *rasas* by way of horripilation, tears and the like (NS, Ch. 24), in other words, by what we have seen defined as the *sāttvika-bhāvas*. This is an important indication for the felt quality of experience given in the corporeal itself, even if the notion of *sattva* could lean towards being understood as mental. In practise, these aspects defined as the physical form emerge in the course of emotive expression itself. *Sāttvika* indicates the very bringing forth of emotive expression in a natural way.

The above definition indicates that, finally, *sthāyibhāva* and *rasa* must merge. However, to reach this phase, *bhāva* itself, as originally defined, in the form of *sthāyibhāva*, must manifest. As cited at the offset of this chapter, meaning is instilled by *bhāva*, enabled or brought forth, as understood from the term *bhāvayanti* it stems from. A meaning that can be specified as residing in the experience that is *bhāva* – meaning, given this, that equates experience, and brought to manifestation by all the factors that it is related to. Apart from the different classifications of the emotional states that constitute the notion of *bhāva* we have seen in the discussion above how *vibhāvas* and *anubhāvas* become operative for any *bhāva*. We can, thus, specify it as meaning that emerges in various levels, explicitly enabled by the *vibhāvas* and/or *anubhāvas* entailed at each level. Indicated in the above discussion are also, how *vibhāvas* are more specific and situated at the level of the transient states, while *anubhāvas* become more specific in their bodily descriptions towards the *rasas*.

Finally, the exemplary examination of these factors above reveals that what one sees as leading from the transient states to the dominant *sthāyibhāva* states and finally *rasas* are the *anubhāvas* themselves; and this, as we see, by informing the *vibhāvas* and/or *anubhāvas* of these. As consequents they enable the manifestation of the *bhāva* given in any *vibhāva*, and are, at the same time, determinants themselves, as evident from the *vibhāvas* they become at the next stage. And given their definition, this is then by means of the felt quality they provide. Thus, if transient states, by definition, lead or carry, it is by way of these determinants leading to or building up to the final experience. In other words, they are themselves the determining factors for dominant states or *rasas* to get established. And by manifesting the dominant states and *rasas* in turn, they enable the emergence of meaning as a sum of the felt quality they provide. As was seen, they relate to the *rasas* directly as well, with *vibhāvas* and *anubhāvas* explained there at times elaborately.

Firstly, the notion that consequents are both the means and the consequence is underscored here. Secondly, if *anubhāvas* provide a felt quality, they should do so at all levels, given all stages from transient states to *rasas* have *anubhāvas*. And given the range of bodily depictions *anubhāvas* entail, which as seen relate to the emotional states, and by definition known in the world, the emergence of the emotive experience lies in the very bodily aspects related to the emotional states, whether transient, dominant, temperamental or even in the dimension of the *rasa*. It is these bodily aspects themselves that, in effect, need elucidation in their function in the process above; particularly in their role as finally leading to meaning as experience, and what the understanding of a felt quality they by definition provide, entails at each level. Such a felt quality must be primarily tied to the movement itself that the *anubhāvas* reflect for the most part.

The NS defines *vibhāvas* and *anubhāvas* in ways that are seen to be guiding principles for the performer. At the same time, they are defined in terms of the physical, the worldly, as objects, events and actions, the detailed explications on *anubhāvas* revealing, at the same time, that they are the very bodily manifestations of the emotional states they correspond to. This indicates the role of emotions, where bodily activities and experience concur. I had noted while laying out the definitions entailed in the NS in the first section above, that experience is interpreted both as being enabled mentally and in the heart. In the notion of *bhāvas*, that as the further explications have indicated, are emotional states, we see, thus, the notion of emotions in their physical-mental dimensions, whereby as also observed, they both enable meaning and are the meaning. Simultaneously, *bhāva*, as we discern, is a condition that encompasses many dimensions, or levels, or better said, stages, with *rasas* themselves constituting one dimension. It is this notion of *bhāva* together with *vibhāva* and *anubhāva* as enabling meaning as experience that reveals a fundamental relevance and is, thus, of interest. Specifically, thereby the definition of *anubhāvas* as providing a felt experience, that calls for further examination from a bodily and movement perspective. As will be discussed in the next chapter, the defining factors of *bhāvas* in terms of both their classification and the determinants and consequents discussed in this chapter reveal parallels to Damasio's (2003: 43ff) definitions from the perspective of brain research on emotions.

1.4 Meaning as experience – a bodily dimension rooted in emotions

Bringing this chapter to a close, the explicit understanding as postulated in the Indian performing arts treatise NS clearly points to a meaning as experience grounded in emotions in their physical-mental dimensions. Based on the discussions in this chapter, we discern a notion of meaning which equates experience, as opposed to meaning equates conceptualisation that was discussed in Part I. There is, at the same time, a very fundamental notion of meaning that becomes evident here, that was also indicated in the discussions in Part I regarding the embodied notion of meaning, rooted in both movement and emotions. The relevance of emotions for meaning has been discussed by Johnson (2007) and Gibbs (2005a), but mostly dwelling on their relevance for consciousness. While discussing gestures in Part I, we saw that objects, situations, events and actions constitute gestural meaning. In the discussions above, it is indicated that depicting them by way of gestures must reflect the emotional connotation they carry, which matters for meaning as experience. To give an example based on the understanding in the NS, a mansion can be a source of amazement or feeling of love if grand, but of fear if it is empty. Expressing the corresponding meaning by way of the emotional connotation it carries through different modes of expression, as defined by the *anubhāvas*, enables meaning as emotive experience to emerge. As we gather from the reading of meaning in the NS, meaning thus given is an experienced one that pervades the body, enabled by a felt quality that such bodily manifestations enable. There is a bodily source for the experience that leads to a bodily experienced meaning.

Furthermore, the modes of expression by way of which such a meaning is to be brought forth, namely the gestures, the temperamental activities and verbal aspects, point to the kind of kinetic-cognitive conceptual processes discussed as underlying meaning from the linguistic perspective discussed in Part I. With the addition that we recognise *emotive-kinetic* conceptual processes here. Definitions in the NS also refer to meaning, thus, enabled being instilled in the spectator, which, as we can deduce, is meaning as experience. In this sense, it points to the kind of simulation that was defined by Gibbs as enabled both by executing an action corporeally, as well as observing and or imagining it. We see in the discussions in this chapter that there must be a simulation enabled by the kind of bodily aspects defined under *anubhāvas* – given, in this sense, also verbally. Practise of performing arts understands experience as also enabled in the performer through the very execution of emotive expression. Thus, from a performer's perspective, on which I have been dwelling in analysing gestural meaning as well, bringing forth emotive expression must entail a bodily manifestation of embodied experiences that in the meaning being discussed here, stem from emotions. There is

thus empirical resource material provided both by the theory and practise of Indian performing arts, in particular dance theatre traditions, that will be examined in the further course, both from the perspective of emotions and movement.

At this point, a further note on the term Nāṭya in addition to what was briefly explained in the Introduction. What is thus being defined here as performing arts is understood as an all-encompassing art, constituted of 11 different aspects, which includes apart from the *rasas*, *bhāvas* and the forms of expression mentioned above, forms of stylisation, aesthetics, regional aspects, music, stage particulars and the final impact of the performance (Ch. 6:10). It integrates essentially what we know today as different genres, generally labelled as theatre, dance or music, with each taking on the 11 aspects to varying degrees. The genre dance theatre, such as Bharatanatyam being analysed in this study, includes both the non-narrative – *nritta* – and narrative – the *abhinaya* aspects cited above, however, mostly without the performers themselves using verbal expression. Thus, there is particular emphasis on corporeal expression with the *sāttvika* notion of natural expression here.

That the role of emotions as indicated in the NS is of fundamental relevance will be discussed in the next chapter based on the afore-mentioned parallels to Damasio's (2003) brain research on emotions. The discussion will be taken forward by placing all the aspects laid out above on meaning as experience in the understanding of NS in the current perspective on emotions, feelings and their bodily states that Damasio (1999, 2003, 2010) expounds on. After thus fleshing out the very notion implicit in the NS on the primordial relevance of emotions, Chapter 3 thereafter will turn to the bodily manifestations in terms of movement evident therein.

2 Primordial role of emotions – a brain research perspective

The explanations of *bhāvas*, as defined in the NS and examined in the previous chapter, correspond to the findings put forward by Damasio (2003) from the perspective of brain research on emotions, both in terms of classifications of *bhāvas* and the factors related to them. Drawing from an initial comparison of these based on definitions that was part of my Master's thesis (2010), I take the discussion forward in this chapter by examining the fundamental relevance the notion of meaning as experience acquires when placed in context with Damasio's findings. These findings unveil a primordial process of growing complexity,

by way of which emotions can be classified and the relevance of the bodily dimensions of these for the emergence of what is defined as feelings. Damasio specifically distinguishes bodily processes, which are emotions, from feelings, which are described as arising from the bodily processes as experience thereof. The former are triggered by what he calls emotionally charged stimulus (ECS). Feelings, according to Damasio (1999, 2003, 2010), finally build the substrate for the mind, consciousness and eventually cognitive abilities. However, the role of the inherent primordially given bodily emotional processes that lead to feelings is of interest here. How these correspond with the notion of *bhāvas* of NS, given their explanations in terms of *vibhāvas* and *anubhāvas*, which are, in this sense, emotions, grounded in the bodily and leading to felt experience that culminates in the experience of *rasa*, are aspects that I will discuss in this chapter.

2.1 Classifying emotions – a matter of evolution

Damasio (2003:43ff) sees emotions as having various levels of increasing complexity with basic bodily processes, such as metabolic regulation, reflexes and drives, at the less complex levels, becoming the so-called emotions proper (2003:30-54) at higher levels. All levels from the homeostatic processes that govern life to the emotions proper which are generally known as emotions, have evolved as responses to “*appraise*” (2003:35, emphasis in original) the internal and external circumstances, i.e. detect trouble or opportunity, and act accordingly to solve by means of actions, with the difference that towards the higher levels, there is a growing complexity in how these mechanisms function. Thus the innate and automatic process of life governance became more sophisticated, as Damasio explains. It is pointed out that there is an old tradition to classify emotions into different categories which are not necessarily appropriate (2003:43ff). However, the current state of knowledge offers no alternatives yet. For the moment, emotions proper can be distinguished as background, primary and social emotions, keeping in mind, nevertheless, that the boundaries are quite fluid. All levels are essentially intricately interwoven with each other and are, in that sense, not a strict hierarchy of moving up to emotions proper. Finally, all levels are grounded in the homeostatic processes.

At the offset, it will be useful to look at the parallels evident in the classification of *bhāvas* compared to Damasio’s classification, whereby I will examine the findings in the earlier chapter based on these correspondences. The three stages of emotions proper correspond with

the transient and dominant states defined in NS, directly and/or by definition. All the emotions that Damasio mentions as primary emotions are reflected in the dominant states, with the NS itself mentioning more. The transient *vyabhicāri-bhāvas* reveal correspondences to background and social emotions. What have been categorised as *sāttvika-bhāvas* from the performing arts context, because of the different modes they necessitate for depiction, are, given their descriptions, part of what Damasio calls the repertoire of bodily reactions that run off automatically during emotional processes. As we will see, even the other *anubhāvas* are such bodily states, which accounts for the inclusion of some transient states and the *sāttvika-bhāvas* under these. The correspondences to *vibhāvas*, *anubhāvas* and the *sāttvika-bhāvas* will be discussed in the next section.

The correspondences of the dominant and transient states to Damasio’s three categories of emotions proper are presented first in the following Table 10 for the sake of better reference for the ensuing discussion. Slashes between terms reveal the varied nuances for any given *bhāva* as evidenced in the descriptions in the earlier chapter, including differences in translations. Wherever the *bhāvas* are seen to correspond directly to the examples that Damasio mentions or defines under each classification, they are specified by equating these. Where there is no direct correspondence evident, the *bhāvas* are listed, nevertheless, under corresponding classifications based on parallels in the definition of the category.

Transient states <i>vyabhicāri-bhāva</i> = Background emotions	Dominant states <i>sthāyibhāva</i> = Primary emotions	Transient states <i>vyabhicāri-bhāva</i> = Social emotions	Feelings = Rasas
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Agitation = agitation	Love	Envy = envy	Erotic
Excitement = excitement	Merriment/ mirth/ laughter = happiness	Jealousy = jealousy	Humorous/comic
Anxiety = anxiety	Sorrow/grief = sadness	Indignation = indignation	Pathos/ pathetic
Languor, Despondency, weakness, inebriation/ intoxication, exhaustion/ weariness/fatigue, apprehension, lethargy/ indolence/ sluggishness/ inactivity, depression, sleep/drowsiness, loss of memory/epilepsy/ forgetfulness, wakening, madness/insanity, sickness/illness, dreaming, energetic, impetuosity/ impulsiveness, restlessness, fortitude/ contentment, ferocity.	Fury/anger = anger Enthusiasm/energy/ energetic enthusiasm Terror/fear = fear Disgust = disgust Wonderment/ astonishment/surprise = surprise	Self-assurance/pride = pride bashfulness/shame = shame embarrassment = embarrassment arrogance, indifference, suspicion, delusion/ distraction, inconstancy, joy, cruelty, impatient curiosity, dissimulation, if stupefaction should mean awe, feigned anger	Wrath/ furious Heroic Terrible Odious Wonderment, marvellous

Table 10

2.1.1 *Vyabhicāri-bhāva* transient states = background and social emotions

We see both what Damasio calls social emotions and background emotions in the transient states. According to Damasio, background emotions are the unpredictable result of several simultaneous regulatory processes in our body such as metabolism, reflexes, immune responses, needs that have to be satisfied or have just been, and so forth; essentially processes which our lives are constantly constituted of. They are also the composite expression of specific combinations of simple regulatory reactions, such as pain, desire, motivations and drives. They are, thus, the constantly changing result of these simple bodily processes that define our state of being. These regulatory processes are themselves dimensions of emotions which are more basic and at simpler levels. Background emotions are thus essentially those

where there is no prominent behaviour revealed as such. However, they are identifiable in their quality of movement or facial expression or a state of being. Based on these, one recognises that someone is agitated or excited and shows signs of anxiety, uneasiness or calmness; whether someone is energetic or enthusiastic. We have seen how many of these are directly mentioned as such under the transient emotions in NS.

As Damasio further hypothesizes, changes in internal processes or the chemistry of the internal milieu, such as heart rhythm or a fall in glucose levels in blood, are not experienced directly as these bodily processes, but in a “‘composite’ form” (2003:88). These are registered as background feelings like fatigue, energy, or “behavioral changes that become appetites and cravings”. The ever-changing processes determine our “state of being” (2003:44), whether we feel good, bad or in-between. Based on such an understanding of a bodily state of being, several other transient states mentioned in the NS, such as exhaustion/weariness, lethargy, weakness, sleep, sickness, or even stupefaction and intoxication, must be attributable to these background emotions. Fortitude, considering it is connected with energy and often brought in relation to enthusiasm, must also fall under this classification. Damasio also defines background emotions as not sustaining over longer periods of time, which make them different from moods (2003:43f). This is what transient emotional states are about according to NS, as opposed to the permanent dominant states.

Social emotions, on the other hand, are those that one experiences due to interactions with others. Many of Damasio’s (2003) examples referred to in the course of Chapter 2 there, relate directly to the ones listed under transient emotions, such as envy, jealousy, indignation, shame, embarrassment and pride, which would be self-assurance, that fall under the same name in NS. Even if not directly mentioned under the transient states, there are also others, such as gratitude, sympathy, guilt, admiration, arrogance and contempt, that are directly or in context listed in the descriptions of *vibhāvas* and/or *anubhāvas*. In a similar vein, other transient states can be inferred as given in social interactions, such as suspicion, delusion, inconstancy, cruelty, joy, impatient curiosity or dissimulation as concealment. Despair is also mentioned as social emotion by Damasio (2003:61).

As Damasio explains, even if the term ‘social’ evokes the notion of human society or culture, they are not to be understood as restricted to human beings or society in that sense, or of having to do with social or cultural norms or upbringing. They are also evident among

animals. Having their origin in innate apparatus, here of social emotion and self-preservation that are not conscious, they may thus appear to observers as unmotivated. Social dominance or dependence behaviours, for instance, do not reflect what would trigger them. They have little to do with knowledge and abilities but are rather physical traits – these and the manner in which an individual presents him/herself, thus, evoking “certain emotional responses in others” (2003: 48). The ability to have social emotions themselves may have contributed to complex social mechanisms of steering and control.

I observed in the previous chapter that given the *vibhāvas* or determinants described for transient emotions, the circumstances they arise from can be understood as quite specific and situated. I called them situated emotions there. From the discussion above on the parallels evidenced, by name, definition, context and the very function, to Damasio’s postulations, it becomes clear in what ways they relate functionally to such a notion. They are the result of, or triggered by, specific circumstances, social or bodily. Damasio when discussing these emotions later calls them “factual circumstances”, stating how enthusiasm and discouragement, that he relates to background emotions, can be prompted by not only such circumstances from one’s life, but also “internal states such as disease and fatigue” (2010:125). These last two are themselves categorized in NS under transient states and, given Damasio’s understanding, must in effect relate to the very basic bodily processes even before emotions proper. Thus, placed in context to how these are emotions in a primordial sense, they shed light on two important aspects. Giving certain emotions the status of transient emotions in the context of performance is, on the one hand, a matter of what produces what experience and leads, thus, to one or the other dominant states. On the other hand, it reflects an understanding of what is more of a temporary phase that makes an emotion transient.

2.1.2 *Sthāyibhāvas*-dominant states = primary emotions

The stage between the background and social emotions in Damasio’s classification is that of the primary emotions. Happiness, sadness, fear, disgust, surprise or anger are mentioned as emotions that come most spontaneously to one’s mind when referring to emotions, because they are commonly known across cultures and species. As evident, fear, disgust and anger correspond directly, underlining, so to say, a particularly common and basic status attributed to them, while the others relate in context or partially to the dominant states NS mentions. Over and above these, we have seen *rati*-love *utsāha*-enthusiasm/energetic/energetic

enthusiasm in NS. That these do not seem to be considered when referring to emotions is also often observed in workshops when participants are asked what they would call emotions. In addition, *utsāha*, understood as energetic enthusiasm, would reflect a background emotion in Damasio's definitions. Here we see how the dominant state, as understood in the NS, is also a matter of the *rasa* it should bring forth in the context of a performance. Heroism is a matter of strength and valour, revealing itself thus.

In the other cases, sorrow/grief is not very different to sadness, only revealing, I would say, an understanding of more intensity attributed to the dominant state of *śoka* in NS. In a similar vein, astonishment would relate to surprise in context, but again more intense, also evident from using the term wonderment for it. The dominant state *hāsa*, translated as mirth, merriment or laughter, entails as defined in the NS, specifically as in the descriptions of its *anubhāvas*, several instances from happiness to ridiculing. In this sense, happiness would be one aspect, given essentially in the transient state *harsa*-delight. These examples yet again, as noted above, underscore the centrality given to experience in how NS categorises emotional states. Defining *sthāyibhāva* as dominant states, specifically as what is manifested, is related to the notion of experience given as evident by both intensity and the sum of experiences other states provide.

It must lie in the nature of the primary emotions themselves, to which the *sthāyibhāvas* are seen to relate, that they best manifest themselves as experience; an experience that finally pervades the body and mind. Damasio considers primary emotions as easily definable, because it belongs to an established tradition to put certain prominent emotions into this group (2003:44). He goes on to add that there is a reason to give them a special status, considering they are commonly known emotions, observable in both humans and animals. Even the conditions that trigger these and their underlying behaviour patterns are seen to be similar. Given this, most of what is known about the neurobiology of emotions is based on research on these emotions. As the insights provided in the performing arts context provoke to specify, if they are prominent, it must lie in their very experience that is not only common but is something that holds forth and can, thus, become prominent or dominant as experience. In turn, influencing the other states, but, at the same time, being manifested as a sum of experiences provided by them. The dominant states then feed into and out of the transient states, informing them but also being informed by them.

The place the *sthāyibhāvas* take in the classification of emotions and the relevance given to them finally for enabling meaning as experience to be manifested is, thus, evident both from the context of performance itself, based on definitions in the NS and practice, and as discussed here from Damasio's perspective on classifying emotions. By definition, we have seen how the dominant states are compared to the king, and the transient states as their subordinates, depending on them. The king shines forth only when in company of the retinue of such subordinates. In the context of performance itself, they need to be depicted accordingly. We have seen examples given in the NS of anger in different situations that revealed a combination with different transient states in the previous chapter. In the practice of dance theatre forms such as Bharatanatyam, the baseline *sthāyibhāva* or dominant state of a theme, character or situation needs to be kept in mind while portraying other related emotional states. Kalanidhi Narayan²⁶, who was a leading master teacher for emotive expression, used to give corrective instructions as, for instance, not to show so much anger, as there is still love and yearning underlying it, or that too much fear is showing up, where it is inappropriate for the character being portrayed to have the intensity. These are often instances where *rati*-love and its corresponding *śṛṅgāra-rasa* have to be brought to manifestation or maintained as a dominant state, but the actual situated context could be anger, anxiety, impatience and so forth. Similarly, laughter in arrogance can be quite different to the laughter or smile that comes from being shy or bashful. Thus, the transient state itself can influence the dominant state. But it is the laughter or smile that comes to manifest itself; in other words, reveals itself most and is, thus, experienced.

Interestingly, and as discernible when placing the emotional states defined in the NS in correspondence with Damasio's insights, some of the transient states are at a level higher of complexity than the primary emotions themselves. While primary emotions are common across species and cultures, also triggered by common circumstances, social emotions to which some of the transient emotions correspond are more complex, given the classification that Damasio gives is connected with growing complexity. But they are, as with background emotions as well, situated. In the understanding of how the various levels emerge forth from more basic levels, Damasio sees social emotions as having elements of primary emotions, their regulative reactions and elements revealing themselves in different combinations as parts of the social emotions, for example, the social emotion contempt taking over the same facial expression as in the primary emotion disgust. This, in turn, has evolved out of the automatic

²⁶ Personal correspondence. Cf. also Narayanan, 1994

and beneficial rejection of potentially poisonous food, belonging to one of the oldest of emotions (2010:117). As a performer, I could add arrogance to it or anger, make it more outward or discrete, depending not only on what needs to be manifested, but also what I as a performer would like manifested.

Thus, an interweaving/interlacing is also evident both from the performing arts context and Damasio's findings. We gather from the insights provided by Damasio's brain research on emotions that there is a classification based on functions that have primordially evolved and at all levels, finally, as life regulatory processes. Placed in the context of emotions and their natural functions, I have illustrated how the emotional states and their categories defined in the NS reveal such an inherent natural relationship. We see in the notion of transient emotions a very broad-based understanding, encompassing a whole range of states classifiable in their natural functions into various categories that include basic bodily states, background emotions and social emotions. Their transitory nature, as defined in NS, as a matter of how they relate to the manifestation of a dominant state, as states that lead towards *rasa* eventually, lies in this inherent nature. They are not permanent but situated. They could stem from bodily processes or external situations, which accounts for why some of them find mention in the NS both as *vibhāvas* and *anubhāvas*. They thus provide in their very nature a sum of both possibilities for depiction and experiences for the dominant state to be established or manifested. We see how they literally surround the "king" states. Then the primary emotions, to which the dominant states are seen to correspond, are, based on Damasio's findings, positioned between the background and social emotions. That these both inform and are informed by the transient emotions is a natural process given this positioning in the sense of evolution. As primary emotions, they emerge from the basic bodily processes and background emotions directly but interrelate with social emotions. Their relevance lies in their primary, universal, conspicuous nature, apparently in the kind of experience related thus to them.

The discussion from both the perspectives being presented here reveals that there is not only one set of emotions that matter or most commonly known. There are various stages of emotions that become relevant in different ways. And there is something common to them that is reflected both in the explanations in NS and Damasio's findings. The classification as understood in the NS, while revealing a logic in the context of performing arts in the sense of building up towards the experience of a prominent emotional state, which in its most natural setting would be the primary emotions, is simultaneously a naturally given phenomenon,

grounded in the primordial nature of emotions. The notion of *bhāva* that, as I noted earlier, encompasses what instils meaning, the experience that does so and what brings forth the experience, lies, as clearly evidenced here, in the nature of emotions and, as will be further examined, in the very bodily manifestations of these. *Bhāva* is source, experience and meaning, in other words both source and product, which, as will further unfold during the course of discussions in this part, corresponds to the perspectives provided from Damasio's brain research of emotions. This takes us towards a fundamental notion of meaning that is apparent here. Specifically, in terms of the primordial bodily grounding of such meaning. At the end of this chapter, it becomes apparent how the classification of emotions lies in the very nature of their physical manifestations, an aspect that will also be examined in terms of the *anubhāvas*.

Finally, based on the understanding in NS, the *sthāyibhāva* itself becomes transient when the experience of *rasa* is established, the ulterior experience that is given only when thus established. Damasio's classification itself encompasses, apart from the basic level bodily processes to the emotions proper, the notion of feelings as well, which is elaborated upon in several discussions (1999, 2003, 2010). Given it is central to understanding the notion of felt quality accompanying emotions from yet again a primordial perspective, and from the perspective of understanding the notion of *rasa*, it will be presented in detail in the following section. It is interesting that Damasio's illustrations with regard to classifying emotions also reveal a tree (2003:32, 37, 45), just as Bharata in NS defines the relation between *bhāva* and *rasa*, as cited in the previous chapter. In Damasio's account, it reflects the interweaving and yet pyramid-like relationship extant between the emotional stages, to which the feelings belong as a dimension. The emotions proper build the branches, literally the crown of the tree, the feelings topping them (2003:37). Graphic 3 illustrates the correspondences.

Required parameters are missing or incorrect.

Graphic 3

2.2 The notion of feelings and the *bhāva-rasa* relation - a journey into the primordial?

Feelings, according to Damasio, are essentially the mental dimension of emotions, emerging directly out of the bodily states of emotions as experience thereof, as the mental expression of

emotions, as mental representations, not to be understood in the abstract sense, but as an inherent bodily process, enabled by the intrinsic relationship between the body and the brain (1999, 2003:Ch.3, 2010). They arise as perceptions of the body in any given state, of “being in a certain way” (2003:88). These can range anywhere between joy and sorrow, as experience between pain and pleasure occurring “in emotions and related phenomena”, as “feelings of myriad emotions and related states” (Damasio, 2003: 3). Feelings essentially reflect states of harmony and disharmony within the body and are caused by the emotional processes themselves. They also entail specific thoughts on certain themes, ways of thinking that arise from specific emotions and vice versa. The brain itself plays an important role in feelings. Examining Damasio’s explanations of feelings is insightful in many ways, given the specificity in defining them as grounded in the bodily, particularly in the bodily emotional states, but also intriguing in terms of the *bhāva-rasa* relationship. For the larger scope of this study regarding meaning, they compare with the very notion of why emotive expression, and performing arts as means for this, are given such a relevance in NS, thus, underscoring also from the perspective of a primordial function of feelings as experience, the parallels I recognise.

Damasio differentiates emotions, feelings and conscious feelings, calling them “state of emotion”, “state of feeling” and “state of feeling made conscious” (1999:37, emphasis in original). The first is the emotion that is non-conscious, triggered and executed as a bodily process. The second is the mental representation of the emotion or, better said, the bodily state of the emotion that can also be represented non-consciously. By mental, Damasio means a representation in the “body-minded brain” (2010:106) that arises from how the body is mapped in the brain. The third becomes known to the organism having emotion and feeling. This is connected with the development of the self, which is itself discussed as having several stages and for which the basic emergence of feelings is crucial. As the accounts (2003, 2010) reveal, even simple organisms have the stages of emotions that are discussed above at the bodily level or even at the level of social emotions. The worm *C. elegans*, as Damasio (2010:56f) points out, reveals the rudimentary stages of social concepts, such as sensing security when in larger numbers or strength through cooperation, that have evolved as survival strategies. When enough food is available in their environment and there are no stressful factors, the worms keep to themselves and eat. If these circumstances are not given, they flock together to eat.

However, feelings are more than that. Based on brain research, Damasio (2003, 2010) lays out in detail how feelings, and more so the thoughts that emerge in association with them, or becoming conscious of feelings are possible only in organisms which have the kind of brains that have evolved for it, as will be discussed further. This occurs apparently in stages, amounting to what the human brain is: firstly, with the mechanism of emotions to react to situations as being good or bad for life, then with the mechanism of feelings that add a mental warning signal for these situations, anchoring the effects of emotions by influencing attention and memory permanently. The feelings finally lead to a fruitful co-operation between memory, imaginative power and thinking to the development of foresightedness and the ability to develop new and non-stereotypical reactions. This means reactions opposed to the stereotypical reactions that emotions produce automatically and are non-conscious. This final stage is the level of knowing what is good or bad, given by the feelings themselves in the first place, and acting in accordance with that. These explanations reflect the understanding of performing arts defined in the very first chapter of NS entitled “Origin of Drama” (Ch.1:108-115). *Nāṭya* as performing arts, in representing the good and bad in the world, has the function of teaching virtues, educating people through *bhāvas* and actions, giving solace to the sorrowing, incentives to the heroic, courage to the coward; it chides the uncivilized, enlightens the intellect, and in enabling wealth, fame, long life, etc., enables general good and learning. We see here what meaning as intended through emotive expression should finally enable. As will be seen below, feelings are seen to be the fundamental prerequisite for knowing and acting in the world; they give a value, a biological value to it.

Damasio (2003:83ff, Ch. 3) citing incidents with patients where sudden unexpected emotions, first in their bodily manifestation and then what followed thereof were observed, lays out his notion of feelings as arising from bodily states related to emotions. There is, firstly, the emotion in its physical manifestation which gives rise to the perception of a specific bodily state in association with specific modes of thinking and thoughts that pertain to certain themes. Such a feeling state that sets in immediately after the physical manifestation can hold forth with further thoughts that are associated with similar feelings or objects connected with them, coming from memory, or subside immediately, on their own or through distraction. By objects, Damasio also means situations. Thus, thoughts and feelings are associated with each other, emotions and thoughts having developed through associative learning into a complex and reciprocal network. Descriptions in the NS about how *bhāvas* should be brought to manifestation by both corporeal and verbal means compare with this notion of the corporeal

emotion and the thoughts that come with it. Taking an example that is absolutely similar to the one Damasio (2003:83f) cites, namely sorrow, one finds sobbing, drooping glance, lamenting, etc. listed that reflect just those corporeal symptoms as well as thoughts about one's state verbalised in lamenting. Putting it in Damasio's perspective, such a depiction reflects the physical, mental and verbal dimensions that an emotion is, a body-brain process.

In Damasio's understanding, it was, therefore, the emotion at the beginning and at the beginning of the emotion it was action, more specifically movement, as I will examine and analyse further. Feelings translate the corresponding life and body constitution that are the emotions into the language of the mind (2003:85). This primordial notion of emotion and its leading to the mind also echoes the understanding in the Indian world-view that underlies performing arts as defined in the NS as well. I will go into this further briefly below.

Referring to his hypothesis on feelings, Damasio points out that it is, however, not compatible with any conceptions about feelings that define them as a collection of thoughts about a theme connected with a feeling. These ignore the bodily dimension that is the feeling itself. Feelings are not just a passive perception or a brief event in time either. There is a give and take between body and brain where the feelings are generated together with images that represent the mapping of bodily states, with changes occurring in both during the process (2003:91f). Emotions and feelings, thus, build an integral process, with the mapping function of the brain essential in this process.

Having said this, it is deemed appropriate to delve into Damasio's explanations of feelings at this point to arrive at what they mean for embodied experience.

2.2.1 Feelings and their origins

Damasio (2003:Ch.3) discusses how one arrives at a few considerations in trying to discover the primary processes that lead to feelings. Firstly, organisms must have a body and the means to map its inner structure, in other words, a nervous system. Secondly, this nervous system must be able to map body structures and states and translate the neuronal patterns of these maps to mental patterns and images. Furthermore, it means having a consciousness; a complicated issue, given that without consciousness one cannot feel, but then it is the mechanisms of feelings themselves that contribute to consciousness. Damasio elucidates on this point when examining how the self comes to the mind (1999, 2010). Then, essentially, a

self is necessary for consciousness, its prerequisite, however, being feelings emerging from the specific kinds of homeostatic processes that have to be felt. Thus, the notion of feelings takes a very fundamental role in the development of the mind, self and consciousness. The brain itself has evolved accordingly, because such an evolution enabled life and its concerns grounded in physical well-being and the need to interact with the world for this purpose, to be managed effectively. Given this, there is a reason to believe, as Damasio notes, that all stages are finally connected with the proper functioning of regulatory life processes at the most basic level, specifically in physiological efficiency.

Therein lies the notion of value as attached to items that are indispensable and difficult to obtain. Specifically, as biological value, of imperative needs that arise in the struggle to maintain life (2010:46ff, all emphases, also in the following as in original, unless otherwise stated). “Value relates directly or indirectly to survival” (2010:48) and for human beings, it has a quality. The “primitive of value is the physiological state of living tissue within a survivable, homeostatic range” (2010:49), associated with the need for constant representations of chemical parameters in the brain, thus, enabling brain devices to monitor and take corrective actions to cater to the internal homeostatic needs of the body non-consciously.

A “sensing” of the organism’s interior and exterior, developing measures to respond and move when changes occur, i.e. a “response policy” and “movement”, were, in effect, as Damasio defines, minimal features that even the simple single-cell organisms required to survive and pass on their genes (2010:50). Thus, brains evolved as a device to improve these in an increasingly effective and differentiated manner, with movement itself being refined, changing bodies in turn, as evident in the human beings’ striated muscles. Introceptive sensing expanded to detect several more parameters and the sensing of the exterior, i.e. exteroception to include the sensory modalities and vibrations. In order that sensing and movement are effective, the response policy had to have a plan of operation with guidelines to achieve goals, specifically homeostatic goals, a “homeostatic design” that creatures of all levels have, and “incentive”, because conditions of the living tissue could at times require urgent corrections or opportunities for betterment so advantageous that responses had to be rapid. Damasio sees herein the reward and punishment mechanisms. Brain structures developed to predict and anticipate delivery of the needed and whether these were good or threatening, using such cues to react with the release of the necessary molecules. Thus,

evolving more complex programmes becoming the aforementioned drives, motivations and emotions that enabled exploring environments, “complete with endless curiosity” (2010:55). Was this the origin of the transient state curiosity/impatient curiosity?

Apart from the kind of life management seen above, Damasio sees the brain’s function in the very ability to create maps or neural patterns, thus, enabling, in turn, more efficient and increasingly sophisticated life management. What maps are will become evident in the discussion below. Constructing maps and their experience as images have, thus, evolved as an essential feature of these processes, becoming the central function of the brain and how it evolved. By thus informing itself, the brain can non-consciously guide motor behaviour to take right actions, because survival depends on it. However, this function has also evolved into more abstract levels as a progression of the most basic levels of regulatory processes. Damasio sees these basic processes entailed at all levels, as feelings that are also a matter of the brain’s ability to map, grounded in the constant mapping of the body in the brain. Maps are, therefore, seen to be of three varieties: 1) interoceptive – of internal structure and state, 2) proprioceptive – of other aspects of the body, and 3) exteroceptive – of the world, enabled by the sensory organs. Maps become images when experienced, which, as we will see, is an activity of the mind. In addition, and most importantly, feelings are defined as “felt images” (2010:76, emphasis in original), a variety of the image that stems from the body and is, thus, made a special and indispensable part of images.

Maps, images, emotions and feelings are, thus, on Damasio’s (2003, 2010) account, an integral part of how the brain functions. In view of the larger scope of this account, a brief excursion into how maps are constructed and the range of these, that Damasio describes exquisitely, would be useful to begin with, before looking into the finer descriptions of feelings, how they become an integral part of all images and what this account of feelings reveals in terms of the current discussion in this part regarding the *bhāva-rasa* relationship and the notion of meaning defined in NS.

2.2.2 All images relate to feelings

The brain constructs maps incessantly of everything external, i.e. from the world, as exteroceptive maps, and everything internal, i.e. from the body that encompass its entirety, from internal milieu states to functional conditions of body tissue by way of the interoceptive

maps, to musculoskeletal and/or viscera as proprioceptive maps. This includes body structure in terms of limbs and their movements, to injuries. They are the “images from the flesh” that map everything within the body as sketchy neural patterns (2003: 195): generally, every “micro-nook” of the body (2010:263). Thus, maps are constructed when interacting with objects of any kind “from the outside of the brain towards its interior” whereby there is an action to begin with (2010:64). An interesting point to note is that such an action must mean one’s own within the body in the first place.

Mapping of the external world applies to every kind of sensory pattern that begins at the sensory organs themselves and is relayed to the brain, of every object and action outside and all the relationships between these in time and space and to the “mother ship known as the organism” (2010:64). Another interesting definition is that such a mapping is “a mimic of the irrepressible variety” of everything outside the brain from the “body proper” in its entirety, as Damasio (2010:92) calls the body apart from the brain, to every object in the world, places, weather conditions, textures, sounds and tastes. This includes aspects of the structure of things and events, and of actions external and carried out by the body’s various parts. We see where gestural meaning discussed in Part I comes from, including how similarity and contiguity relations would become operative! Damasio further describes such mapping as not passive representations but involving active contribution of what is available in the brain from early development, the assembly happening often “*in the setting of movement*” (2010:64, emphasis added), referring thus to the action at the beginning that is cited above. There is again the notion of action and movement being referred to as one and same. But this reference to movement will be taken forward in the course of the discussion in this part of the study.

It becomes evident from the detailed description of the structures of the cerebral cortex how the maps enabled there reflect topographic, geometric and other spatial relationships. Its horizontal grid-like structures, whose main elements are the neurons, enable detailed maps revealing themselves as momentary activity vs. inactivity of the neurons. Thus, lines in all configurations, such as straight and curvilinear, appear when neurons are in a certain spatial distribution and stand out against the ones not active. Similarly, the vertical columns in conjunction with other layers have other input and output functions. That geometric patterns visually perceived are also a matter of mapping becomes evident in how specific patterns such as a cross or circle that get mapped on to the retina of the eye are preserved as they are signalled forward to the visual cortices. The analogy to electronic billboards is interesting to

understand the kind of rapidly changing mapping going on in the brain, as everything within the body and from outside is mapped in momentary patterns.

The brain is in as much defined as a “born cartographer”, whereby the “cartography began with mapping of the body inside which the brain sits” (2010:64). This is what accounts for the feelings finally. Even what comes from the external world via the sensory organs is through the body. The sensory organs are a part of the body, devices as Damasio calls them, portals on the outside of the body. All signals arriving there must pass through these portals and enter the body before being relayed to the brain. The body itself contributes finally regarding how they are mapped in the brain. Mapping also includes the very structures that support the sensory organs, namely their surrounding tissue, muscles and skin, for instance. This indicates that changes occurring at the level of these body parts must be relayed to the brain and maps must represent these bodily changes. As was cited in Chapter 2 of Part I, Johnson refers to how neural structures are analogues to the structures in the outside world. Given Damasio’s explications, these structural analogues are also a matter of the body and how it contributes to how signals arriving at the sensory devices are relayed to the brain and mapped there, assembled in a setting of movement as was cited above. Changes occurring there must be structural changes enabled by movement. A point to keep in mind, while examining movement itself.

Damasio also discusses how the brain, furthermore, constructs maps of objects recalled from inside the brain’s memory bank, thus, both of the concrete entities actually present as well as abstract. Or maps of itself making maps, that are additional aspects of spatial relationships, their descriptions revealing the kind of spatial image schematic structures discussed in Chapter 2 Part I, such as trajectories, paths, relationship of objects, positions. Others find their way into musical compositions or mathematical descriptions, signs and symbols. This reflects the kind of images discussed in image schematic terms.

We see here an account of how the body-brain relationship that was about enabling survival and governing behaviour in all life-threatening situations holds forth in the refined body-mapping of both the interior and exterior, with the inner opening the way to also know the outer as Damasio thus notes. The connection to the others occurs not just through “visual images, language, and logical inference but also via something deeper in our flesh” (2010:106). This is defined as a four-way translation among actual movement, somatosensory

representations of movement, visual representations of movement and memory. Damasio uses an experience of his walking like another person that brought forth a visual image and thoughts of the person as an example of this assessment. The essential message that Damasio sees is that a representation of the body in the brain, i.e. representing one's own body, enables one to simulate the body states of others and, thus, enable feelings related to empathy, a notion that is coined in the "as-if body loop" (2003:115). The explanations on mapping, in as much, provide clear insights into where structural aspects seen to constitute meaning in gestures are rooted, including the bodily grounding of mimetic/cognitive semiotic and cognitive conceptual operations. There is, thereby, an insight into how whatever one experiences is via one's own body. Every experience is grounded first and foremost therein. I also read the function of movement thereby, not only external movements of the body, but what is there as movement within.

Finally, the central relevance in Damasio's account is the notion that accompanying every kind of mapping is the body mapping itself (2010:92f). A communication between the body and brain that goes both ways, which is, however, hardly symmetrical, as Damasio notes. The body-to-brain signals, provided by way of neural and chemical means are extremely wide in range, with everything happening in the body being relayed to the brain, so it can "alert the brain" about important changes in its state and structure. This, as was seen earlier, is important for its very maintenance and survival. As will be seen below, the brain has information about the stable state as well as changes occurring therein, which are what feelings are about. The brain, on the other hand, communicates with the body to give it commands regarding changes necessary so as to "maintain its keel". "Whenever it is called for, it also tells the body how to construct an emotional state" (2010:94) is a most insightful statement. This communication, as Damasio notes, is not just about quantitative aspects, but also a "qualitative aspect to the results of the transmission" (2010:97, emphasis in original). The state of the body is felt as being in some qualitative way, ranging from pain to pleasure, and defined in more substantial terms such as "energy or lassitude, of physical lightness or heaviness; of unimpeded flow or resistance, of enthusiasm or discouragement". We see here not only qualities of movement, but also the very bodily descriptions in emotional states that have been discussed from the perspective of NS in the previous chapter.

As mentioned above, images are maps experienced. It is the brain's "map-making" ability that generates them. Images are, as Damasio defines, the source of the "objects-to-be-known in the

conscious mind” (2010:187), whether they are of the external or internal kind. However, as was also emphasised, all images, internal and external, arise in the body, then the sensory organs, as portals to the external world, are also part of the body. The consequence of the “incessant mapping” is the mind, with the momentary maps constituting images therein – brief images (2010:70). Maps and images linked in the mind constitute the very emergence of the mind. In other words, experiencing maps as images is the activity of the mind. It is consciousness emerging forth from this that enables the experiencing of maps as images, to manipulate and apply reasoning. These are consciously known to us as the various sensory experiences, and the pains and pleasures mentioned above. But as Damasio explains, it is the experience as a private inner activity of the mind that needs to be explained: An activity which is defined as extant a long time before consciousness became operative. In this understanding, there are images of the body in the brain as maps that are experienced or felt.

Thus, given the three kinds of mapping cited above, images are also of different kinds, of all sensory varieties, of any object or action. While all are defined as being included in a normal mind, they are not all the same or equal, and not always conscious, but essentially of what is being processed in the brain at any moment. While most of the images of objects-to-be-known are defined as conventional, resulting from mapping operations of externally-tuned senses, Damasio emphasises that images of the organism, i.e. originating in the body’s interior and representing aspects of body in action, the introceptive and proprioceptive ones, are special and a “special achievement” (2010:188). Thus, they are spontaneously and naturally felt images of the body, prior to the building of consciousness. Their function is to map every part of the body continuously, thus, enabling the brain to coordinate physiological states: The ‘flesh’ images sent to the body-sensing regions of the central nervous system (2003:195). They build the substrate for all other maps, also of the outside world. Thus, images inherently acquire a felt quality that is tied to the bodily states.

I had earlier cited Johnson when referring to the felt quality of image schemas (1987, 2007), and mentioned that it needs to be examined in terms of movement-based experiences. What we gather from Damasio’s understanding of images is an important component in terms of feelings and their generation at the level of the body, their foundational association to the mind and consciousness given by the brain structures, and how they have evolved in the twofold interactions which are emphasised in their intro- and exteroceptive dimensions time and again (2003, 2010). It is the bodily dimensions of these that is of interest here. As I will

further examine, these explanations give us sound insights into just these dimensions of feelings. Essentially, we should recognise both an understanding for and the relevance of feelings in the very term sensing that Damasio uses as a minimal feature cited above. It is evident from the examples of the amoeba that Johnson cites and mentioned in Chapter 2 of Part I, and it is evident from Damasio's even more explicit definition "poke an amoeba and it will shrink away from the poke" (2010:257). This is the function of feeling, the sensitivity given in "forerunners" at the cellular level itself to threats or intrusions, and a feeling that corresponds with interactions with the world.

This brings us to Damasio's elucidation of two kinds of feelings connected to the images of the body that accompany all other images. They reflect two notions of experiencing the bodily states, essentially reflecting two aspects that Damasio discusses when figuring out how perceptual maps come to have feelings. These will be presented in the next section, given they lead to some very interesting revelations.

2.2.3 Feelings twofold – primordial, emotional

At the beginning of this section, we saw how Damasio describes feelings in terms of emotional feelings that relate to bodily states of emotions; these have risen as regulatory factors necessary for responding to life-threatening aspects and leading to well-being. There are three states related to emotions that are differentiated, of emotions, of feelings and of feelings that become conscious or come into the consciousness of the one who is feeling. When discussing consciousness and the self, Damasio introduces a further dimension of feelings, namely, primordial feelings, to the discussion (2010:101, 185, emphasis in original). This is a baseline for all feelings in relation to the introceptive and proprioceptive maps/images from the body that were mentioned above. The former stem from signals from the internal milieu and viscera, i.e. organs, informing about the ongoing state. Primordial feelings are a by-product of these. They "result from nothing else but the living body" (2010:101), reflecting it as "a neural description of relatively stable aspect of the organism" (2010:181). They are the most primitive feelings underlying all others, including the feelings that emerge from emotions. Thus, all feelings of emotions are variations of the ongoing primordial feelings.

Thus, while primordial feelings are constituted from the images of the introceptive variety, and those of the proprioceptive ones together with these constitute the so-called body feelings, feelings of emotions are defined as “variations of complex body feelings caused by and referred to a specific object”. As we will see, emotions are triggered in various ways, an aspect that is echoed in the notion of *vibhāvas* in the NS. Given that emotions are understood as changes in the bodily states, emotional feelings are defined as relating to these changes; specifically, to changes that occur in the stable bodily states that are the source for primordial feelings. Damasio defines primordial feelings, therefore, as the substrate on which emotional feelings occur. The latter are essentially “the conscious readout of our body states as modified by emotions” (2010:56). Finally, all other images are grounded in these two images, given feelings also constitute specific kinds of images. Thus, when the third variety, the images of the external world, are defined as being “normally accompanied” by these first two varieties of images (2010:76), it should be understood as by the feelings these images are essentially associated with. What we discern herein is a twofold notion of feelings, encompassing a process from the state of primordial feelings to a state of emotions, to a state of emotional feelings. This is an extremely important insight to consider for the notion of meaning in the NS. It also has implications for understanding the kind of meaning discussed in Part I of this study.

Feelings are, thus, understood as being potentially and perpetually available, but only noticeable when significant changes occur in the relatively stable states (2010:104). The notion of the pleasantness-unpleasantness cited here as experience is the range called elsewhere pain and pleasure, or even joys and sorrows (2003). In other words, feelings that are there already, primordial and tied to the ongoing activity of the body, become noticeable as changes that occur in emotional states in conjunction with emotions. Thus, what are finally experienced as feelings are firstly and primarily the emotional ones. In terms of brain mechanisms themselves, primordial feelings are seen to be “based on the operation of upper-brain-stem nuclei, which are part and parcel of the life-regulation machinery” (2010:101). Damasio defines them as important for the emergence of self and the notion of experience attached to it. While the related processes happen below levels of consciousness, the mapping in the brain of the homeostatic range can be experienced with qualities related to pain or pleasure, reward or punishment. In brains that can map and have developed to have minds and consciousness, these can become conscious, associated with different kinds of negative or

positive feelings. These feelings serve as “barometers of life management” and have influenced, as Damasio adds, societies and cultures, their workings and artefacts.

Changes are occurring constantly, and no images are without value, a value given by emotions. Thus, there is a constant experience of feelings related to images, conscious or not, with an evaluation going on simultaneously at the non-conscious levels. Damasio explains this evaluation as a salience that is given to images in their ongoing flow in the mind. There is a coherence therein like a narrative, with images that matter in terms of value for the individual that come from the original set of dispositions, namely the life regulation, mentioned earlier, becoming enhanced and given saliency. While there is mostly a logic when images interrelate to the external world, revealing a coherent narrative, there is also more than that. There is an underlying editing occurring, defined as a “spontaneous form of editing” (2010:256), where the need to organise the images to become coherent is coupled with the fact that many images never come into conscious experience, as not all can be attended to in the limited “display space” (2010:174) of consciousness. In Damasio’s terms, this has probably brought forth an automatic selection based on the most valuable images at the non-conscious levels.

In this context, the following definition is of specific interest and will be cited in full: “Especially valuable images, given their importance for survival, were ‘highlighted’ by emotional factors. The brain probably achieves this highlighting by generating an emotional state that accompanies the image in a parallel track. The degree of emotion serves as a ‘marker’ for the relative importance of the image” (2010:174f). It is understood as a value-based selection executed by the brain and the ensuing edited continuity of images. It does not need to be a fully formed emotion overtly experienced as feeling, but an emotion-related signal the subject is not aware of.

What we discern here is that emotions give value and enable the ordering of images according to their salience depending primarily on life-regulatory needs. Such a value is grounded in the feelings generated as a bodily change that occurs as an emotion. It need not be a matter of conscious awareness. Salience has a degree, and it is the degree of intensity that we should understand as leading to feeling becoming a conscious experience. Perhaps it should be added here that the emotion-related signal is essentially a bodily signal, given emotion is understood as a bodily state. Considering the swiftness required for responses, as was noted earlier,

perhaps the swiftness and, thus, efficiency when the body itself responds and regulates life's processes as emotive responses must have mattered.

Damasio's aim in explaining, as one sees, is to arrive at a definition of consciousness. But in doing so, it is the "vast unconscious" (2010:175) that we see as becoming evident, which is defined as where such a value-based selection evolved long before consciousness and must have been related to life management at very early states, continuing to be there "under the limited conscious existence", and still influencing thinking and actions. Damasio poses the question: Why did consciousness prevail in the first place? He answers it by suggesting the possibility that generating, orienting and organising images, interior and exterior, increased life management and survival. Feelings were also not just felt but could also be known in their context. Its foundations are, nevertheless, the unconscious processes that lead to feelings.

Feelings, as we can see, are an essential part of existence, an experience of a fundamental kind, that need not be conscious, but are there, rooted in the bodily. One of the stable bodily state and the other of the changes occurring in it, both ongoing. We, therefore, see what far-reaching implications feelings have in arriving at an understanding of embodied experience. There are two further discussions to understanding the two kinds of feelings that, though discussed with the aim of coming to an understanding of the neurobiology of consciousness, as Damasio (2010:243) formulates it, are of interest here. They address the bodily grounding of the two notions of feelings in what I think is an important differentiation.

2.2.4 The twofold bodily grounding of feelings

2.2.4.1 Qualia I – emotional experience

As we saw earlier, one kind of feeling arises from the bodily states of emotions. The brain has the ability not only to map objects, as was seen above, but also to respond to signals from these maps, triggering the bodily changes that lead to feelings. This is how images acquire different values, as noted above, depending on the emotions they provoke. Going into a few details of how Damasio (2003:68ff, 2003:63, 2010:108-125/255) lays out the bodily processes that effect these changes is useful to understand the stages through which emotional experience ensues. As we will see, apart from the insights into the brain structures in enabling these, there are parallels to the descriptions in NS.

From a neuro-anatomical and neuro-physiological perspective, the process begins with the appearance in the sensory areas of an object, an ECS as Damasio defines it. An evaluation phase sets in, in the most basic terms, about the danger the object entails. It is emphasised that this evaluation need not be a conscious one. Most of the time it is something that happens without one's awareness and without one even becoming aware of the object. There is, nevertheless, an evaluation by the organism of a situation that may be potentially harmful to it. As was also seen above, every object has a value which is primarily grounded in a value that stems from those basic physiological needs. This can trigger an emotion, whether strong or weak, good or bad and consciously or not. Some are evolutionary and others are not, being associated by our brains through individual experiences with such emotionally charged objects. More complex organisms can modulate these reactions. In all the cases, there need not be an overt emotional response to the ECS. On the other hand, other similar stimuli through recall from memory can enhance the intensity of the emotion, modify it or effect other emotions. This depends upon the cognitive processes accompanying these emotions. They can be specific thoughts, on certain themes, and so forth. These objects or stimuli can be real, i.e. concrete, or from memory. However, stimuli can also be internal, as in the case of the background emotions, for instance, given due to the brain's monitoring of the physiological needs and responding to them accordingly. They accompany any other triggering factor, as we gather from Damasio's insights.

Neural signals of specific configurations, based on the appearance of an object in the sensory areas, are sent through several parallel channels to the structures, such as the amygdala and other brain areas, that become active when the specific configurations fit, like a key in a lock (Damasio, 2010:113). The amygdala is, for instance, attributed with triggering emotions such as fear and anger, primary emotions in early evolutionarily areas of the brain. Particularly stimuli pertaining to fear need not consciously be noticed. In others, such as the ventral medial prefrontal cortex, the emotional relevance of more complex stimuli is identified which trigger social emotions. Damasio lists compassion or sorrow, or emotions that have gained relevance due to experiences in life. There are also different neuronal firings in reaction to pleasant and unpleasant images, and a right and left hemispherical asymmetry where emotions and feelings are concerned in general. There is a dominance of the right hemispherical somatosensory cortex for the composite mapping of bodily states and, thus, emotions as feelings. Damasio thinks that perhaps the asymmetry is because the left

hemispherical somatosensory cortex has a large part to play in language and speech (2003:117).

Thus, the brain has devices, “emotion-triggering regions”, that can respond to signals from the “image-making regions”, directly or after further processing (2010:255). If configurations fit those regions, and a ECS is qualified as such, there is a series of events, a “cascade” that is “enacted” in other parts of the brain and, finally, in the body. These include the hypothalamus, understood as an executor of chemical reactions, by releasing chemical molecules directly or through the pituitary gland that alter bodily conditions, such as the function of the viscera and the central nervous system. These processes run automatically in the body and in a stereotypical manner. Finally, a whole “volley” of neuronal and chemical reactions in all emotions work upon the internal milieu, the inner organs and the musculoskeletal system over a period of time and in specific patterns, resulting in bodily responses, such as facial expressions, stances, vocalizations, specific behaviour patterns, such as running or freezing, or body attitudes, which one normally associates with emotions. These bodily responses are ‘enacted’ (2003: 63). These are the descriptions also found in NS regarding the consequents.

There is, thus, a whole gamut of changes that become evident here. These immediate changes evoked in the process that is the emotion are mapped in the nervous system, in the somatosensory regions of brain to be specific, as the changed bodily state at that moment. Feelings are then the immediate response of the emotion, according to Damasio. When the maps reach a certain configuration, they are recognised as feelings (2003:65). Not so much as mental states or thoughts in an abstract sense, as much as perceiving a state of the body and related thoughts, as was mentioned above at the beginning of this section.

Thus, feelings rooted in changes that occur in the body, are associated with experiences between pain and pleasure, joys and sorrows, positive and negative, as “feelings of myriad emotions and related states” (Damasio, 2003: 3). According to Damasio, there are no conscious images that are not “accompanied by an obedient choir of emotions and consequent feelings” (2010:254) – this sounds almost like the *retinue* that accompanies a *sthāyibhāva* or permanent state defined in the NS and discussed in Chapter 1. There is always some shade of an emotion as a subjective experience. In other words, we must understand everything as having an emotional connotation. The explanations above tell us how we can understand

emotional experience as arising from primordially given bodily processes, which can be termed bodily emotional states. Damasio calls this level of feelings, namely, emotional feelings, Qualia I (2010:253-256).

2.2.4.2 Qualia II – the primordial level

Having defined emotional feelings, Damasio continues by addressing the question of what makes the perceptual maps felt in the first place. Consequently, he thinks it is necessary to go down to the level of primordial feelings themselves, to the level where the maps are of the bodily state, the stable states against which changes stand forth as emotional feelings. He puts forth several possibilities that reflect a fundamental relevance that primordial feelings must have at the very neural, cellular level of activity that is involved in the transmission of signals from the body's interior to the brain.

Firstly, in defining the neurobiology of the mind, he discusses that feelings, images and mind are seen to occur at the level of the brain-stem nuclei (2010:76). The maps generated by these structures, simple and “devoid of spatial detail”, must result in feelings such as pain and pleasure, based on the direct signalling from the body that takes place there, coupled with “motor structures with which they loop back to the body”. Given their highly interconnected nature and the fact that they receive the highly complex, integrated signals of the body being transmitted to the brain, a “functional fusion of body states and perceptual states” must be enacted, where the signals are not separable from states of the organism (2010:257). Neurons that transmit the signals “would have such an intimate association with the interior structures” that they “would imitate life so thoroughly that they become one with it”; becoming the very “extensions of the flesh” they are about.

The other possibility in this regard are the neuron circuits themselves. Given that neurons are not just receivers of signals but are organically similar to living cells, even if differing functionally, the physical state resides there. Cells show some aspects that single-cell organisms have in terms of sensitivity when something changes in their interior. I cited Damasio's reference to poking the amoeba earlier. Considering this, the modifications and amplifications of such felt changes via larger circuits of cells must lead to a “protofeeling” (2010:258, emphasis in original). This is an important insight to hold for the results of my analysis of emotive movement to be presented in the next chapter.

Another answer that Damasio reflects on for how perceptual maps could feel is the fact that they “ought to feel like something” (2010:259, emphasis in original) in order to execute their regulatory function effectively. Perhaps early organisms had body states similar to pain and pleasure that were portrayed as such in later evolved nervous systems with detailed neural signals in a close bond with bodily aspects. These should feel different given they are a mapping of different body states. Alternatively, the possibility might lie in the chemical molecules themselves that convey the state of the body’s interior to the brain and activate neurons in receptive areas.

While these considerations pertain to the maps of the interior kind, regarding the exterior ones provided by the sensory organs, the brain, as Damasio specifies, is not only receiving and mapping the information coming to the sensory organs but also what arrives simultaneously as changes from the regions that surround the sensory organs, such as the skin, membranes, tissues and muscles. Due to their interaction with physical signals coming from the external world, the activity of each organ is altered depending upon its structure and functionality. In all probability, as Damasio defines it, one feels the sound in the ears or there is a feeling texture to seeing and so forth (2010:260f). At the same time, in all cases, both for interior and exterior images, the loop that is enabled by the brain that signals back to where the signals are coming from must enable the kind of functional linkage between the body and brain, enabling, in the case of the sense organs, further reverberating processes, adding to “the integration of inner and outer worlds” (2010:261). Since no object is without value or emotional response, the mapping causes changes in the body which, in turn, are mapped as emotional feeling states in the brain, namely, the feelings as Qualia I responses related to emotional experience.

In this sense, maps that are neural and physical must enable feeling, coined Qualia II (2010:256). Both the feelings that must arise at the very fundamental neural-cellular level and the felt qualities associated with the mapping and related images of the external world, namely sensory experiences, are subsumed in this. Finally, both Qualia I (the emotional feeling) and Qualia II (the more primordial feeling) together are defined as constructing the mind and constituting part of the self process. Yet, it is the Qualia II that is the foundation for the first stage, the “protoself”, and thus “sits astride mind and self, in a hybrid transition” (2010:262). The notion of Qualia, according to Damasio, includes the “neural design” that

enables it in the first place. It is this neural design that, as interestingly worded, “provides the brain with felt perceptions, a sense of pure experience” (ibid) .

The notion of Qualia itself is termed and discussed from the perspective of understanding the neurobiology of consciousness, which is Damasio’s aim. However, for the larger scope of this study, there are several aspects to which I will return during my examination and analysis of emotions, emotive movement and its relevance for meaning. For now, there are two aspects that stand forth. Firstly, the function and defining factors of the twofold notion of feelings finds elucidation in bodily terms. Secondly, an observation after the discussion on Qualia which I think is particularly central for the analysis to be presented in Chapter 3 is the following statement, which I think sums up the notion of bodily movement-based experiences. Damasio notes that there is a blatant underestimation of the “micro-nooks and micro-crannies” of our bodies and that “microworlds of form and function” can be signalled to the brain (2010:263, emphasis added). As Damasio further notes, such signalling serves different purposes, first and foremost, of the regulatory kind. Its “obvious result” is the feelings of emotions, even if feelings define largely our conscious life.

Briefly summarizing, Damasio presents a two-fold notion of feelings, primordial and emotional, from a perspective offered by brain research on emotions that at the same time emphasises what is happening in the body, but at two levels. In the discussion above, one discerns how primordial feelings might be grounded at the very basic level of cellular, molecular activity given in ongoing bodily processes and relayed to the brain, with such a primordial level of feeling, or perhaps the better term sensing, that Damasio also uses, eventually not surfacing into, let us put it this way, some kind of overt, felt experience unless changed due to emotions. From Damasio’s explications we gather that at this level of emotional feelings, feeling is projected or magnified against the background of the primordial sensing occurring, with the possibility of surfacing to conscious experience as well. A level of conscious experience at which we as humans with mind and reasoning would give the feelings terms related to emotions. If this is so, would emotional experience as an immediate form of experience serve as a stepping stone for the more primordial or innate level of experience? Having laid out Damasio’s notion of a twofold understanding of feelings, I will turn to how this understanding may impact the *bhāva-rasa* concept of meaning postulated in the NS. It has repercussions for understanding, firstly, the notion of experience itself, before

going into a detailed analysis of the bodily grounding emotions enable, as both Damasio's research and the perspective from NS shows.

2.2.5 Two-fold feelings and the *bhāva-rasa* continuum

2.2.5.1 *Bhāva* and emotional feeling

Firstly, let us go back to the notion of emotional feeling. This state and how it must surface to awareness depends, as defined by Damasio and cited earlier, on its intensity, which, in turn, lies in the salience or value attached to the image that generates it; specifically, a value an object may gain in any given instance based on immediate needs, thus, triggering specific responses related to fulfilling these. The object itself could either be related to the body and its internal processes or any entity from the external world where the value may not be immediately biological, but the process of change that is triggered, nevertheless, is similar to and also grounded in the primordial processes pertaining to need-based value and salience emerging from the physiological. It is the bodily changes occurring thereby, and becoming externalised, for example, in gestures, facial expression and behaviour patterns, that generate feelings as emotional experience.

This is what is indicated in the notion of *bhāva* defined in the NS. The factor instilling meaning on the dramatic theme reveals that it is brought to experience by the depiction of emotional states, the different *bhāvas*. We have seen how these emotional states relate to the classification of emotions given by Damasio, from background to social. As also evident from the *vibhāvas* or determinants, they must be understood as triggered by objects, internal and external. We see not only the *vibhāvas* as being objects, situations, actions, but also states, such as an ailment or sickness, that would be the inner bodily processes. They are given value and provoke emotions, just like Damasio's ECS, that trigger bodily changes that constitute the emotion. In the notion of *anubhāvas*, the consequents, we see these bodily responses mirroring the same ones Damasio lists, namely, changes such as facial expressions, stances, vocalizations, specific behaviour patterns, such as running or freezing, or body attitudes. The depiction of *anubhāvas* is by way of gestures, verbalisations and temperamental activities that correspond to what constitutes feelings defined at the outset, namely as being in certain bodily states and having certain thoughts pertaining to specific themes. We have seen how NS attributes a felt quality to the consequents, which in effect reflect bodily changes, grounded in

inner processes. In this sense, there is the fundamental understanding of emotional feeling or emotional experience here, a Qualia I in Damasio's definition.

In the notion of *bhāva* as defined in the NS, a primary nature of emotional experience is, thus, accessed and accorded meaning. As was seen in the definition in Chapter 1, it is an experience that pervades and is congenial to the heart. While the notion of *bhāva*, is in theory interpreted as a mental experience for the spectator, or a mental state as defined by Tarlekar (1975:61), it is, nevertheless, produced in practice through the bodily, with an experience enabled by the felt quality entailed in bringing to expression the emotional states in their bodily manifestations. This means, for the performers themselves, it is necessary to bring forth not only an imitation of emotional expression, but the movement qualities entailed therein, as was briefly analysed in Chapter 3 of Part I for manual gestures. Meaning as being instilled by way of such emotive expression reflects an accessing of just the kind of emotional experience, which is where feelings are essentially experienced.

At the same time, it may be added, that the divide between the mental and the bodily is not given in the Indian world-view laid out in the ancient scriptures as Vatsyayan (1996:54) states. Both the body and mind are entailed in the term *sarira*. As cited earlier this is seen in how the senses move inwards and expand outwards as the mind. Viswanadham Satyanarayana²⁷, who in personal correspondence provided relevant interpretations of the ancient scriptures to understand the insights provided in the NS, sees the mind revealed in the very notion of the physical manifestation of *bhāvas*. The NS states in Chapter 1 that the insights for performing arts have been derived from the four oldest texts, the *vedas*²⁸. The NS states that the notion of *rasas* has been derived from the fourth *veda* – the *atharva veda*, and Viswanadham explains that *bhāva* is placed in the context of creation itself. *Bhāva* was the very beginning, causing movement accompanied by sound in the primordial state of stillness. The experience provided by *bhāva* is in this sense the very first kind of experience enabled in a primordial sense. In the individual, *bhāva* is defined as being born in the mind, its physical manifestation, however, revealing the mind.

Damasio's observations about emotions are similar, in the sense of emotion being the beginning and action at the beginning of emotion, as cited earlier. It is also a mental image

²⁷ Personal correspondence. Vedic scholar. My citations from Viswanadham Satyanarayana stem from notes during personal seminars at the Dance Department of University of Hyderabad in 2009.

²⁸ For insights into how NS relates to the ancient scriptures, Vatsyayan, 1996, is a useful source.

that triggers an emotion. Its experience coming from the bodily changes as Qualia constructing the mind. In both perspectives, therefore, there is a primordial function given to emotions by means of their physical manifestations in enabling a primary kind of experience, which, according to the NS, is understood as meaning. As we discern from the explanation in the NS, it can, however, only be accessed by way of the experience provided by the emotion, by way of emotional experience. What does this mean in terms of primordial feelings?

2.2.5.2 *Rasa* – the primordial feeling?

The second implication of Damasio's twofold understanding of feelings is the understanding of primordial feeling and the notion of Qualia II attributed to it. Firstly we have seen that it is defined as a baseline feeling even below the emotional feeling, of the state of the actual body, stable and unperturbed by changes caused by emotions. It is defined as the sense of the body as it is. Primordial feelings are at the very bottom-line of all feelings, all images, the substrate of all these. And in discussing Qualia II kind of experience which is attributed to primordial feelings, Damasio (2010:262) as cited above, defines neural design as providing the brain with felt perceptions of its internal states as they are, which is further defined as a sense of pure experience. Let me now turn to the understanding of *rasa* given in the NS. Here as well, there is also a notion of pure experience, in the sense that it is not the experience of the emotion itself even if it originates in the experience of the emotion; it is understood as a relish thereof. Citing Viswanadham again, the experience of emotions recreated through corporeal expression in the context of performance provides pleasure or *sukha*-happiness to the spectators. This is the notion of relish defined in the NS as presented in detail in the Chapter preceding this. It is, therefore, different to when emotions are actually personally experienced. Their actual experience leading to *dukha*-sorrow.

This brings us to Damasio's explanations of feelings and the notion of the 'as-if-body-loop' (2003:115). In the ability to map every kind of object, event, internal and external, the brain is also capable of mapping its own maps or modifying maps. Therefore, leading at times to not precisely mapping the actual state of the body in any given moment. It can not only "transform body states", but also "most dramatically, simulate bodily states" (2010:93), even when they have not occurred. This can be due to other brain regions interfering directly with signalling activity in the somatosensory regions, or due to modifications in the transmission of signals. Thus, bodily emotional states can be simulated when others experience them or when

one hears about them, caused by the modifications in mapping. These “false” body states get enacted in the body sensing areas (Damasio, 2003:117f).

Damasio discusses how the configurations that map feeling can range between joys and sorrows, due to their differentiated mapping in the brain. This is connected with the neural patterns that are represented in the somatosensory regions of the brain. The bodily activities that are mapped determine these, giving them a specific intensity and temporality, due to which a feeling feels like what it feels. States of bodily equilibrium are signified by joy, but these states can be actually happening or as if happening (2003:137f). Whereas the maps related to sorrow, which reflect disequilibrium may mostly be of actual bodily states. However, the quality of the feelings must also depend on the structure of the neurons themselves, the medium they arise from informing the quality of experience (2003:129). We saw how Damasio defines what this could mean at the cellular-like neural level. Another interesting observation, that would perhaps account for why emotions experienced in a performative context would lead to feelings of joy, is enabled in the further reading of how Damasio explicates this notion of as-if-loop. For instance, the fast speed of these mechanisms brings thought and effected feeling close together in time more easily than if feelings were solely dependent on actual body changes (2003:119). There is thus more to be fleshed about the understanding of *rasa*, when thus placed in context with brain research on emotions.

Similarly, in the listings presented in Chapter 1, often *anubhāvas* such as horripilation or tears have been mentioned, and not necessarily only related to emotions that would be on the sorrow end of the range. These are associated with the experience of *rasa*. In practice, it is understood and experienced by the spectator as much as the performer, who in the sense of the discussions here, must enable the experience to arise through emotive expression, in other words by bringing forth the bodily changes occurring in emotions. And yet both the performer and spectator transcend the experience of an actual emotional state as such. Enabling the experience of *rasa* is finally based on one’s own experience as to how well such an experience is enabled. And yet, it can be accessed only when bringing forth emotional expression and enabling emotions to get established as experience, in other words, when emotional feelings get established. Through practise the performer experiences the interplay of these, and brings forth a *rasa* directly, by way of the bodily states related directly to them.

In other words, *rasa* as the root experience, latent and potentially present, is necessary. As we have seen, whereas *rasa* can be experienced only when *bhāva* is experienced, it is still defined as the root in which all *bhāvas* are stabilized. Tarlekar interprets it as a latent mental state (1975:54), but a mental state that perhaps fits what Damasio elucidates as mind and experience rooted in the body. The NS specifically defines *rasa* as an experience that pervades the body like fire pervades dry wood. This itself is an indication of the bodily dimension of experience, of a thorough pervading of the body that could be defined as being at micro levels, echoing Damasio's notion of microworlds of form and function in the body. There is the notion of experience that goes deeper down in a bodily sense, indicating the stable state of bodily being that is reflected in Damasio's definition of primordial feelings. Experiencing *rasa* is, in effect, accessing the primordial feelings.

As the experience of *rasa* is defined, it is enabled only when emotional experience as *bhāva* is established. Emotional experience in this sense is, so to say, a stepping stone to deeper levels of experience, there where all *bhāvas* are stabilised. In other words there where emotions are rooted and emotional experiences must arise from. In Damasio's terms, where primordial feelings arise. They finally "result from nothing else but the living body" (2010:101) as was cited earlier, as "a neural description of relatively stable aspect of the organism" (2010:181), perhaps generated at those micro-levels defined, for instance, in neural-cellular terms. In this sense if *bhāva* leads to *rasa*, to an experience that pervades the body, it must be an experience of the stable aspect at the internal level at micro-levels of the body, related to the primordial notion of feelings. Finally, in Damasio's postulations in terms of pure experience that is enabled by the neural design behind such perceptual experiences, I see the implications for thus understanding *rasa* as just such an experience, the definitions in NS and as known from practise in turn enabling an understanding of what this pure experience is that pervades the body in a unique way.

The function behind the practise of performing arts as enabling *bhāva* to lead to *rasa* as a means of establishing or instilling meaning as experience, is then primarily an accessing of this bodily primordial dimension of experience. It finally lies in how the primordial level where all feelings arise, or must ultimately originate, is experienced in a bodily way, accessible however, through experiencing emotional states. Then it is emotional feeling that lends itself to experience first and foremost, as echoed in Damasio's postulations as well. This is due to the bodily changes that carry a felt quality or become feelings, given how the body-

brain have evolved to work together. Damasio's postulations investigate explaining both varieties of feelings from the body-brain perspective, which are finally placed in the larger discussion on self and consciousness. Self and consciousness are central themes even in the Indian understanding of body-mind relations and more, discussed in ancient texts that are cited with regard to bodily disciplines, whether performing arts as discussed here, or the practises such as Yoga, going into which is beyond the scope and not the aim of this study. As cited in Part I, the aim is to go down to the bottom-line of bodily experiences.

The insights that Damasio provides regarding how images, emotions and feelings relate, thus, have repercussions at several levels. Illustrated at this point is how the insights provided by NS and the world-view it is embedded in are substantiated by current neuro-scientific research. At the same time, the Indian performing arts offers a perspective of how emotions can be used in a performing arts context to generate the feelings they entail, leading just to those primordial levels of experience that Damasio formulates. Of interest is thereby the understanding of body-based images that constitute feelings and hold forth in all images, and the idea that primordial feelings and the variations caused by emotions accompany all images in the mind as "an observant chorus" (2010:193). Damasio often uses the metaphor of music for how it feels. And yet, given the clearly bodily basis evident here, I would define it as an observant chorus grounded in the rumblings of movement that needs elucidation. Then, if emotion is at the beginning, and action at the beginning of emotion, and emotion causes perturbations in an otherwise stable state, in the Indian world-view in stillness itself, then movement emergent as change must matter for experience to surface at a primordial level.

Having looked at the primary function of emotions for experience as feeling, perhaps at very primordial levels, and placing these insights in the context of the *bhāva-rasa* relationship, the discussion underscores the need for looking at the relevance given to meaning as emotional experience and particularly the embodied experiences underlying meaning in terms of movement-based experiences. Then we see here that emotional experience or feelings as felt experience is what is accessible and could be a kind of stepping stone for even more basic experiences. We have seen how the surfacing of such experience depends upon the degree of intensity in the bodily states itself that must lie in the salience given to an object triggering these. Finally, any object that gains value, gains attention by way of a felt quality, because of the bodily responses triggered. Just as a movement when it is actually executed and to the extent it is executed, gains attention, with a felt quality entailed in it also gaining attention or

coming to awareness. Emotive movement must function in the same way in the very generation of emotional feelings or experience. Having said this, I return to the bodily processes inner to outer that according to Damasio characterise emotions essentially and that are seen to matter for such experience. Given they relate to the notion of *anubhāvas*, as discussed earlier, it will enable taking the discussion further from the perspective of NS.

2.3 Emotions are physical processes – inner to outer

At the beginning of this chapter, the classification of emotions and their hierarchical relationship as evident in the NS was placed in correspondence to Damasio's postulations. This shed light not only on the very primordial grounding of emotions, but the categorisation of emotions, as Damasio sees it, based on how they reveal themselves in bodily term, a body-based process so to say. Those very basic bodily states that were mentioned briefly, such as reflexes, metabolism or immune responses, occur without one being aware of them or revealing themselves in an outer manner. As Damasio notes, without requiring thought or questioning. These are the simple levels, evolved with life as elementary functions that are regulatory responses, essential to maintain life, particularly at the physiological level. Thus, they are chemical or mechanical processes, reactions that determine heartbeat, blood pressure or balancing the internal milieu as in metabolism. They could be basic reflexes, such as reactions to sudden noises, touch, heat or cold, or immune responses. As we see here, even if there is no manifestation in an outer manner, there is activity within the body, the changes occurring surely revealing themselves as a subjective felt quality if they are prominent enough, like feeling the heartbeat only when it is pronounced for some reason. There is a very interesting gesture in Bharatanatyam, the dance theatre style that I was analysing in Part I. It is with a hand-form called *sandamsha*, where finger tips are brought together and separated in quick succession. BH placed in front of the chest, palms oriented forward with these finger movements for the depiction of great fear reveals a conceptualisation of gestural meaning based on what is felt as heartbeat, in cognitive semiotic terms as put forward by Mittelberg, a HAND-BODY INDEX.

At the slightly more complex level, emotions may remain partly concealed, but if revealing themselves, then as pain or desire. They are connected with reward and punishment, with such mechanisms as the organism's advancing and retreating reactions in certain situations or with certain objects and grounded in the natural automatic defence mechanisms at the level of

tissue. Damasio places these on the tree illustration cited earlier along the middle branches. The motivations and drives that become more outwardly are at the next higher level. These are reactions triggered by hunger, thirst, play and curiosity and determine the state that influences the organism. It needs to go into the world, to look for food. Where incentives are required as Damasio defines it (2010:50). All these are the sum of automatically monitored life regulatory processes, the homeostatic processes, the levels of life regulation (1999:55). These can be called emotions in a broader sense, given their common regulatory function for the organism. These are biologically seen reactions that are specific to a situation that induces them, such as flight or freezing, and the regulation of the internal state in preparation for the reaction.

In this sense, they have evolved as necessary mechanisms for survival and in neurobiological terms that hold forth at the next complex levels, emerging as ‘emotions proper’ (2003:32) in all their manifestations and appearances. They are, however, grounded in the same basic processes at the lower levels; nevertheless, interlacing and informing each other. Distinctions may only be a question of the intensity in which the reactions take place and based on the value that any object may be accorded as an emotional charged stimulus, as was seen in the earlier section. The classification of emotions is, thus, essentially a matter of how they are distinguished as bodily states, in other words, as experiences that arise from them. This is clearly evident in the classification in the NS as well, which, though appearing slightly different than Damasio’s in the hierarchy, reflects from an experiential perspective and interlacing, similar understanding. There is also the notion of externalisation, inner to outer, that becomes evident along the hierarchy. In what ways these are bodily processes are described by Damasio and were briefly laid out while discussing the bodily grounding of emotional experience as Qualia I. In the following I take up this discussion again.

2.3.1 The bodily process that is the emotion

As was seen in the earlier section, when an ECS is detected and mapped in the brain, a whole cascade of bodily reactions take place (Damasio, 2003:54-65, cf. also 2010:108-126). Emotions thus getting triggered is a function of the brain. Therefore, primary emotions such as fear and anger or social emotions such as sorrow are triggered by different areas. There is, in effect, a whole neurobiological process that is triggered as a coordinated action of several brain areas in response to signals from areas mapping images of objects that are identified as

ECS. The result is a series of events that become, as Damasio specifies, the emotion. How this happens was briefly cited in the earlier section. These processes run automatically in the body and in a stereotypical manner. Finally, the neuronal and chemical reactions that work upon the internal milieu, the inner organs and the musculoskeletal system in all emotions over a period of time and in specific patterns result in an enaction, as Damasio (2003: 63) defines, of bodily responses, such as facial expressions, stances, vocalizations, specific behaviour patterns such as running or freezing, or body attitudes, which one normally associated with emotions. There can also be, as was cited earlier, what is called a composite form of response such as fatigue (2003:88). Such a composite form is particularly defined when the stimulus is from within the body, i.e. an internal bodily state that causes changes. Thus, the reaction can be fatigue or energy based on the chemistry of the internal milieu, or response in muscles rather than glucose levels in the blood.

This list of enactions Damasio lists echoes the list from the *anubhāva* of NS. There are also gaits and glances that find mention. Of course, not as detailed as in NS, but, nevertheless, a classification of bodily manifestations becomes evident and can be applied to the NS. What we finally come to see as an externalisation or external characteristics of emotions begins deep within, a process inner to outer. This is of particular interest here, as it tells us that what is defined in the NS is a fundamental, yet primordial process. It is first changes that occur in the internal and, depending upon the kind of changes, they manifest themselves in all the various ways that Damasio also lists as seen above. The NS mentions these as recommendations for the performer; whether it is an action, such as flight or freeze for fear, a facial expression of an astonished look for surprise, or contemptuous lips turned down for disgust. In this sense, the detailed descriptions of these in the NS, therefore, offer themselves for a systematic examination. Examining the notion of emerging forth from the inner is of particular relevance in my opinion for why a felt quality of experience is enabled, leading to meaning. This will be approached in the next chapter.

From the discussion in this section there are the following salient points to keep in mind.

- An emotion is, as seen, an unfolding of a whole process, that begins with its triggering in response to an ECS and culminating in the changes that become bodily manifestations. These are, however, coordinated by the brain in conjunction with the body, reflecting a body-brain-world interaction given the ECS. The outcome is essentially an instantaneous bodily state that runs automatically and brings changes

even before one becomes aware of it. It is a process below the levels of consciousness, first within the body, before becoming external.

- There is a degree of intensity in such a process that is directly tied to the salience of value attributed to the ECS triggering it. This is caused by primordial functions of the brain which occur in regulating life and physiological states. Thus, any emotion or, for that matter, any experience is grounded in the basic evolutionarily processes.
- The bodily manifestations continue into the feeling phase, which Damasio describes as a dimension of the process that is the emotion, with the only difference that one is bodily and the other a matter of the mapping of the bodily state in the body-minded brain (2010). It is thus first and foremost an intimate body-brain interaction, the body loop that is enabled, that provides the basis for thus experiencing.
- Also underscored in Damasio's explications from earlier is the fact that the physical state itself being experienced is something that is more composite, that is defined as ranges between pain and pleasure, joy and sorrow, or positive and negative. As Damasio further notes in several instances, there must have been a reason for the organism to avoid what is painful and seek what is conducive to its well-being. Yes, we normally do not reflect on the bodily state, when experiencing an emotion, but rather as being angry, disgusted, happy, tired and so forth. We do not notice our eyes widen, our eyebrows becoming distorted, or that our lips part in a smile, as is defined in exacting terms in the NS. Nor that our stance has drooped or straightened, or that we get goose bumps.

In this sense, emotions and their bodily states leading to feelings or felt experience are primordially given processes rooted in evolution itself, tightly tied with how brains have evolved. The notion of *bhāva*, also revealing the various stages from the *vibhāva* that corresponds to the ECS to *anubhāvas* in terms of bodily manifestations, which in turn lead to the experiences of emotional states and meaning, has a fundamental import. Firstly, *vibhāvas* in corresponding to the emotionally charged stimuli, are revealed to be not only the entities that by definition in the context of performing arts lead to a *bhāva*. When looking at their descriptions, albeit the historically rooted specificities that in terms of context and content reflect different times, we see objects, actions, situations, people, events and so forth. They can also be bodily states. Specifically, we see that entities are seen to be meaningful in gestural meaning construction discussed in Part I as well. Their meaningfulness, in this sense, is a matter of the emotional connotation they carry, essentially a value, defined as emotional

value, which is a felt value, biological at its very basis, that stems from the bodily processes they trigger as ECS. In the context of performance, they are images that we can define from recall or imagination, of objects, not physically present, but distant, to use Damasio's definition, but not necessarily abstract.

Secondly, and essentially, the emotions they trigger become bodily manifestations, are in fact the bodily manifestations, reflecting the *anubhāvas* defined in NS, due to which meaning gains a felt quality. It is in them that the notion of meaning as felt experience is indicated. They are simultaneously emotion, bodily manifestation, feeling and felt quality. In this sense, NS is right in defining the term. While these notions are being defined in terms of the spectator, it plays a role for the performer as well, as I will analyse, thus, enabling insight into the evasive notion of felt quality itself.

Finally, what is described as *bhāva* including its associated factors is then in its entirety an emotion, the emotional state that brings forth meaning as experience, as emotional experience, and thus feeling. *Bhāva* also is what becomes, what is brought to be experienced, thus, instilling meaning. The experience of what is brought through the emotion, that is the *bhāva*. The feeling of it. It is in this sense both the source and product for meaning as experience, as noted in Chapter I. Meaning equates experience. Finally, it takes one to a deeper experience denoted in the *rasa*, a meaning with relish, which in turn must take one to a more primordial notion of feeling or experience, as seen above when placed in the context of the two-fold notion of feeling Damasio postulates.

Thus, placing the various stages of emotions, emotional states and, finally, the notion of experience as an outcome of emotions in the framework of Damasio's research helps identify and underscore the primary relevance given to the understanding of emotional states in the NS. There is in fact a primordial relevance to these notions, the correspondences that I have illustrated hitherto indicating it. On the other hand, the detailed descriptions of the *anubhāvas* clearly differentiable into the various kinds of manifestations stated above, facial expressions, stances, behaviour, etc., helps unveil Damasio's postulations of the bodily dimensions of experience in terms of feelings, particularly discussed in the twofold approach to feelings from the perspective of form and function given at the micro-levels of the body, and this in movement terms.

A further important aspect, as to why there is a need to look into the bodily level of experience enabled by emotions, is given in the discussions here. While reflecting the primary function of performing arts that NS can be understood as defining, they also indicate the kind of experiences that were defined as enabled by body-brain-world interactions in the discussions of Johnson and Gibbs in Part I Chapter 2, and as Johnson also referred, why meaning is a matter of how objects gain salience based on qualitative aspects given in situations. With the role of emotional experience, however, spelt out as a body-based experience, as indicated in NS and underscored by correspondences to brain research on emotions, one offering the empirical material for it and the other the scientific framework, a perspective for bottom-up scrutiny both in terms of emotions and movement is given. Having thus examined the fundamental role of emotions, the question now is to flesh out what is so fundamental in movement terms.

Considering that the central concept that emerges in the NS is the use of corporeal expression to generate and convey meaning through performing arts, the following chapter takes an in-depth enquiry into the gestural means of expressing *anubhāvas* that will lead to an analysis of emotive movement itself.

3 Emotive movement - an analysis

Continuing the discussion in the last chapter, the bodily processes related to emotional states will be examined in this chapter based on the detailed descriptions given in the NS for emotive expression. The initial analysis is aimed at identifying the different kinds of bodily manifestations, such as facial expressions, vocalizations and specific behaviour patterns, that Damasio also discusses, in the *anubhāvas* in NS. Having thus differentiated them, the gestures of the face and limbs that are described in detail in Chapters 8 to 10 of the NS, will be analysed for the kind of movement they reveal. These readings reveal interesting details about how, where and in which emotional state what kind of movement matters. There are stances, whole body movements and gaits described in the subsequent Chapters (11 to 13) of NS that are not included in the present study. While there are gaits defined for the *rasas* and some stances and body movements recommended in specific representations, such as actions in war and with weapons, they are mostly stylised dance movements and not all pertain to emotional

states. Detailed descriptions of facial expressions and gestures of limbs, that matter for emotive expression and are given a central place, reveal on the other hand, the kind of inner to outer bodily changes discussed in the previous chapter as constituting emotions. Given this, they will be laid out in detail and subsequently analysed in specific movement analytic terms, yet again using the conventions of LMA/BF and drawing from video material from class sessions with students of dance, here gathered during an experimental teaching of bringing forth emotive expression. The nature of emotive movement thus analysed will be further substantiated from the perspective of current fascia research to illustrate how felt and structural aspects identified thereby as inherent to movement are at the level of connective tissue.

3.1 Classifying the *anubhāvas* – varied bodily manifestations

I discussed in Chapter 1 that *anubhāvas* contribute to the kind of hierarchy of emotional states that NS discusses. They were specifically seen to also constitute the *vibhāvas* or determinants for the dominant states and/or *rasas*. In other words, the corporeal manifestations were seen to provide the determining factor for these states. In the following, all the bodily manifestations mentioned will be differentiated as stated above. As mentioned earlier, while it is obvious that these descriptions have been given considering the corporeal expression of emotional states in a context of performance, they, nevertheless, give insight into the varied forms in which they are manifested.

Table 11 illustrates the classification into facial expressions/movement of limbs, behaviour patterns, physical form and behaviour patterns defined in terms of gestures. The upper row in red lists those mentioned for *rasas*, where the maximum number of these bodily states are mentioned. A point that was evident in Chapter 1 Part II while examining the descriptions is that most of the *anubhāvas* of the dominant states, with some exceptions, are the same as those given for *rasas*. Therefore, they will not be stated separately, but highlighted in cursive script indicating which ones relate to the dominant states as well. In the lower row in green, the bodily manifestations evident in a reading of the *anubhāvas* for transient states are illustrated. Here, given the reading reveals that for transient states only a few very rare instances where facial or other specific gestures are concerned, but a very large number of what would fall under behaviour patterns are mentioned, only all the gestures and examples of the latter have been included. Appendix 3 illustrates all of them. A separate column, third

from left, illustrates the physical forms defined as *sāttvika-bhāvas* or temperamental states in NS. These states, essentially symptomatic bodily states, where changes that occur are not gestures or facial expressions in that sense, were, as also mentioned in Chapter 1, seen to be both a category of emotional states and *anubhāvas*.

Facial expressions/ movements of limbs	Behaviour patterns	Physical form/ <i>Sāttvika-bhava</i>	Behaviour patterns that include gestural descriptions
<p><i>Eyebrows, throbbing nose/cheek, opening eyes wide, contracting eyes, blown cheeks, bent shoulder/head, drooping limbs, knitting/widening eyebrows, swelling nostrils, movement of eyes, looseness of limbs, trembling hands/feet, stunned sensation in thighs, squeezing/contracting limbs, motionless, shaking head, rolling/closing/narrowing eyes, narrowing mouth, bending head and walking, gaping/dilating eyes, staring with winking/fixated gaze, grinding teeth, biting lips,</i></p>	<p><i>Desirous looks, sweet smile/dance figures, pleasing words, fortitude, serene composed eyes, beaming face, holding sides, different varieties of smiles, elegant glances, different kinds of laughter, boisterous sounds, sluggishness, drowsiness, feigned anger, weeping loudly, sighs, striking body, lamentation, gasping, cheerful lustre of face, writhing/squirming, terrible/joyful/admiring utterances, hitting, killing, firmness, patience, heroism, bravery, vigour, aggressiveness, boldness, cleverness, censoring words, agitated movements, covering nose, spitting, expressing disgust/delight, fainting, nervous/uneasy glances, expressing delight, feigned anger with gentler movements,</i></p>	<p><i>Perspiration, change of colour, tears in different ways, parched mouth/throat, change/loss of voice, loss of memory, tremors, horripilation, palpitation, paralysis.</i></p>	<p><i>Significant/clever glances with movement of eyes, gentle smile with slightly blown cheeks, smile with teeth shown, laughter with contraction of eyes/cheeks, with expanded nostrils, squint eyes, with violent shaking of limbs, with expanded eyes, haughty upturned eyes, obscene laughter with shaking of limbs, smile with blooming eyes, clapping hands, hitting palms, tired face, graceful movement of limbs,</i></p>
<p><i>Distortion of eyebrows, twisting contracting mouth, wrinkling face, contracting eyes, raising eyebrows, downcast look, heaviness of limbs, closing /partially closing eyes, distortion of nostrils, licking tongue.</i></p>	<p><i>Mostly behaviour patterns, which are quite specific actions of the body, such as running, jumping, dancing, singing, throwing out limbs, falling, rolling, stretching, pretentious behaviour and laughter. Different kinds of utterances, which are at times quite specific, such as proclaiming others' faults, or physically bold. Sometimes</i></p>	<p><i>All the ones listed under this category and presented in Chapter 1 appear in different states here as well.</i></p>	<p><i>Turning face in anger, gait crooked/unsteady, retarded movement</i></p>

there is mention, such as
disgusting behaviour in
general. Arrogant/gloomy
face, meaningful stares.

Table 11

Firstly, it becomes evident that all kinds of bodily manifestations are entailed in the *rasas* and many in the dominant states as well. The combination of increasingly defined bodily states, particularly the increasingly defined gestural activity in movement terms that become evident thereby, unveil how relevance is given to these for *bhāva* as experience to manifest itself. In the case of transient states, there are only very few instances where facial gestures or specified gestures of limbs are described, and when mentioned, they are, as indicated, very few, and mostly single instances where the state is often a bodily one, such as sleep, fright or inebriety. However, all descriptions have a very wide range of behaviour patterns, some general, but many quite specific, such as pretentious behaviour, proclaiming the faults of others, or descriptions, for example, arrogant or gloomy face, that I call general, defining rather a behaviour than a movement. Yet, even these are at times quite specific and elaborate in their descriptions. The physical forms are evident in all stages and find mention quite extensively, as was also noted earlier. Finally, there are several behaviour patterns that have been mentioned with the kind of gestures they entail for the dominant states and *rasas*. Such descriptions are more seldom in the transient states, again revealing the non-specificity of gestures here.

What do these classifications of *anubhāvas* tell us further? Let me start by analysing the behaviour patterns. I have listed here different kinds of actions, attitudes, utterances and some facial expressions that one would generally define as typical behaviour patterns. These do not reflect, as one sees, specificities in movement terms. There is, for instance, agitated movement. One can imagine what it is and that there might be quick nervous movements, uncoordinated, and so forth, just as there is a general notion of the movement of the body in actions, such as in jumping, dancing, hitting or irrelevant talking. These are movements that also carry different movement qualities: Jumping needs pushing off the ground with force, hitting needs a force in the hands carrying out the action and singing needs the effort coming out of the inside with breath. We can also imagine what rolling or stretching entail. They are general movements people often do easily if asked to, or also know while executing these what it is like to use weight or lightness, quickness, expanded movements, etc. I illustrated in the gestural analysis how the student had no problem depicting the jump onto the tree. These

could, thus, be understood as attitudes that can be acquired, or become wilful expressions of emotion that Müller mentions (2009:511). In movement terms, they are rather coordinated movements that the body does as a movement whole so to say, though the coordination is not necessarily deliberate or intentional.

At the same time, there are descriptions such as desirous looks, beaming face or uneasy glances that would fall under facial expressions. These also reflect typical behaviour patterns, however, non-specific in terms of movement. Under behaviour, I have also included the attitudes such as bravery, fortitude, aggressiveness, cleverness, or even such instances as covering nose, that we can *put on* as behaviour as well. Even here, given they show themselves in the body, they will have qualities that are discernible. There are also specific ones, such as pretentious behaviour, throwing out limbs or garments, or turning away face, which are movements one can execute even if not in the state of emotion as such. I would generally say, one can discern under behaviour patterns, even if they are bodily manifestations, a non-specificity in movement terms. It is the general action or attitude that needs to stand out, rather than a specific kind of movement. At the same time, one can call them known behaviours that are brought forth often when just labelling emotions.

On the other hand, there are the physical forms. When placed here in comparison with the other manifestations, they reveal how they are neither attitudes, behaviour patterns nor specific gestures. The changes occur on the body, such as parched throat, paralysis or trembling, symptomatic bodily expression to put it in terms of Müller cited above. They are normally changes that occur only when in a specific condition that cannot be brought forth without being in a specific emotional state. They, as has been defined in the NS, need a concentrated effort on the part of the performer; meaning concentrating on the body in specific ways and at specific locations, which an action or attitude, for instance, does not require.

Now coming to the descriptions that I see as falling under the category of gestures, facial expressions or movements of the body, these reveal in more exacting terms how any body part is moved, as opposed to the kind of movement wholes that one sees in actions or behaviour patterns, as I mentioned above. We thus see knitted eyebrows, sensation of looseness in limbs or slacking limbs, wide opening/dilating/narrowing eyes, swelling of nostrils, biting of lips, throbbing of cheeks or lips, clasping hands, licking with tongue,

suspended movement of eyes, contracting of limbs, twisting /narrowing down mouth, or moving head to and fro. We see in the classification of the consequents above that such specificities as to how what is moved or felt are particularly and extensively described for the dominant states and *rasas*. This reveals again how defining in more bodily terms is seen to progress towards the states that are central for establishing emotional experience. These descriptions also reveal how they would relate to *anubhāvas* that are defined in less bodily or movement terms, such as behaviour patterns or even transient states listed thereby. Some of them, such as stunned sensation in thighs, for instance, or looseness of limbs, indicate depicting what is defined elsewhere as paralysis or inebriety. The progression of movement specifications towards the experientially relevant states also points to the import of exactly executed movement in enabling the felt quality that is attributed to the consequents, particularly to the ones understood as establishing *bhāva* as experience and, thus, meaning.

To illustrate how even behaviour patterns are at times seen to be defined in just these exacting movement terms mentioned above when defining the dominant states and *rasas*, I have placed these in the column on the far right of the Table. There is here a simultaneous mention of actual gestures, such as those of the eyes, in conjunction with behaviour patterns, giving an indication of the kind of specific facial or other gestures that would accompany them. Thus, for instance, while upturned eyes would describe the movement of eyes, descriptions such as haughty or even angry/fierce looks defined elsewhere reflect behaviour patterns that are the outcome of such movements. A gentle smile or more boisterous laughter would be a behaviour, whereas descriptions such as slightly blown cheeks, contraction of eyes/cheek, with expanded nostrils, tell us with what exacting movement these would occur. While the descriptions relate clearly to the context of a performance, as I mentioned earlier, the fact that the consequents become more specific with bodily gestures towards the feeling state is again evident just in this column; behaviour patterns defined in terms of related gestures find very little mention for the transient states. It points at the same time, to the role of gestures, essentially movement, for the emergence of the felt experience of an emotional state. Such gestures, as I will discuss in the next section, have been described in detailed movement terms in separate chapters and give an insight into how movement actually occurs in the physical manifestations and how refined some of these gestures are that are recommended specifically for these states.

Putting these points together when comparing the descriptions of consequents, one discerns a progression where the actual bodily aspects are concerned. A rather general description of the physical manifestations in terms of behaviour patterns find particular mention for the transient states, even if these can be pretty specific in terms of the context. While defining in movement terms becomes more specific towards dominant states and *rasas*, with facial gestures or gestures of specific limbs finding extensive mention. Thus, the descriptions reveal how the use of well-defined specific gestures in movement terms progresses towards the states that matter for experience to become established. At the same time, the category of physical forms find mention in both transient and dominant states and *rasas*, underscoring their relevance as symptomatic bodily states in certain emotions. Another aspect that stands forth, and was noted in Chapters 1 and 2 as well, is that the *anubhāvas* for the transient states, that are, at times, quite elaborate as specifically situated behaviour patterns, relate to the determinants or emotionally charged situations, to use Damasio's term, that are described for the states they are designed to lead to. As was mentioned, this would account for their descriptions and function as *transient* states. On the other hand, the *anubhāvas* of transient states as causative factors for dominant states or *rasas* also reveal how these states that are relevant for experience, are triggered by the specified bodily manifestations themselves. Here as well, one discerns the relevance given to actually executed bodily manifestations, as opposed to just objects, events or actions that carry an emotional connotation, for a dominant state or *rasa* to become established as experience and thus meaning.

Finally, evident in the consequents for the *rasas* themselves, the descriptions are seen to include all forms of bodily manifestations, with a combination of not only facial expressions and gestures, but also behaviour patterns and attitudes manifesting themselves in bodily yet differentiated terms. The differentiation being specifically evident as movement. It is particularly evident in the differentiated descriptions for laughter as mentioned above. Regarding anger, there is not just knitting, but also widening of eyebrows at the same time. Even behaviour patterns reflect the exact bodily state in an emotion in sluggishness, weeping loudly, or even agitated movement. I cited NS in Chapter I, where it is mentioned that the *sthāyirasa*, as it was finally coined, should be shown with excessive *sāttvika* (NS, Ch.7:120), understood as denoting what is both natural and conceptual. To put it into the context of practice, it means one needs to apply gestures as the situation requires and in accord with what needs to be brought forth. At the same time, the transient states need to be depicted only with gestures and postures, meaning surely the more general kind as defined above, since

these states need to support the *sthāyirasa*, which is a more subtle experience, as also the discussion in Chapter 2 underscores. There is also mention that the transient states have to be assigned to male characters, because they are accomplished through various objects, perhaps meaning the determinants defined therein. One sees above how the finer the experience is intended to be, the finer the nuances of movement are also.

Coming back to another point in this regard, that was also briefly noted earlier, is a further discussion in Chapter 24:1-3. *Sattva* translated as temperament is explained there as being basic to portraying *bhāvas* and *rasas* with aspects such as horripilation or tears. These need to be depicted in proper places in accordance with the *rasas*. Actors need to pay attention to this because it makes corporeal expression superior. It is defined as something that is not manifest but related to the mind. Emotion coming from the mind manifests itself in the eyes and eyebrows, or movement of neck, thus, giving rise to *śṛṅgāra* or the erotic *rasa*²⁹. What ensues after that are descriptions in very specific terms of what are defined as natural graces of women or aspects of male temperament, and how these need to be displayed in situations relating to this *rasa*, which reflect several of its *anubhāvas*. Standing forth in these descriptions is the notion of grace and refinement that would make performance superior, attributed to *sāttvika* in terms of a natural expressivity as mentioned above; a notion that is central to today's practices, as in forms such as Bharatanatyam being analysed in this study. What refinement could be is indicated in the separate specifications of gestures of different parts of the body and face that I will discuss below.

3.2 Gestures of the body and face in emotive expression

We saw how NS stresses the fact that *anubhāvas* have to be depicted through various modes so as to establish meaning as *bhāva*. Consequently, we come to the notion of *abhinaya*, that was mentioned briefly at the beginning of Chapter 1. *Abhinaya* is the aspect of performing arts that is about these modes, essentially different modes of expression classified under corporeal, verbal, ornaments and costumes and what has been defined as temperamental. Bharata, the scholar who is expounding about performing arts in the NS, defines *abhinaya* as a term that is constituted of the root, *nin* – “to make something obtained” – and the prefix *abhi* “arriving at, taking something on face to face” (NS, Ch. 8:6-7, Board of Scholars:115).

²⁹ In practices, this *rasa* is more than the erotic. While sensuality is one aspect, there is also the notion of yearning, surrender and so forth that it entails. As Kalanidhi Narayanan (1994, and personal correspondence) saw it, it evolves into devotion and what one sees as spiritual aspects of dance.

The interest here and, thus, focus is on the corporeal. Expression through the corporeal, *Āṅgika*, is classified into *śārīra* – of the body, *mukhaja* – of the face and *ceśthakṛta* – of actions. The first pertains to the limbs of the body, specifically to the gestures of the head, hands, hips, chest, sides and feet. They have been defined as major limbs. This is a very insightful classification considering these are initiating limbs for movement, and what one generally understands as limbs, namely arms, legs, torso, etc. move when these move. The second variety is, as the term translates, of the face. While eyes, eyebrows, nose, lips, cheeks and chin have been mentioned under ancillary limbs here, the gestural descriptions finally extend to include nostrils, eyelids and mouth. The head gestures are finally classified and described together with these gestures, with the explanation that they are relevant for emotive expression, just as these are. This is an interesting point, given head movements ensue forth intrinsically from facial gestures, that initiate movement in very subtle but powerful ways, as the analysis of actual movement to be presented in this chapter further below will illustrate.

The third aspect pertains to actions, as the term *kriyā* incorporated in it indicates, though NS does not further spell out directly what falls under this variety of corporeal expression, as with the other two. The term *ceśtha* as used here can refer to specialized actions, embellished in the context of performance, and applied to, for instance the activity of war, or the state of a character³⁰. In this sense it apparently is a term to be understood as pertaining to actions, as we saw, for instance, defined under behaviour patterns. To be understood in this sense as coordinated actions of the body, that are specific, not only to any given activity or state, but becoming specifically ornamented movements as required in dance. At the offset of this chapter it was mentioned how in later chapters of the NS specified actions as for depicting warfare are defined, which are not necessarily referred to directly for usage in emotive expression. And yet, though being understood thus in the context of performance, the category, nevertheless, points to the notion of actions as a separate aspect of emotive expression, not to be confused with movements of limbs, which are specifically categorized under gestures that have been described separately under the first category. My focus will be on the first two varieties, given that these are most extensively brought into relation with emotional states.

I lay out all the descriptions for the gestures of the limbs and the face in the following, yet again, by way of tables. Defining factors for the gestures are, as will be illustrated, the manner

³⁰ I am grateful to Dr. Nandakumar, musicologist and scholar (personal correspondence), for drawing attention how this term can be interpreted thus, based on other texts.

in which any body part needs to be moved. For each of these, the description further entails recommendations as to the emotional states they are to be used for. At times, they are related to typical behaviour patterns or physical forms. I have highlighted behaviour patterns, including actions and attitudes, in blue, physical forms in yellow, transient states in green and the experientially relevant dominant states and *rasas* in red to enable a better illustration of how the gestures are, thus, related to emotional states or their consequents to varying degrees. Additionally, since most of the descriptions are so exacting, this is an invitation to the reader to try them out while reading, and perhaps experience the subjective and evasive felt quality I propose to unveil in the analysis. A systematic approach enables insight into what I have called above a progression towards the states relevant for experience, which becomes evident as an increase in refinement at minute levels of movement towards specific kinds of gestures and how these relate yet again in a differentiated manner to emotional states and *rasas*.

Here as well, I refer to the English translations by the Board of Scholars and Ghosh. Furthermore, in spite of the detailed explications, there are some gestures that NS does not explain in ways that one can understand the movement. In such cases, it helps to execute the movement in relation to the behaviour or facial expression mentioned thereby. I have used this and the knowledge from the practice of dance and movement and placed one or the other in parentheses.

3.2.1 Gestures of the limbs

The gestures of the major limbs are discussed first. I have included the head gestures here for purposes of better illustration, though, as cited above, Bharata found it more appropriate to include them in the ancillary or minor limbs. I do not discuss the gestures of the feet or hands, which also fall under major limbs, as they do not have a direct relevance for emotive expression, even if there are hand gestures for depicting specific emotions as exemplified in Part I of the study, or gaits for *rasas* as mentioned at the beginning of this chapter. These reflect more a stylised representation rather than the kind of bodily manifestations being analysed here. In terms of how these gestures become operative in any given instance of meaning depiction, we have seen the kind of depictions typical for hand gestures in Part I. Facial expression or gestures of other limbs as being analysed here accompany them as necessary for any given emotional connotation an object, action or event might carry or be given (cf. also Ramesh, 2013). A further note about how the illustration of these gestures is

laid out: The descriptions here are so exact and at times long, that each limb has its own sub-table, but subsumed under Table 12. They also need to be read together. The descriptions do not often refer to the movement of the limb in question directly, but to the movement another neighbouring body part needs to execute for the gesture to be executed. Therefore, placing them together helps not only analysing, but also executing for oneself as recommended above, and, thus, enables a comparison. Finally, the first line in **bold** letters in all tables refers to the movement description and the lines below to the usage.

Śiras – gestures of head

<i>Ākampita</i>	Slow up-down. Giving hints and instructions, asking/questioning, natural conversation, giving directions, bearing.
<i>Kampita</i>	Quick up-down. Anger, arguments, comprehension, averring/asserting, threatening, sickness, intolerance.
<i>Dhuta</i>	Slow bending and contracting (pulling back). Unwillingness, sorrow, wonderment, self-assured state/confidence, side glances, void/emptiness, forbidding.
<i>Vidhuta</i>	Same as dhuta, but quick. Affected by chillness, excessive fright, terrifying situation, fever, initial stage of inebriation/intoxication
<i>Parivāhita</i>	Turned successively sideways. Accomplishing, wondering, enjoying, getting angry, recollecting, reflecting deeply, concealing.
<i>Udvāhita</i>	Turned up. Showing pride, revealing desire, looking up, self-confidence.
<i>Avadhūta</i>	Quick downward movement once. Messaging/communicating message, invoking a deity, talking, beckoning.
<i>Añcita</i>	Slightly bent to one side. Ailment, loss of sense/swooning, inebriety, anxiety, sorrow.
<i>Nihañcita</i>	Head movement when shoulders raised, neck bent. Women showing pride, coquetry, light-heartedness, feigned anger in love, hysterical laughter, silent expression of affection, affected indifference, arrogance, jealous anger.
<i>Parāvṛtta</i>	Turned around as in turning away. Turning away
<i>Utksipta</i>	When face turned up, but head remains. Looking at tall persons, indicating lofty objects, when using divine weapons.
<i>Adhogata</i>	Same as above, but face turned down. Bashfulness, veneration, sadness.
<i>Parilolita</i>	Rolling around. Fainting, ailments, advanced inebriety, affliction, drowsiness, possessed by malignant/evil spirits.

Uras – gestures of chest

<i>Abhunga</i>	Bent slightly, kept lowered, back raised higher, shoulders slightly bent and left loose at times. Embarrassment, despair, fainting, sorrow, fright, ailment, heartache, cold touch, rain, bashfulness when used suitably.
<i>Nirbhunga</i>	Not bent, stiff, raised up, back depressed, shoulders not bent but raised. Paralysis, expressing resentment, surprised look, declaring truth, haughty expression, excessive arrogance
<i>Prakampita</i>	Quivering, incessant heaving up and down. Laughter, weeping, exhaustion, terrified, asthmatic fit, hiccups, misery.
<i>Udvāhita</i>	Lifted up, raised. Deep breathing, looking at objects placed high above, yawning.
<i>Sama</i>	Level, all limbs in symmetry, chest in sauṣṭhava – excellent. In practice in symmetric vertical posture.

Pārśva – gestures of sides

<i>Nata</i>	Bent, waist slightly bent, thus, one side slightly bent and shoulder slightly drawn away. Approaching someone.
<i>Unnata</i>	The side not in nata, therefore, lifted up with waist, side, arm and shoulder also lifted. In going away/backward.
<i>Prasārita</i>	Extended – when sides stretched in respective their direction. Delight, etc.
<i>Vivartita</i>	Turned around, when sacrum turned around. In turning around.
<i>Apasṛta</i>	Slightly withdrawn, when side restored to original position after vivartita – turning around.

Jathara – belly gestures

<i>Kṣāma</i>	Slender, thin. In laughter, crying, inhalation, yawning.
<i>Khalva</i>	Depressed. Sickness, in penance, weariness, hunger.
<i>Pūrna</i>	Blown up. Gasping, stoutness, disease, excessive eating, and the like.

Kati – gestures of hips

<i>Chinnā</i>	Turned aside – In turning the waist. Depicting exercises, agitated confusion, looking back, turning around.
<i>Nivṛtā</i>	Turned up in turning back to front from reverse position. Turning around – like in reversing direction.
<i>Recita</i>	Moved about in all directions.

<i>Kampita</i>	Wandering, and of general nature. Side of hips moved up and down. Walk of hunchbacks, dwarfs, etc.
<i>Udvāhita</i>	Sides of hips raised slowly. Movement of stout people, amorous and seductive movements of women.

Urū – gestures of thighs

<i>Kampana</i>	Quivering, repeatedly raising and lowering of heels. Depicting inferior persons in great fright .
<i>Valana</i>	When drawing in knees. Movement uninhibited/in ease of women.
<i>Sthambana</i>	Rigidity. Suspension of all movement. In perturbation , despair/despondency .
<i>Udvartana</i>	Springing up/turning quickly, with knees drawn in with force. Physical exercise, dance movements (<i>taṇḍava</i>)
<i>Vivartana</i>	Turning, when heels/knees drawn in.

Jangha – gestures of calves

<i>Āvartita</i>	Turned, when left foot turns right and right foot left. Sauntering stroll of clown.
<i>Nata</i>	Bent – effected when bending knees. For standing and sitting postures.
<i>Kṣipta</i>	Thrown out. Exercises and dance (<i>taṇḍava</i>)
<i>Udvāhita</i>	When raised. Quick walking, crooked movements
<i>Parivṛtta</i>	Turned back. For dance movements (<i>taṇḍava</i>)

Table 12

As stated, one sees that these gestures are recommended mostly for emotional states and their manifestations. However, there is a differentiation within these as to which kind of movements relate to what states, or what kind of consequents.

We find a lot of emotional states mentioned in the head gestures, reflecting their categorization under the gestures that pertain to emotive expression. Yet, except for a few marked in red that reflect the dominant states or *rasas* arising from them, the others are discernible, transient states. Here, as well, they are mostly of the variety that would fall under background emotions, rather than social emotions. There are a few symptomatic physical forms, such as chillness or fainting, also mentioned that I have marked in yellow. As the several blue highlights reveal, there are mostly several behaviour patterns, such as

threatening, forbidding, showing pride, coquetry and hysterical laughter. These indicate predominantly different kinds of actions or attitudes. Given the gestural descriptions, we see how the head is engaged thereby. These gestures reveal mostly movements that do not require a great effort in movement terms to be executed. Up-down, side-side or turning movements are typical movements of the head. That can be classified as overt. When, at times, the movement is not quite understandable, it helps, as mentioned earlier, to actually execute it. On the other hand, for *dhuta*, the contracting is not very easy to understand and requires some attempts. However, it helps to execute how we would express unwillingness or excessive fright defined thereby to explore what this movement can be. It reveals itself as more internal, requiring moving from within, like the pulling back that I have added. The detailed description for *Nihañcita* is also interesting. The movement of the head is defined as in the other cases. When, however, raising shoulders and bending neck as explained and then holding or moving the head in the attitude or behaviour described thereby, one would recognise differences in each case. There could be a movement or just placement of the head. These explorations reveal how one knows behaviour patterns in a bodily way and how these are usually unconsciously executed. Alternatively, one might find oneself recognising something else not defined there, such as vanity, in the above example. The head movements also reveal how one may experience a movement quality. While executing the overt kind of movements might not give a felt quality, the ones that are defined as contracting, for instance, which is more internal, has a stronger felt quality to it. When executed within the framework of a behaviour or attitude, I think it also reveals a felt quality.

In the case of chest gestures, not as many behaviour patterns have been mentioned as transient states or bodily manifestations of the symptomatic kind, even the transient states fall mostly under background emotions, such as ailment or exhaustion. One discerns haughty expression or surprised look among the behaviour patterns, revealing how the chest is also engaged in facial expressions: An important point to hold on to that we will come back to in the analysis. Additionally, when attempting to execute the movements described here, such as bending, quivering or raising at the chest, to emphasise not at waist, as one may find oneself executing, one discerns how they need some attending to and reveal themselves to be of the more internal rather than overt kind of movement. At times, the descriptions reveal a coordinated action required, such as not bent, stiff, raised up, back depressed, and shoulder not bent, but raised, as in *nirbhunga*. If the reader does not feel paralysed after attempting these!

The gestures of the side are, as the descriptions reveal, a matter of the other side as well. Here, no other consequents or emotional states are related to them directly except what could be behaviour or attitudinal movement, as I have highlighted, or one transient state of delight. They reveal mostly general movement descriptions. However, some of them are interesting. If the movement is executed as described for *unnata*, for instance, one may not go away or backward. Even if no relation to emotive states becomes evident, if in conjunction with going away or backward, one would raise all the body parts that need to be raised, an attitudinal movement surely emerges. A going away with some connotation to it. The turning movement in *vivartita* is to be initiated from the sacrum rather than the side. No application is mentioned, but this movement has a movement and expressive quality if thus executed. In the very fact that the sacrum is mentioned here, it reveals that its description is based on a felt quality the movement entails at the sacrum when executed. In fact, executing such a movement itself brings a felt quality at the sacrum. The recognition of an attitude could also surface here. I am engaging myself in this movement as I write. This is the analytic convention used in LMA, as I mentioned in Chapter 3 of Part I. Even the notion of the sacrum is an important point to remember for the later analysis.

The descriptions of belly gestures are again like the chest gestures, about movement more internal, such as hollowing, which is what is meant by depressed or slender; blown up being the opposite, namely bulging. We see, yet again, the relation between an internal kind of movement and the number of emotional states in these gestures – also background emotions and behaviour patterns. Executing these movements is accompanied by a movement quality that is different to the next hip gestures, for instance. Coming to the hip gestures, they too reveal, as in turning the waist, movement execution from elsewhere. Essentially, one discerns that a turning from waist turns one around but needs the support of the hips, while the turned-up-to-turn-around would be a more forceful movement, involving the leg as well. The other movements are obvious and do not require much effort or thought. Even here, these gestures are more the overt kind and, except for a few behaviour patterns or typical gaits, one discerns mostly a general kind of movement. Though, one may, through exploration, arrive at attitudinal behaviour.

The thigh gestures reveal several movements that range from inner to outward and are also related to physical manifestations of emotions. These particularly reflect changes in the musculoskeletal system. One recognises a manifestation of the physical form in quivering,

which also appears related to great fright, just as in rigidity. While the other movements are outward, involving the knees as an essential accompaniment. The last one is a very interesting way of turning, by staying grounded. Finally, the calf gestures can also be accomplished elsewhere, depending on the movement to be executed. One also sees their function for gaits and movements, revealing these gestures are mostly, as also in thigh or hip gestures, for outward and general movement. Using them again is not an effort unless one wants to imitate the clown, but even this is just, because it is unusual.

As a general trend in these gestures, one discerns how emotional states find mention in gestures of head, chest or belly, and a few in thigh gestures. This occurs essentially in limbs and/or movement that reveals an execution from within, rather than outward. As we will see, the chest is involved in emotive movement given the inner dimensions of emotions. Even here, it is largely the transient and symptomatic states that find mention. Given Damasio's definition, background emotions stem from the inner regulatory processes, their bodily manifestations more internal than becoming outward. As for the consequents mentioned, they are mostly behaviour patterns, and these are also mostly in the aforementioned gestures. There are different kinds of movements and actions in the other limbs that need not pertain to behaviour patterns, though one can read attitudes in them when exploring their execution. Many of these movements, such as wandering, movement of stout people or gasping, need not pertain to any single state or denote an emotional state, particularly of the primary or dominant kind in the first place. Except for a few movement descriptions, such as those involving the sacrum, these gestures reveal outward movements. We, thus, see how gestures of specific limbs matter for emotive expression more than others. Here as well, whether movement is more internal or outward makes a difference, indicating that they are recommended for depiction based on how they can be felt when executing them.

3.2.2 Gestures of the face

Regarding the gestures of the face, all the parts of the face are described here, as I mentioned at the offset. Glances are given a separate status that I will discuss next. Given the number of facial parts, a table comprising several pages is attached in the Appendix 4. A few examples are illustrated in the following Table 13, which appears in two parts, with the columns for chin, mouth and neck appearing below the others.

Pupils	Eyelids	Eyebrows	Nostrils	Cheeks	Lips
Bhramana circular. Heroic, anger	Unmesa Separating opening. Anger	Utksepa Raised. One only for anger, deliberation, heroic sportiveness and playfulness, hearing, looking. Both for wonder, delight, anger.	Natā depressed, frequent clinging together. Mild crying with sighs.	Ksāma Lean/ depressed. Misery.	Vivartana Rolling/ Narrowed down. Envious jealousy, physical pain, contemptuous disgust, laughter, etc.
Valana Turning fear	Nimesa Closing. Anger	Pātana Lowered. Envy, disgust, smile, smelling	Mandā Natural resting lobes. Sorrow, despair, eagerness, anxiety	Phulla Blown up/ expanded. Excessive joy.	Kampana Tremor/ throbbing Trembling, cold, fever, anger, victory, etc.
Patah Letting down. Pathos	Prasṛta Spreading/ separating widely. Wonder, heroic, erotic.	Bhrukuṭi Knitting/ raised from roots. Anger, dazzling light.	Vikṛṣṭā Lobes blown, extended. Strong smell, hearing, sighs, anger, fear, distress.	Purṇa Full/raised up. Energetic enthusiasm, arrogant attitude.	Visarga Spreading out. Women's graceful coquetry, feigned anger against lover, painting lips

Chin	Oral/mouth	Neck
Kuṭṭana When teeth chatter. Afflicted by fright, chillness, old age, fever, chronic ailments.	Vidhuta Obliquely opened. Preventing some activity, saying not so, etc	Samā Natural. Meditation, chanting prayers, natural posture.
Khaṇḍana Frequent throbbing of lips. Chanting prayers, study/ recitation of scriptures, conversation and eating.	Vinivṛtta Turning/ Spreading Feminine envy, jealousy, anger due to rivalry, contemptuous or playful behaviour	Natā Face lowered. Wearing ornaments, placing arms round someone's neck.

<p><i>Chinna</i> Lips in close contact. Recitation, sickness, fear, chillness, physical exercise, in angry looks</p>	<p><i>Nirbhugna</i> Lowered down/ crooked. Majestic, serious survey.</p>	<p><i>Unnatā</i> Face turned up. Looking up, ascending</p>
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Table 13

It is interesting here that all of them are recommended to a large extent for emotional states and *rasas*, which are also mostly directly mentioned. The descriptions expose how gestures of the face finally manifest themselves in emotional states. The consequents mentioned are again mostly in terms of actions, behaviour or attitude, revealing, as stated earlier, what gestures these would entail. However, we see here ones mostly related to the dominant states or *rasas* such as love, fear, sorrow or anger. Majestic survey relates to the heroic *rasa*. There is also mention of meditation or natural pose. This would relate to a *rasa* that is in practice today, but not mentioned in the NS, namely the peaceful state, *śāntarasa*. A differentiation within the emotional states in movement terms also becomes evident. We see the stages relevant for experience to be mentioned directly for pupils, eyebrows, eyelids, nostrils or cheeks, with just a few in some of the lips, chin or mouth gestures that do not in that sense have an overt external movement. Even amongst these, more overt states, such as anger, find mention in almost all gestures. Whereas love or affection, as seen in consequents such as sweet smiles, delight or graceful sport, is seen in eyebrow gestures. Transient states recommended are some of the gestures related to several background emotions, such as pain, chillness, fever, ailments and tremors.

Essentially, the more minute the movement, the more *rasas* they are recommended for. There are exclusive *rasas* mentioned, for instance, for pupils. When attempting to execute some of these gestures, one notices how it is an internal movement that defines them. While gestures of the chin or mouth can also be easily produced as rather overt movements that often need no specific attention, an attempt to execute them, for instance, as the tremor in the lips or chattering of teeth for the chin gesture, reveals the need to bring movement from within. Some of the more overt gestures are recommended for behaviour patterns or just actions, such as in painting lips, yawning or chanting. Interestingly, the neck gestures are mostly part of a stance or activity rather than carrying an emotive expression of their own. The dominant state is related only in one instance – sorrow. I will come back to the role of the neck in the analysis.

One generally notices a heightened felt quality in most of the gestures, with some difference depending again upon whether parts of the face enable more overt or more internal movement. The attribution of these gestures predominantly to *rasas* themselves is related to the latter. Another point to remember here that is more predominant than in the gestures of the major limbs in terms of the kind of movement are the descriptions themselves. The complete reading of facial gestures reveals how almost all of them are defined, such as a raising, lowering, spreading, contracting, opening, closing, throbbing, narrowing, blown up, projected forward (meaning bulging) or depressed (meaning hollowing). These point to the Shape category in LMA that will be underscored in the analysis of actual executed movement in emotive expression to be presented further below. Given the notion of felt quality attributed to *anubhāvas* leading to meaning in the NS, and particularly of establishing the dominant states and *rasas* for this purpose, one sees in these detailed descriptions the relevance given to the very specific kind of movement that relates to gestures of facial parts in facial expressions for the experientially relevant emotional states.

3.2.2.1 Glances in emotional states

Finally, the NS discusses glances in a separate listing. We discern that all the transient and dominant states, as well as *rasas*, have their own glances. Their listing is laid out in the following Table 14. I have used the term *Sañcāri-bhāva* for transient states as used in NS when discussing gestures. It is essentially another term for *vyabhicāri-bhāva* used in the earlier chapters. The descriptions for glances are particularly minute in movement terms, which indicates their specific relevance for establishing a felt quality. I highlight some in red to give an idea how exacting the descriptions of these are. I find them particularly specific in terms of minute details which could never have been described thus if they were not felt as such in their execution. The reader is particularly invited to try these.

Rasadr̥stis
Glances for *rasas*

Sthāyibhāva dr̥stis
Glances for dominant states

Kāntā: contraction of eyebrows, side long

Snigdḥā: centre expanded, eyeballs appear smiling, tears of joy

Hāsyā: eyelids contracted alternately and move when eyeballs move in agitation

Hrsta: eye rolls without disclosing pupils

Karunā: upper eyelid descends, eyeball at rest, gaze fixed at tip of nose	Dīnā: lower eyelid falls, eyeballs swollen , eyes move slowly
Raudrī: eyeballs uplifted , rough and reddish, eyelids still, eyebrows crooked	Kruddhā: rough glance, eyelids drawn up, immobile eyeballs turned up, knitted eyebrows
Vīrā: centre of eye spreads brightly, eyeballs level, glance fully open	Dṛptā: steady glance, opened widely without moving eyeballs
Bhayānaka: eyelids fixed and drawn up, eyeballs turned up, gleaming	Bhayānvita: eyes fully opened, eyeballs move from central point.
Bībhatsā: eyelids almost cover corners , eyeballs disturbed and eyelashes kept close together	Jugupsitā: eyelids contract without coming together, eyeballs covered and turn away from object in view
Adbhutā: tips of eyelashes curved , eyeballs slightly raise	Vismitā: level glance, fully blown, eyeballs turned up without movement in eyelids

Saṅcāri-bhāva dr̥stis – glances for transient states

Śūnyā	Vacant glance, feeble and devoid of motion, staring without perceiving. Pupils and eyelids kept level.
Malinā	Faded glance, eyelids half-closed, pupils in dismay, eyelashes shake slightly .
Śrānta	Due to weariness, lids droop down, corners narrowed down, pupils slip down.
Lajjānvitā	Due to bashfulness, upper eyelid sinks down, eyeballs lowered, facing down, ends of eyelashes slightly curved.
Glānā	Languid glance, brows and lashes move very slowly, eyeballs covered by eyelids.
Śaṅkitā	Fearfully uneasy. Glance held down with interrupted movements, at times uplifted, obliquely open with timid pupils.
Viśādinī	Sorrowfully dejected. Glance appears bewildered. Lids swell out, without winking, pupils motionless.
Mukulā	In happiness, pupils wide open, upper eyelid bud-shaped .
Kuñcitā	Ends of eyelashes bent after contracting eyelids. Contraction also in pupils.
Abhitaptā	Distress/anguish. Movement of eyelids make eyeballs also move gently.
Jihma	Squinted, crooked glance, eyelids bend down with contraction not apparent. Concealed eyeballs give it oblique skyward glance .
Lalitā	Lustful yearning/charming. Sweet glance with contraction at ends, smile visible, movement of eyebrows.
Vitarkitā	In conjecture/guessing. Eyelids turned up, full-blown eyeballs move downwards.
Ardhamukulā	Due to excessive joy, eyelids shaped like half-bud , pupils also half-blown with slight movements.
Vibhrāntā	Confused, excited. Middle of eyelids in constant movement in agitation.
Viplutā	Distressingly disturbed glance with tremor of eyelids followed suddenly by stunned steadiness. Pupils disturbed profusely.
Ākekarū	Half-closed eyes. Corner of eyes together with eyelids become contracted,

<i>Vikośa</i>	joined together like in a half-wink. Pupils repeatedly turning up. Full-blown joyous glance with eyelids wide open with no winking whatsoever. But pupils unsteady.
<i>Trastā</i>	Due to fright, eyelids drawn up, pupils tremble; due to panic, middle of eye full-blown.
<i>Madirā</i>	Inebriated glance makes eyes roll, corners fully widened.

Table 14

While the Shape aspects mentioned above become even more predominant, the glances reveal how a fine tuning in terms of movement is needed for expression. Let us look at two *rasa* glances. For *Bībhatsā* or odious *rasa*, the eyelids almost covering the corners is what is needed for the disturbed state of the eyeballs. The curved eyelashes for wonder, on the other hand, are only executable if the eyeballs are raised. The notion of raised eyeballs as opposed to upturned eyeballs is generally a finely tuned differentiation. The notion of swollen eyeballs is executable if the movement comes from inner to outer. Even in the transient states, there are several interesting minute details. The glance called *mukulā* needs bud-shaped upper eyelids. Trying to execute it involves the whole body. But one also discerns how a combination of several movements is described for these glances, an enabling from various parts indicated, given the minuteness of such movement. It is as if one part of the eye needs the other part for execution, which, at the same time, requires a honing in to very minute parts. Given these descriptions of glances in emotional states, it becomes evident how these are seen to be recommended in fine-tuning emotive expression. As we will see in the analysis in the next section, the gaze is related to gestures defined under chest, head and belly. They emerge with it, telling us why the gaze has been given a separate relevant place amongst the gestures and manifesting itself in all states, while, at the same time, anchoring itself in practiced traditions as aesthetics of expressivity.

To sum up, one generally discerns in the descriptions laid out above how gestures of limbs are attributed mostly to transient states, and those of the face to permanent states and *rasas*. This is what I meant by the progression towards experientially relevant states. At the same time, this does not mean that gestures of the limbs are not relevant for permanent states. One discerns in these gestures how, given that the transient states lead to permanent states and *rasas*, one can consider the gestures mentioned for transient states to fulfil just this, the transient function, as stated earlier. This is evident, for instance, in the chest gesture called *abhunga* that is attributed to fright. Another chest gesture called *prakampita*, described as quivering and incessantly heaved up and down, is attributed, amongst others, to terror, which is to do with being terrified. A quivering gesture of the thighs with heels raised and lowered

repeatedly called *kampana* is attributed to great fright. These are transient states of fear. Among the gestures for the sides of the body, there is one called *prasārita*, which is attributed to delight, a transient state, for instance, for wonder.

However, given the increased specificity of the facial gestures in minute movement terms, the experience of a *rasa*, which is what the aim of expressing all states is, must underlie the very kind of movement involved therein. It also particularly reflects that a felt quality of experience is seen to be attributed to just the minute kind of movement in emotive expression, as directly evident when examining this in the gestures. Even the behaviour patterns mentioned in gestures of the face are almost all of them directly related to dominant states and *rasas*, revealing how, even in the case of these kinds of consequents, it is the minute movement that matters for these states to manifest themselves as experience. That depicting emotions through *anubhāvas* would bring forth a felt experience of meaning are not just artistic aesthetic musings or descriptions but are grounded in an understanding of the primordial bodily manifestation of emotions and the feelings they enable, became evident when placing the relevance given to emotional states in the NS in the framework of brain research of emotions, as discussed in the last chapter. The discussion above reveals most importantly how in arriving at such a meaning, importance is given to the very movement involved therein. As the analysis of actual executed movement below will examine, it is something that comes with movement executed in certain ways that is evident in the minute manifestations of emotions. We have seen above how, apart from the minute movement descriptions, there is an indication of how an internally given movement seems to matter in the progression towards experiential states. While this is particularly evident in facial gestures, we saw with belly and chest gestures that it is specifically those in such movements that is related to emotional states; shoulders bent is, for instance, a description of shoulders when the chest is drawn in or hollowed. Such movement points to the notion of bodily states in emotions to be inner to outer discussed in the earlier chapter. It is these that I identified above as relating to the Shape Category of LMA/BF. In the next section, I present a movement analytic enquiry into actual executed movement that is required for emotive expression to emerge, to look into how such movement is evidenced therein and would matter.

3.3 Analysis of emotive movement

3.3.1 Analytic methodology

This section presents an analysis based on using movement analytic conventions of LMA/BF for the execution, observation as well as analysis of actual executed emotive movement. The examples presented for analysis draw from teaching experiments conducted on a student of dance, where knowledge about movement principles acquired by a study of LMA/BF have been used to explore what would enable students of dance to bring forth emotive expression.

As was mentioned in the Introduction and in Chapter 3 of Part I, LMA/BF is based on Rudolf von Laban's (1966, 1975) and Irmgard Bartenieff's (1980) insights on movement. Essentially, movement is seen to be defined, as was briefly introduced, by four major categories called Body, Effort, Shape and Space, which subsume the broadest range of principles movement reveals. These are categories that a Laban Movement Analyst applies to execute, observe and analyse movement. At the offset, I will briefly define the central aspects of this vast movement studies system with several subcategories that are as complex as movement itself. It is essentially a rich system that has evolved and continues to evolve as practitioners enquire into movement. The integrated system being used here, labelled LMA/BF in general, includes the contributions of Irmgard Bartenieff, a disciple of Laban, are subsumed under the Body category. As Bartenieff Fundamentals, they provide major insights into the functional aspects of movement. Functional and body organisational principles attributed to movement in terms of the Patterns of Total Body Connectivity (Hackney, 1998) that define neuromuscular connectivity as a developmental progression are of particular interest here.

The Effort category, on the other hand, defines the inner attitude of the mover to invest in the four Effort Elements: Weight, Time, Space and Flow attributed to qualities of movement. Whereby Space is not about how it is generally understood but refers rather to focus or attention and whether it is Direct or Indirect. Time is also a qualitative aspect of sensing whether a movement is instantaneous or prolonged/sustained. Flow is how movement can oscillate between being Bound or Free. I described while analysing gestures in Chapter 3 of Part I how one can understand the former as keeping the insides in. It is about being tensed, for instance, and not allowing movement to flow out freely. Weight is about whether it is used actively or passively or with a Weight Sensing, an important aspect of experiencing weight. Each of the Effort Elements, thus, has two poles between which movement acquires a quality.

Shape defines several aspects of how the body changes shape, also defined in four subcategories. Shape Forms, as the term denotes, emerge in a moving body and have been coined: Pin, Wall, Sphere, etc. Modes of Shape Change define the kind of movement that effects the change in shape, such as Directional Spoke-like or Arc-like, or a voluminous Carving. While these are changes that take place when the movement is about going out, reaching out in a self-to-other relation, or related to the environment as in Carving, there is also a further aspect defined as Shape Flow. It addresses how the body is changing shape in relation to itself. It is also about sensing and being in one's body rather than making something happen out there when moving (Hackney, 1998:222), as in an unconscious adjusting internally in one's stance. I will come to this below. Shape Qualities, on the other hand, are again about the qualitative aspects, here when the body is changing shape. Thus, the factors Advancing/ Retreating, Rising/Sinking or Spreading/Enclosing define the shape change occurring as we move outwards in a process of Opening and Closing, a "towards where" (Hackney, 1998:22) or which primary spatial pull, based on the mover's inner intention or attitude.

The category Space, finally, that Laban (1966) elucidated in a major way in his *Language of Movement*, defines the factors of space as we generally understand them, out there in the world, around our body, when we move in directions, dimensions, diagonals, planes and so forth, reflecting the natural tendency of the body to move with spatial intent and along spatial pulls. These were defined by Laban (cf. Groff, 1990) in terms of the scaffolding of crystalline forms evident in solid matter as well. This movement analytic convention is, therefore, a vast field in itself and the approach is very elaborate. Having given this brief insight, further details will be discussed as and when they reveal themselves in the analysis.

Coming back to the Shape category, there is a further aspect that looms forth as relevant and will be further probed into in my analytic study to be presented below. The Integrated Movement Studies (IMS) Program of LMA/BF taught by Peggy Hackney (1993, 1998)³¹ et al. distinguishes Shape Flow mentioned above from a baseline change of shape occurring at a fuller range through the whole body, calling it Shape Flow Support. It underlies all shape change as basic change in the body's form, rooted in internal processes such as breathing, essentially a baseline process of Growing and Shrinking (Hackney, 1998:221). In defining the specific spatial dimensions in which this occurs, the terms developed by Judith Kestenberg

³¹ Personal correspondence as well.

(Amighi et al., 1999:109-139) are used. Change occurs on this account as a Widening or Narrowing along the horizontal dimension, Lengthening or Shortening along the vertical, and Bulging or Hollowing along the sagittal dimensions, either simultaneously in both reciprocal directions as bipolar Shape Flow, or in one direction as unipolar. Kestenberg further places it in the context of feelings; the growing aspect leading to feelings of comfort and shrinking to discomfort, relating the Shape Flow factors to Shape Qualities and Effort Elements. As Hackney stresses, the IMS convention of LMA/BF has retained the term Shape Flow as Mode of Shape Change to denote the more general changes occurring in relation to self, also as an expressive aspect. And Shape Flow Support to denote the Growing and Shrinking to include the specificity it can have as defined by Kestenberg, thus, enabling a differentiation. These terms according to the LMA/BF conventions in the IMS Program will be used in the following analysis. I will come back to Kestenbergs insights in the next chapter, where I discuss the findings below.

3.3.2 Data for analysis from teaching experiments

As was briefly mentioned in Chapter 3 of Part I, the LMA/BF analytic convention enables not only analysis through observation, but also stresses the self-execution of movement being observed and analysed. Consequently, it requires the analyst to become acquainted with movement in one's own body, in intensive personal work with movement, and exploring the finely tuned nuances that movement entails. The study of this analytic convention and its methodologies led to applying it to analyse the movement principles inherent to traditional disciplines from India in an in-depth manner, particularly, Kuchipudi and Bharatanatyam, two dance theatre forms from South India. An initial application while teaching Bharatanatyam unveiled several movement principles defined in LMA/BF (Fernandes, Ramesh, 2005, 2006; Fernandes, 2006). The quest for teaching methods that would best work for students, especially non-Indian aspirants, to learn the aesthetics involved therein led to explorative movement analytic methodologies of teaching movement as understood and practised in Indian disciplines. For the current study, not only these teaching sessions, but also class sessions and workshops in facilitating movement in general and in yoga have been incorporated, that specifically were designed to study movement further.

For the following analysis, I draw on examples from experimental sessions of teaching emotive expression, where, based on how the student is actually able to execute the emotive

expression intended, cues and specific instructions were given to explore how intended emotion would manifest as expression. While discussing the descriptions of *anubhāvas* given in the NS above, we saw an increased specificity in movement terms and its refinement at minute levels, as the emotional states progress from transient to permanent states and feelings, i.e. to the states that when established as experience lead to meaning as a felt quality. In addition, there was a specificity towards facial expressions in the gestures attributed to these states, particularly specific glances. I, therefore, focus here on sessions with facial expressions to lay out how their emergence as expression requires specific ways of executing movement, at the same time exposing in what ways and also why these must take such a central place in emotive expression. After first presenting an analysis to identify the movement properties they inhere, the next section examines what they tell us about a felt quality.

People have various reasons for not showing or wanting to express emotions in a physical manner. This holds for students of dance as well. Even if some form of expression by way of a hand gesture, such as a fist for anger, a facial expression or a body stance, may find easy depiction, often similar to the descriptions given in the NS, not everyone brings forth these expressions with the same or the necessary intensity required for emotive expression. It varies from literally no evident expression to projected behaviour, i.e. very overt expression. The aesthetics of Indian dance theatre forms such as Bharatanatyam also require the use of refined facial expressions as seen above. The movement analytic methodology is, thus, also based on the observation that it is not feeling or imagining an emotion, or getting cues about the emotion itself, such as what emotion to express or placing it in a narrative or situated context, as is the conventional method, that is always helpful, or even seems to matter. The explorations rather entail what can be called *locating emotions in the body* where the methods LMA/BF provides are used.

Essentially, two approaches have been used to see what works for expression, particularly facial expression to be depicted, given its pertinent relevance. One is to observe as stated above, if possible, emotive expression may emerge through instructions entailing different cues to include images and kinetic specifications. Given there is mostly some form of visible expression, even if very minute, I have used the method of guiding students with the help of kinetic cues to enhance this, based on the actual emergent movement, similar to what was seen in the teaching of gestural meaning construction that was analysed in Part I. The other aspect, a work in progress, is to make them bring their own narratives, or what ‘moves’ them,

vibhāvas, so to say, and then find bodily workable solutions to bring forth the necessary expression related to these. This, in turn, is based on the observation that when students presenting their stage debut were given the assignment to conceive and create their own narrative choreography, their expressive potential was better than when they were taught the choreographies, the so-called items, in the traditional way. Then, given that emotive expression is a core element of Indian dance theatre, it was observed during several years of teaching that what can become a passive learning process is not conducive for expressivity. Emotive expression requires an active intensive personal involvement that engages all faculties of perception, particularly the bodily ones.

One of the first methods used was to see how emotive expression may be affected when holding, holding and releasing or softening/hollowing into breath. Alternatively, experimenting with categorising emotions into abdomen or heart emotions, and letting students use tension or relaxation in these regions. First results revealed that facial expression can change accordingly. In due course, the aspects of neuromuscular connectivity Patterns of Total Body Connectivity, an integration of anatomical landmarks, such as back of the head, scapula, sternum or tail-bone/sacrum in supporting and/or initiating movement, and a coupling of these with the elements from the Shape category, particularly Shape Flow Support, turned out to be effective and began to flow into the instructions for facial expressions. These emerged as an organic process from observation and analysis of actual executed movement, particularly in enabling a facilitation of movement, both in general, and in particular for emotive expression. Specifically, they flow into the observation of the same while it is being executed, based on which, further cues are given to facilitate emotive expression to emerge forth and/or be enhanced. These cues become evident in the analysis. The LMA/BF method has, thus, been used both for analysis and observation as well as enabling movement execution. Finally, the expression that thus emerged is analysed for the movement principles most apparent in emotive expression. As an added note, I do not use the notation symbols used in LMA/BF, namely Motif writing, for movement descriptions, but spell them out, with the aim of enabling readers not acquainted with this system to also follow the analysis.

3.3.3 Analysis of locating emotive movement in the body

In the following, I analyse expression as it emerges when the student is given cues one after another to engage more and more parts of the body. The images illustrated in Figures 21 to 23 reflect the moments of crystallisation of an emotive expression and its progression based on further cues. As in learning gestural meaning, the traditional methodology of learning upper body articulation sitting on the floor is followed, which also holds for emotive expression. However, in these experimental sessions attention was paid only to facial expression, particularly glances. If a gesture of the hand is added, one sees how it informs such an expression. It has also been an exploration of the emotive expression, pure as such, and not placing it into narrative contexts, as its learning normally is. The explanations given in NS, however, do not normally play a role in such teaching, as has been mentioned before. It is not a technique that is taught, particularly in dance theatre forms such as Bharatanatyam, given the emphasis on natural expression. This has been followed here as well. A word on cues: They are placed below the illustrations. They are English translations of the German cues being given.

In the first series of images illustrated in Figure 21, the student is learning to bring forth the expression for the *rasa* wonder, by way of the dominant state astonishment.



Figure 21

Expression of wonder. Cues:

- 1) Expression of wonder in its pure form
- 2) Intensify it by opening eyes, pupils
- 3) Allow something to become visible from face muscles and mouth
- 4) When you open eyes a little more.

As can be discerned from the illustrations, we see the emergent expression for wonder with every cue. While the first is a neutral beginning after being told that we will work on wonder today, where the eyes begin to widen with a simultaneous engagement of the head as well, when asked to intensify the expression by opening the eyes. In the next cue, when asked to

allow something to become visible using face muscles and mouth, not only do the lips go apart, but the eyes also open wider with the eyebrows rising. The head advances slightly at the same time, with a lengthening of the neck. There is activity in the chest as it sways slightly side to side. When asked to open the eyes a little more, not only do they widen further with more expression emerging, but the activity in the chest also intensifies, as the neck lengthens and the head continues to reciprocate with continued advancing. All this is happening as the student engages in facial expression and gaze. Underlying the Rising of the eyebrows or chest, or an Advancing of the head, is a Lengthening and Narrowing in the neck or even observable along the nose.

In terms of LMA/BF, the following principles are most pronounced:

1) From the **Body** Category: **Patterns of Total Body Connectivity**:

- **Breath Core**, seen in the activity of the chest. This element from the Body category defines movement at the very core of the breath. It also essentially enables core support.
- **Core-Distal**, which involves the connectivity pattern from core to the distal edges, the hands, feet, head and tail-bone. Here seen in the engaging of the head as it moves in accordance with activity in the chest. Here, Core connection is as evident to the Breath Core, or upper Core, one may say. In the understanding of NS, upper body articulators initiate upper body movement. The notion of the Core itself, as my observations with Indian movement traditions reveal, can be very different depending on where the movement is located.
- **Head-Tail**, seen here, however, only as how the head is engaged, the very beginnings of it, as the student lengthens through the neck into the head. This connectivity pattern, where the two distal edges head and tail are in communication with each other during movement, together with the Core-Distal, are the earliest neuromuscular patterns evolved in the body.

2) From the **Shape** Category:

- **Shape Flow**: A Mode of Shape Change, evident, for instance, in the movement of the chest. It is how the body is changing shape in relation to itself, an inner change in shape, rather than an outer-oriented one. One sees it in how there a slight swaying within the chest. This is evident all the time, so I will not mention it in each description.

- **Shape Flow Support:** That changes are occurring in more specific terms, namely along the spatial dimension mentioned above, are evident in the Widening of pupils, Lengthening of the neck or Narrowing. As we will see, these factors that define Shape Flow Support and encompass the body, become central to the movements being analysed.
- **Shape Qualities:** As the eyes widen a little more and the lips part, there is the emergent Advancing of the head in relation to a Rising of eyebrows. We see here towards where this is happening. The head is moving forward and there is an inner intention of this given in the emotion of wonder itself. While Opening or Closing are understood as the basic aspects of movement underlying Shape Qualities, we see here a projecting outwards towards the external, as opposed to what is defined under Shape Flow Support, that is internal.

I find the analysis reveals only those Shape factors that tell us not about a shape or form as such, but about the process in which one arrives there, as Hackney defines it. The process of change that is central to what Sheets-Johnstone (2011) defines as movement as an ongoing animate aspect of life.

3) From the **Effort** Category:

- **Space Effort:** The most prominent in a gaze is usually the Direct Space Effort. This is particularly the kind of emotive expression such as astonishment. It reveals the outward worldly directed emotion that it is.
- **Time Effort:** There is a Sustained or Lingering Time when the lips part, as movement emerges from within in both lips and eyes.

In the following examples, illustrated in Figure 22 this emergent expression is further explored by making the student engage with more body parts and also connect through anatomical landmarks, such as the scapula, tail-bone, back of head or shoulders.



Figure 22

Astonishment/Wonder combined with hand gesture and anatomical landmarks. Cues

- 1) At that moment when you blink with your eyes, the fingers open.
- 2) You can now connect the hand with your chest..., your heart centre..., what opens when fingers and eyes open.
- 3) You have to engage your chest at its utmost. You will feel it between your ribs, so to say.
- 4) Right, now your whole torso, upper body, up to the pelvis is involved.
- 5) If you can feel it from the tail-bone, through the shoulder blades/scapula and back of the head to eyes
- 6) Now keep the eyes wide open and go into *hāsya* (mirth)

In the upper row, the first two images from the left show the emergent expression after the first cue. The far right for cue 2. In the lower row, the image on the far left is for cue 3, the middle one for cue 4 and the far right for cue 5. The image in the third row is for cue 6.

Cue 1. The student was instructed to open her fingers at the moment the eyes blink, as when seeing something bright and luminous. The quick blink was followed by several activities in the face, torso and hand which were instantaneous and simultaneous revealing a Sudden Time Effort, as opposed to the lingering emergence of the expression in the earlier example. There was again activity in the chest as Breath Core was engaged, which one can simply define as a heaving. The activity in the chest was in conjunction with the hand gesture with an Opening, specifically Spreading of the fingers, a slight Rising and Advancing of the head along with the emergent Lengthening of the neck. We see that hand and head are connected to the Breath Core here in a Core-Distal connectivity involving the hand as a distal edge as well. The connection is into the fingers to be specific. There is again a Widening of the eyes along with Rising of eyebrows. Thus, revealing several aspects from the Shape category in conjunction with aspects from the Body category, essentially combined with the baseline change occurring in Shape Flow Support.

Cue 2. The instruction thereafter to connect hand to chest where an opening also occurs in conjunction to fingers and eyes, is what has been observed on myself and others while teaching hand gestures. It was used here to see how it may enhance facial expression. There is an intensification of the facial expression as evident, whereby there is enhanced Widening in general. The eyes do not only open, but also widen to the sides even more. The changes taking place in the chest are also a Widening Shape Flow Support, together with a sudden heave, which would be a minimal form of Bulging Shape Flow Support. This underlies the Advancing Shape Quality, which is evident in the head. In the earlier movement, there was a Rising of the head, which is essentially in conjunction with a Lengthening of the neck. Whereas, here we see that a Widening becomes Advancing Shape Quality. The Widening flows out into the elbow, articulated as it moves out horizontally, becoming a Spreading Shape Quality. The elbow position away from the body and to the side is crucial in Bharatanatyam for hand gestures. As one sees, it is connected with how the chest and torso are engaged. In fact, the whole enhancement was a result of thus engaging hand and elbow and finally the chest simultaneously. It brought forth a neuromuscular connectivity from the

hand, via the elbow to the scapula, and, thus, the chest. A deep connection was in play in bringing forth the enhanced expression.

Cue 3. The changes here illustrate how such an enhancement can be furthered, given this connectivity, that is felt by the student at the same time. Apart from the emergent changes above, there is a clear enhanced Widening in chest and a Lengthening upwards through the neck. There is a sudden heave in the chest that is more pronounced accompanying these changes.

Cue 4) is rather an explanation of what got effected as changes after cue 3). And while she is being told these, she brings forth the expression as illustrated, using yet another gesture of the hand, which is also used for wonder or astonishment.

Cue 5 Before this cue, the student is told that if she does it properly, the expression for wonder will come all the way from the pelvic floor, tail-bone and all the landmarks mentioned in the cue. She is given the cues as she brings forth the expression. One discerns how there is a simultaneous change as Shape Flow Support goes through the torso, all the way up to the eyes that widen yet again differently, leading finally to a Rising of eyebrows. The engagement of the Head-Tail connectivity is effected, contributing to further changes, evident in how the head is engaged differently. There is a Lengthening through the back of the head with its Advancing becoming pronounced. It is interesting to see in all the facial expressions that have this slight Lengthening that there is a slight narrowing in the face itself, the change occurring mostly in the nose and lips. There is the Breath Core underlying this as well, even if no prominent Shape Flow is observable.

Cue 6. In the image in the third row, the student is asked to combine wonder with mirth. When the laughter comes forth, there is a Rising in the shoulders, a Narrowing of the torso, as the movement sends messages through to the head with an Advancing from the back of the head, and the mouth widens into laughter. What is not evident in the image, but accompanied the movement, was an engagement right from the belly, with a wave-like movement, with the chest in constant Shape Flow as the expression holds on for a moment. There is, thus, a slight Hollowing as the torso lengthens upwards, accompanied by a slight sound as the breath thrusts out of the open mouth.

In the next series of images, illustrated in Figure 23, another primary emotion is illustrated, as a progression from contemptuous laughter towards showing one's strength thereby.



Figure 23

- 1) Contemptuous laughter, malicious
- 2) It can come with a display of strength, show your arm “muckis”
- 3) Much stronger, grow out of your elbow, really feel between shoulder blades, feel the upper arm, where the strength sits.
- 4) Not so high, lower the arm.
- 5) Now grow out of the back of your head, and the whole..., from the tail-bone, the whole, grow out.

The first two images in upper row are for cue 1. The image far right is for cue 2, the image far left in the lower row for cue 3, the middle image for cue 4 and the image far right for cue 5.

Cue 1. The expression progresses from a raising of the head and letting it fall back and then to the side. There is Narrowing of eyes and lips, with a slight curving, that is enhanced as the expression is held. Here as well there is an engagement in the chest as the head is moved. With Breath Core engaged. The movement itself reveals Shape Flow is in effect.

Cue 2. The student is then asked to use her arm to show strength. As the arm rises with a fist, the head rises slightly, the lips narrow downwards, as eyes continue to maintain the Narrowing.

Cue 3. When asked to show more strength, there is a Retreating of the head as the arm goes into Bound Flow Effort as it constricts into tightness. This is accompanied by a Hollowing in the chest that reveals itself in the Retreating of the torso, as the Lengthening through the back of the head becomes visible. The chin sinks thereby.

Cue 4. When asked to lower the arm, so that strength is displayed more strongly, the Bound Flow enhances as the arm retreats and the Lengthening upwards from the head is accompanied by a slight Bulging of the chest, and a Widening that goes out into the elbow as Spreading as it is brought to a horizontal position. One sees here an engagement in the sternum as well, as a Rising essentially, as the chest also goes into Bound Flow. The mouth narrows down further.

Cue 5. In the last image of the lower row, where the student is now asked to get the whole torso all the way from the tail-bone to grow out of the head, the Lengthening through the back of the head increases, while, simultaneously, the head gets thrown back as the chest bulges. There is a Bulging in the nostrils at the same time, emergent here, becoming stronger as the expression holds or is intensified with loud laughter, not illustrated here. In these examples with Bound Flow, the engagement of the chest is evident and, thus, the Breath Core. One also discerns a Core-Distal Connectivity Pattern when the hand is used as an articulator.

All the changes that have been recorded in the examples above emerge and run off automatically. They are seen to be emergent movement, not very outward, unless a hand or arm has been used. Changes are seen to occur simultaneously in several body parts. I will discuss the movement principles below.

3.3.4 Emotive movement is about *Shaping*

Essentially, the examples illustrate how Shape aspects are there by default in emotive expression, thus, underscoring what is evident in the descriptions in the NS of the gestures of

body parts attributed to emotions. It is seen in the fact that every change in expression is a change in terms of Shape Flow Support with Shape Qualities resulting from it. Most importantly, as the analysis above illustrates, but also teaching situations and further video material collected thereby underscore, the aspects evident in the very first movements that become observable are the changes occurring inner to outer, as an underlying baseline change in the body's shape in terms of Shape Flow Support reflecting the inner processes of change. The full range through the body that defines this is also evident, given in the specifications in spatial terms defined by Kestenberg (Amighi et al., 1999) as unipolar and bipolar.

It is at this level not so much about going towards somewhere outside the body in the first place, but an inner process of change along spatial dimensions that relate to the architecture of the body. Thus, we have a Lengthening from the back of the head, which would be a unipolar lengthening upwards. Or a Widening in different, yet reciprocal body parts, which is mostly bipolar, as in the eyes. A unipolar Bulging is evident, for instance, in the chest for laughter. For astonishment, underlying the Rising of the eyebrows or chest, or an Advancing of the head, is a Lengthening and Narrowing in the neck or even observable along the nose. The Widening of the eyes here could also be defined as a Bulging of the eyeballs, as the NS describes it. Then the actual movement execution feels more like Bulging. In another instance, when the student is asked to combine astonishment with laughter, one discerns changes occurring in the torso that can be defined as Hollowing and Narrowing, as the expression of laughter emerges. The arms here are also seen to be kept close to the body. Lengthening goes into a slight Rising in the shoulders. A Narrowing and Lengthening is also evident in the expression for laughter as the arm is held up.

Even the reciprocal changes occurring in several body parts simultaneously – in the neck, head, chest, etc. – are primarily in Shape Flow Support, revealing the fuller range through the body thus enabled. The, at times, minute changes in the eyes bring forth similar changes in the torso, or vice versa, as evident again and again in the video footage. An example that stands out is the Bulging that becomes apparent for boisterous laughter, when the student is instructed to widen the chest, broaden the shoulders, stretch the chin upwards and grow upwards along the completely vertical axis. The Bulging in the chest is accompanied by what the NS describes as expanded or fully blown nostrils or blooming cheeks, which are also manifestations of a Bulging. Associated with such change one also sees a change in the breath in terms of Growing and Shrinking. This is seen to be a central aspect, occurring constantly as

a change in the torso. Upon more detailed analysis, one sees that breath has essentially all spatial aspects, namely in the vertical, horizontal and sagittal. This will be underscored in the analysis further below from the perspective of fascial structures or connective tissue.

One discerns, in fact, how there is thereby a messaging through, as a continuous movement is usually defined in the movement analytic jargon, of a baseline change in the body's shape in what seems an automatic process across the various bodily gestures occurring simultaneously, culminating in reciprocal changes in the distal edges as well. This is particularly exemplified in the intensification of astonishment when the student is asked to feel the connection all the way up from the tail-bone. The simultaneous change goes through the torso, neck and all the way up to the eyebrows as Widening in the chest, Lengthening of the neck, Widening of the eyes, and so forth, leading, finally, to a Rising of eyebrows. The Lengthening, Widening or Bulging continue, so to say, into adjacent body parts, and connect eyes with torso or distal edges, as is the case when the hand is used as necessary. In the outward movement of the elbow together with the fist going up, one discerns a Spreading as Shape Quality, effected yet again by the Shape Flow Support factors. In the reciprocal changes taking place across body parts, there is an amplification evident in terms of changes via larger circuits, giving indication of what Damasio (2010:258) discusses in terms of modifications and amplifications of felt changes via larger circuits of cells when discussing where primordial feelings must arise from, as cited in the earlier chapter.

Patterns of Total Body Connectivity of the Body category also, thus, become evident in the orchestrated reciprocal movements between all articulators, revealing an inner connectedness, from the eyes/eyebrows, through the back of the head, down the neck to the scapula and then elbows and hands as distal edges or extremities. Head-Tail Connectivity and Breath Core are brought about. There is a Core-Distal Connectivity when the hand is articulated that helps the posture to gain strength. We discern that internal connections, such as neuromuscular body organisation principles, are then essentially connections that come into effect when the kind of baseline change in shape occurs as Shape Flow Support with reciprocal changes in several areas. It underscores the understanding of this aspect of inner shape change as enabling a fuller range through the body.

At the same time, the relevance of engaging in anatomical landmarks, such as the scapula or tail-bone, that are crucial in supporting integrated movement, becomes evident in these

connections. Anatomically speaking, the Lengthening in the neck, the Advancing of the head or the horizontal elbow movement analysed above, suggest a balanced orchestration of the three components of the trapezius, enabling the movement to message through. Thus, the scapula, particularly the lowest part with its anchoring function (Hackney, 1998:148), is engaged, just as the atlanto-axial joint evident in the Lengthening through the back of the head, or the elbow or the wrist in the hand gestures. While a hand-scapula connectivity is evident, there is also an interesting eye-occipital connectivity with apparent connections further downward through the neck, as the reciprocal changes indicate. The change in the gaze is seen to effect several other changes and vice versa. This indicates deeper connections, a notion that needs elucidation and will be taken up in the next phase of analysis from another perspective, namely current fascia research to be presented further below.

Effort Elements evident can also be understood as occurring inherently in conjunction with Shape Flow Support. We saw how movement emerged as Lingering/Gradual or Instantaneous/Sudden Time Effort, as added variations to the baseline change in shape occurring. Additionally, as some of the aspects of emotive expression reveal, such as when it comes to portraying strength, Bound Flow Effort accompanies the changes already manifest in terms of Shape Flow Support as an added feature. The student has to place her arm properly, get the Lengthening to the back of the head, or a Widening in the torso between the shoulder blades, that is seen to go out into the elbows and hands to enable the necessary Bound Flow. While Effort Elements or Qualities are manifest in emotive expression, I think they can be defined as *variables*, and the change in shape as baseline change in Shape Flow Support is seen to underlie all change, as *constant* at the most minute, hardly visible emergent level of movement. From the perspective of infant development, Kestenberg defines efforts and pre-efforts, the latter developing even before Effort. Within the body itself, Effort is seen to be in play as tension flow in the activity of the muscle, as being bound, free or neutral (Amighi et al., 1999). Even this is then an accompanying variable of change in shape.

Finally, it is not Laban's Space Category reflected in these gestures, except for defining the Shape aspects in an internal way in the body that have to do with spatial pulls based on the body architecture – thus, Lengthening into the Vertical/back of the head, Widening/Narrowing into the Horizontal/sides, and so forth, which, as seen above, are tied to anatomical landmarks and how the movement itself manifests in inner connections. In other words, for emotive expression to take effect, there is no need to go into outer space. But

spatial aspects specify the structural aspects at a minute level of shape change that is already taking place in terms of Shape Flow Support. Exceptions are, of course, seen when the distal edges, hands, have to be positioned to elicit a specific meaning. But these gestures are to do with an action, rather than the kind of emotive movement discussed here. In other words, or to use the vocabulary utilised in the Indian performing arts context, the hand gesture embellishes the articulation, adding more to expression.

Regarding emergent emotive movement itself, not only do the cues in specific terms related to Shape aspects seem to best help bring forth the necessary expression. We also discern how Shape Flow Support best characterises emotive movement at the subtle levels of emergence, as change occurring in specific body parts, inner to outer. A connection in such emergent movement to the Growing and Shrinking attributed to breath is also discernible, as evident from the changes occurring simultaneously in the chest, reflecting how a baseline change is surfacing. Finally, as the movement holds and intensifies outwards, all the categories inform each other, making the movement effortful, i.e. having several Effort Elements as well. This happens as the various Shape Flow Support aspects combine, such as Lengthening, Widening and Bulging. As evident particularly for laughter with strength, there is Shape Quality as Spreading that ensues thereafter, reflected, for instance, in the elbows. Generally, in the LMA/BF system, while Body category tells us about the neuromuscular connectivity patterns and internal physiological processes that underlie movement and Space Category the structural aspects, Shape and Effort are the defining factors that characterise the intentional, attitudinal aspects of movement that also have to do with expressivity. In the Shape Category, it is then Shape Qualities that are considered to be the expressive aspects of movement. As the analysis above, however, clearly illustrates, Shape Flow Support with the specificities of uni- and bipolar Shape Flow as coined by Kestenberg, is seen to be primary for and an intrinsic aspect of emotive expression. It is seen to be both the supporting and defining factor of movement therein. We have also seen how applying it enhances expressivity at subtle levels.

Giving instructions that address Shape Flow Support factors in conjunction with Patterns of Total Body Connectivity are not only revealed to be useful in enabling the student to effect emotive expression that is relevant, but then, when the movement is thus effected, the necessary emotive expression is also brought about. It emerges forth in a most primarily subtle manner as that baseline change in shape that is defined as Shape Flow Support, and as attributed to internal processes. Apart from breath, we see the relation of these changes to

emotions as internal processes. We saw in Damasio's (2003, 2010) postulation that internal changes are brought about by emotions; they in fact constitute these, ranging from the basic life-regulatory homeostatic processes that underlie emotions at all levels to their outward manifestations as emotions proper. One also sees in the analysis how the reciprocal changes are not a conscious or 'learned' endeavour. The changes occurred instantaneously with just a single cue. It could be for the gaze, which brought reciprocal changes in torso, without torso being addressed. Similarly, a connecting through from lower to upper enhanced facial expression in a continuous or instantaneous emergent process. Underlying all this was the Shape Flow Support aspect that encompassed the body in a fuller range, consisting of the individual unipolar and bipolar Shape Flow factors, such as Lengthening upwards in the neck, an activity in the chest such as Widening or Bulging, a Bulging in the nostrils, and so forth, that occurred without further reflection or even paying attention. A throbbing of neck muscles also becomes evident at times in the video footage. All these reflect what we saw also explained by Damasio (2003) in the earlier chapter, as changes that run off automatically, of facial expressions, glances, stances, etc. The analysis exemplifies the thus defined bodily changes effected by emotions in clear movement terms, the creative approach in performing arts thereby, in enabling a differentiated enaction, providing insight into the nature of movement at the inner emergent level.

Summarizing these observations, the discussion hitherto in providing valuable insight into the nature of movement in emotive expression and, in doing so, of bodily emotional processes in movement terms, illuminates how there is something essential about emotive movement and perhaps movement itself. Firstly, emergent movement at the most minute subtle levels, at times hardly noticeable, reveals the nature of changes occurring in emotional states, *inner to outer*. While there are several movement principles discernible, what finally, however, defines emotive movement as it emerges at the most *primary* level, in all bodily parts that were seen to be involved in emotive expression, including breath, is essentially the aspect of baseline changes occurring in the body's shape. It underlies all other changes as understood in the notion of Shape Flow Support and reveals the specifications put forward by Kestenberg, namely unipolar and bipolar Shape Flow.

Secondly, we have also seen how the specific descriptions of the gestures in the NS that were laid out in the earlier section reflect the Shape factors of change. The analysis underscores the exactness in which these gestures have been defined. Even if one finds terms like blooming

cheeks in the translation into English from the original Sanskrit text, from a movement analytic perspective such a description would relate to a Bulging. I have not analysed the belly gestures in the above, but the changes seen in the chest reveal that similar reciprocal changes must also occur in the belly in terms of the descriptions there, such as slender/thin, depressed or blown-up. In other words, there is the Narrowing, Hollowing or Bulging indicated in these terms as well.

Thirdly, there is connection between chest gestures and facial expression, they are particularly connected to the glance or gaze itself. Essentially, all other gestures are seen to be brought about with the glance; particularly the head gestures. It becomes evident why the head as a limb is classified with facial gestures, as being part of the facial expressions itself. It is moved when other gestures in the face are brought about, thus, revealing that it is not only a major limb that moves other body parts. It is in fact seen to be connected with the glances through deeper internal connections. Another interesting point that is underscored is the notion of the sacrum, revealing here how it is also involved in deeper internal ways. The analysis thus not only exemplifies how reciprocal changes take place, revealing deep inner connections in a bodily way, thus shedding light on the relevance given to the glances, but also points to inner dimensions of emotions in terms of a felt quality.

The discussion has, thus, taken us from what are *expressive* aspects of movement as evident from the theory and practice of emotive expression in Indian performing arts, to what are seen to be *functionally* primordial bodily changes that Damasio illuminates, here in movement terms. In doing so it instantiates the very nature of movement involved therein, which also is the very nature of emergent movement, inner to outer, revealing thereby what become evident as *structural* aspects that define the change, and are best defined as **Shaping**. Hackney proposes in the paper “What’s Shaping Up” presented at the EUROLAB Conference in Berlin in 1993 (unpublished) that Shaping is a general word that should be available to the whole process-oriented aspect to include all the aspects of shape change. I use the term here in the sense of the process it reflects; the process that originates in the baseline change of shape happening in the body at an inner level and related to internal processes, here most clearly evident as emotions at the primary level. A process that encompasses the body as reciprocal changes along inner connectivity patterns. Essentially, a process where *shape, spatial aspects and movement* are intrinsically integral as inherent concurrent factors, given these define the Shape Flow Support nature of movement identified therein. It was seen how these factors are

intrinsically interrelated in movement in the analyses presented in Part I of the study as well. However, as the analysis here exemplifies, they are inherent to the very process of change taking shape innately at minute levels of emergent movement, externalising into other aspects of Shape such as Shape Qualities as was discussed above. Shaping, finally, as the analyses and discussion hitherto instantiate, characterises the very process in which emotions and movement come together, informing each other as an integral *emotive-kinetic* process. And this Shaping is first and foremost an inner process of change.

Regarding arriving at the envisaged goal of understanding where primary and movement-based embodied experiences are grounded concerning meaning, the analysis above gives us the first lead in terms of the structural aspects. These aspects were also seen to underlie a linguistic notion of meaning construction. The analysis also gives indication of the felt notion of experience that must underlie such movement, that was discussed descriptively when analysing the gestures in NS in the section above. I will make a closer examination of this in the following section.

3.3.5 Felt aspects in emotive movement – the notion of *Sensing*

While discussing the descriptions of *anubhāvas* given in the NS above, we saw an increased specificity in movement terms and its refinement at minute levels, as the emotional states progress from transient to permanent states and feelings, i.e. to the states that, when established as experience, lead to meaning as a felt quality. Among the gestures of specific body parts, whether of the face or limbs, the ones that were defined in minute movement terms or indicated as being of the more internal kind, were seen to be recommended for emotive expression of the experientially relevant dominant states and *rasas*. Additionally, in the gestures attributed to these states, there was a specificity towards facial expressions, particularly specific glances. I noted how the gaze reveals such a fine tuning of movement that effecting it is a matter of felt quality. We have seen in the analysis of actual executed movement above how the internal processes of change connect in reciprocal ways, the gaze bringing about change in the torso, as much as the torso's activity effecting change in the gaze.

Thus, if bodily emotional states, both in the context of Indian performing arts and Damasio's brain research, give rise to felt quality and feelings, then the defining factors of movement

recognised above in the analysis as involved in these bodily states must inform these. That a felt quality is tied to movement in terms of inner shape change and connectivity patterns has been not only observed and analysed at the level of personal experience, but also indicated from observing and teaching in the aforementioned movement analytic methodology. We have seen that changes were brought about when taking the student, so to say, to relevant body parts that are both seen to be involved in emotive expression, and also to be anatomical landmarks that integrate and support movement. Such a methodology entails essentially an *accessing* of the body parts by the movers to enable the necessary emotive expression, similar to what was observed in the analyses presented in Part I for any given gestural meaning to be brought forth.

The experiments with emotive expression and the notion of accessing through body Connectivity Patterns with a focus on anatomical landmarks, Shape Flow Support aspects, Inner Core and outer spatial aspects, even in generally facilitating movement, were continued in a variety of set-ups. These included, apart from studio work with students, workshops with dancers, dance students, actors, laymen, yoga practitioners, dance theatre projects in primary schools and with physically and mentally challenged people, or interactive lecture-demonstrations. The methodology continued to incorporate the twofold reciprocal self-exploration of movement and observation and facilitation of movement on others accordingly. It is the often spontaneous feedback about felt experience when thus executing movement that encouraged a probe into this aspect. This has provided some useful insights into what may be experienced as a felt quality thereby. In the following, I present examples of observations made when students are brought to executing emotive expression, as well as feedback from teaching sessions in different set-ups.

I have not used the method of carrying out any interviews to assess a felt experience, to avoid a much too reflective assessment. Also, the spontaneous feedback has been most interesting. I have, however, used the method of requesting participants to write down their experiences during or after sessions. There was one hitch in this method: it is often verbal feedback during or after sessions rather than written comments that worked with long-term learners and practitioners. Any request to give a written assessment, even of the verbally and spontaneously expressed experience, was responded to by only a few. It is interesting to note how evasive felt quality can be and not everyone can or wants to write about it, or even verbalise it, stating in some cases that it is difficult to do so. I, therefore, present examples

from the feedback, some as a sum of frequently received spontaneous reports, others from relevant written ones, sometimes as quotes. Given the medium of instruction in my sessions has been in either German or English, they often also include translations from German that I, however, do not always specify. The feedback by participants of even one-time or short duration workshops who were asked to write down their experiences during the sessions is also of interest.

To begin with, let us look at the examples above once again. We saw how when the student was asked, for instance, to feel the movement all the way up from the tail-bone, changes occurred successively with the eyebrows raising finally. In another instance, where the student was asked to combine the expression for laughter with contemptuous strength, the expression emerged forth in terms of Widening, Lengthening, etc. as instructed. There was a focused manner here in which she was connecting through the torso. One sees in both instances how movement is brought about in the body parts she is being instructed to engage in. Given that it all happens pretty momentarily and instantaneously, the accessing is not a reflected one as such, but happening via a felt quality. This is seen to run off automatically to other reciprocal regions, revealing there is a bodily knowing which, when triggered at one point, sends messages through to other parts connected internally. Secondly, given the immediate change, I would say even her focus on attending to bring forth the movement is an attending enabled by movement itself and the awareness it provides. Accessing and movement execution are seen to inform each other as an ongoing felt process.

That the student is also having some sensate felt quality was evident from the visible reactions of discomfort. Where she was told, for instance, she has to engage her shoulder blades and feel them widen for the hand gestures, she made adjusting movements in her shoulder blades and revealed discomfort in her face after several attempts, reporting feeling a pull on the side being constantly used for her arm movement. That there is such discomfort or a sensate quality is also seen in how the student reveals movements every now and then that can be defined as Shape Flow, an adjusting into her own body to accommodate the shape changes taking place there. This factor, as I mentioned earlier, is also understood as where there is an inner sensing of being in one's own body. On several occasions, every time an expression got really intense, the student would pause, rub her face and eyes, before resuming her attempts. As opposed to this there are other instances when students are unable to execute the

movement instructed, often also unable to feel it then, as reported. Where there is no movement, there is no feeling either.

It is very often the inner change, the Shape Flow Support aspect of movement, that is most challenging for students; even in the case of more experienced movers. While the experience of breath, as reported, seems to be apparently easy and direct even when there may be no outer expression that emerges forth, the minute changes the gaze entails, or an engaging of the Core while doing outer movements, necessitates an attending to movement execution, which essentially is, as teaching sessions with the movement analytic methodology I have experimented with, reveal, an attending to where movement must be initiated. In sessions with students of dance, where they had to bring their own narratives that are then worked out, as was mentioned at the outset of this section, the gaze was reported as being ‘difficult’ to produce. Particularly when asked to either refine the gaze already produced spontaneously or make it more exacting for any given emotion at hand. Even here, this is directly related to the movement itself, namely whether it is brought about or not. Accessing the minute movement details is coupled mostly with a sensate experience of same.

Even in the analysis of a kinetic conceptualisation of gestures in Chapter 1, it was observed how a student attempting the gaze only became aware of a spatial direction, when it emerged forth in the movement of the eyes. Here as well the student takes her hand to the eyes, indicating where a sensate experience must reside, effected by the specific movement itself that finally emerged. Also the profound reaction was seen as an indication that the gaze itself must have a special felt quality. Given the observations with the execution of a gaze, an attending to movement is an attending to the feeling that is inherent to it. In other words, when applying and extending the definition of attention discussed in Part I of this study, an attending to a feeling that lends itself to being attended to. This is observable in other instances.

If accessing the eyes for glances is difficult, the method of accessing areas that seem to be connected has been applied, such as the anatomical landmarks. In the examples analysed above, the student was constantly given cues to engage, for instance, in the back of the head, the scapula or the tail-bone. There were subsequent changes occurring in the movement in all of these, revealing how engaging the anatomical landmarks brings forth, in this case, the intended emotive expression. In general, my observations have been that the regions seen to

be involved primarily in emotive movement are themselves experientially relevant areas. Changes, for instance, are particularly felt at anatomical landmarks or between them. Apart from the kind of spatial dimensions in which these can occur and felt as lengthening or widening, there can be specific experiences of spatial aspects as well. One of them is when consciously relaxing at these landmarks, not in the sense of giving in to gravity as passive weight, but as a sense of being carried. Applied to the tail-bone, it brings about the experience of a Hollowing, for instance, into the pelvic area and/or femoral joints. When applied to the scapula, the same occurs in the chest. Similarly, there can be a general sense of volume or space in the body, for instance, in the joints, and along the vertical axis all the way up to the back of the head, coupled with a sense of the head being separate from the body and neck when gently Lengthening into the back of the head. This is often accompanied by a deep breath. Anatomical landmarks can, thus, enable some of the most direct and profound experiences, evidenced at times as an emotional experience of a personal nature that participants reported as having surfaced, but then interestingly also as giving a sense of release.

Another means of facilitating movement that sheds light on how felt qualities are tied to inner change is observed when using the method of facilitating movement through Touch for Re-patterning, a method used in the IMS system of LMA/BF. It is a powerful means to coax not only change to occur, but it also gives the mover a sense of agency to execute the movement. Specifically, this is enabled by the quite profound felt quality, particularly given it addresses breath flow for facilitating movement. In other words, it takes one to the very Growing and Shrinking. I have used this hands-on method to enable students to engage in and integrate pertinent areas for any given movement, such as the anatomical landmarks or the Breath Core, or placing hands where movement is seen to be restricted or resisted, or where it needs to be grounded, such as the ankles or deep pelvic core. There is almost always some form of accompanying acknowledgement when thus accessing, indicating that there has been some sensation.

That such a sensation is finally the outcome of the change that is brought about from there is evident when sometimes there is no reaction for some time, and then, when change occurs, in whatever minute movement terms, and which can be felt in the hands of the facilitator, the eyes widen, there is a nod of the head, or ‘ahs’ of revelation. Such observations have been made interestingly also during workshops with trained young dancers and masters students of

dance. This reveals that even if executing movement with ease is already enabled through training and practise, a sensate quality is, nevertheless, experienced for the first time and as something new, coupled with attending to the internal process of change and investing or engaging in it. These observations have also been often made with students who resume their dance training after a pause and experience the movement analytic methodology of initiating movement at anatomical landmarks, along pertinent Patterns of Total Body Connectivity or the like for the first time. At times, the felt sensation is described by way of verbal feedback, also in the aftermath, perhaps after a week, that it felt good or different after, for instance, a femoral flexion exercise that brings a feeling of hollowing when executing it. Or that there was a feeling of opening at the scapula after grounding a hand and arm movement there.

Feedback regarding anatomical landmarks is often quite specific. Anatomical landmarks are apparently pretty easily accessible even when making the first attempt of moving with their help, as students' reports during movement facilitation reveal. Typical reports are about feeling the back of the head or a Lengthening there or in the tail-bone, or a sense of opening when engaging the scapula, an opening at the jaw, and so forth. The connection with the head is often reported as being felt particularly when the sensate experience is new or when moving with awareness of this for the first time. One participant wrote back after a session (Translation from German: Ramesh): "Your focus today on the skullcap was good for me. While simultaneously stretching to the heels nicely opening upwards and making the connection conscious." Given the relevance that anatomical landmarks seem to have, not only in the process of change that is related to emotions and evident in emotive expression and movement in general, but also for experiential qualities, some of the sessions conducted explored this in various ways.

The following excerpts from my report written after a three-day workshop in 2012 exemplify observations made at workshops with a cross-section of participants with and without dance and movement experience, and where I used the movement principles to enable participants to bring forth aesthetics typical in India dance vocabulary. Regarding enabling a typical gait, where I used different emphasis, at times on heels placement, at times on a bounce in the pelvic floor-femoral joint area, I wrote:

"The firm placement of heels was experienced as vibrating through to the spine. I asked them to walk again making sure they kept their backs erect and then assessed

the range of vibrations. The response was that it reached the head. Then the experience of walking softly with a bounce and the response was that they felt it in their pelvic area – often this verbal explanation was accompanied by hands being placed on the specified area around the abdomen. Some of them noted the sense of stability coming from the pelvic area and others nodded assent to this.”

I noted about exploring another movement, also a typical movement in aesthetics of Indian dance forms, the neck movement: “The more subtle movements coming from the neck which involved the atlas and the axis were a challenge. They closed their eyes to get a feel of the region and initiate movement from there. Some succeeded and others could not differentiate between the neck and the head.” As one sees yet again, the feeling into the region and moving it informed each other. Regarding their overall response to the sessions, I also noted here how participants commented at the end of each session that they felt so happy and joyful, a typical reaction after such workshops. I must add here that these sessions are usually 90 minutes to two hours each.

There were some interesting written reports from short-term sessions in one- to three-day workshops with a similar cross-section of participants where something new was explored as a work in progress based on both dance and yoga knowledge. A workshop report written after one of the first sessions is attached in Appendix 5. These explored movement qualities when engaging in what is defined as Inner Core in LMA/BF. In the workshops sessions the Core is engaged at different levels, such as the Centre of Gravity that is defined in LMA/BF as located in deep pelvic muscles, or the Naval Centre, or Centre of Levity in the chest. There are these and other centres from the perspective of Yoga, which as energy centres are understood as opening and enabling the flow of *prāṇa*, the life energy. These *chakras* are associated with specific anatomical regions, thus being also labelled as navel, heart or throat *chakras* for instance. Explorations during the sessions were aimed at assessing the quality of movement in these regions, when initiated, supported by them, messages through them or is emergent there in the first place. The idea was to see how movement would be experienced given, on the one hand, in the Indian worldview they are related to the five elements: space, wind, water, fire and earth; and, on the other hand, these are near important anatomical landmarks and constitute different areas in the Core. After such an exploration, the participants were both asked to move freely and guided through specific basic Bharatanatyam movements, such as deep femoral flexions with gradated rotations at the femoral joints in

conjunction with deep-seated stances (cf. Ramesh, 2014), or the linear movement with hands into specific points in space around the body, or the typical head and neck movements.

Considering participants began to report specific and non-specific kinds of experiences, in a later workshop session they were asked to write down their experience during and at the end of the sessions. Here are some examples:

- a wonderful fluid shoulder and neck.
- “had no idea that the simple movement of the neck and head will eventually spread through my whole body and I would be dancing and jumping around without any music or rhythm”.
- the heart region was felt so precisely for the first time, so open and mobile
- a “natural flow of energy in all major body parts of the body” while going through the movements, “hard to characterise the experience because of its uniqueness”.
However, it felt like dance and liberating, though not knowing what “I was doing or what was happening in the room”.
- One wrote down a list of musings, such as softness, feeling, dreaming, knowing, understanding, vastness, stillness, hearing and, finally noted, “speaking needless”.
- Another had a philosophical musing. I cite the original in German, with a translation thereafter: „Es ist nicht leicht mit einem weichen Brustbein durch die Welt zu gehen.“ It is not easy to go through the world with a soft sternum.

In this last case, while working with the sternum did apparently enable a felt quality, there was also perhaps a sense of vulnerability, underscoring how bodily changes can relate to emotional experience, or feelings with specific thoughts or specific themes, as Damasio notes. It also underscores how emotions are tied to these regions.

There have also been some specific ones reported after sessions with locating emotions in the body for these general participants that state for instance:

- that taking a specific stance evoked the emotion related to it
- that it was difficult to express emotions through the body wilfully. But it happened spontaneously
- what it feels in the body when emotions are directed to specific regions, as for instance, in the case of love, to feel more into the heart area did the body good, that it, thus, became softer

- that it had affected deeply to know there can be a relation between sorrow and compassion ... the connection makes sorrow less bottomless than it feels like. This participant expressed gratitude for the bodily perception.

Thus, apart from the observations mentioned above, the feedback received also reveals that there is an experiential quality when movement is made to be accessed in terms of the factors that bring about inner changes. These reports range from rather general ones to being quite specific. One must add that it is finally the individual sensibilities that enable defining exactly what is felt. But a felt quality is often observed and or made evident in some manner. Based on these hitherto discussed observations made during exploring and experimenting as to where movement and felt experience relate, one thus discerns a very relevant insight: I see a felt quality residing in the very kind of movement underlying bodily manifestations of emotions; in the process of change itself, in *Shaping*, both at minute as well as reciprocal levels of change along neuromuscular connectivity patterns.

One last example sums up the discussion on felt quality. It was essentially a reaction from a student of Bharatanatyam upon receiving the photograph illustrated in Figure 24 taken of a posture that emerged in her during a session where students were made to explore narratives as well, after first exploring how to emote. I am citing most of it here in the original:

“About the experience of seeing this picture in the aftermath, I would say I am surprised how convinced and stark I look. But in fact, if I think about it, I really felt this power emerging while doing it.you take us from where we are to the point where we fully embody the specific state (in guiding all our body parts so they can convey our inner emotion). *Abhinaya* are really demanding because they ask you to not only be completely there (mentally and physically), but to be stark enough to convey your mental state to the viewer so he/she can then also feel it. I feel exhausted and ... happy :) after these workshops.”

In this case, the student was made to connect gaze with her complete body stance to express anger in a specific instance, and had to be given very precise instructions for this given her reservations about exhibiting it. It was a guiding through the stance with cues for several aspects, such as grounding herself with her foot and lengthening from there right through to

the back of her head, widening the chest, widening and directing her gaze to a point on the floor in front of her, anchoring her elbows, tightening her wrists for the hand gestures, and so forth, until she suddenly, at one point, stood there as the image illustrates. One sees in terms of LMA/BF the Lengthening and Widening aspects of Shape Flow Support, a Bound Flow Effort Element, but also Direct Space Effort Element in the gaze. All these together with being Grounded in various ways, in the foot or ankle to be specific, deep pelvic muscles revealing being engaged in the Centre of Gravity, Breath Core, Vertical axis or Vertical Throughness, as it is called in the IMS convention of LMA/BF, and several other anatomical landmarks such as the tail-bone, scapula and back of the head. Furthermore, one sees both a Head-Tail Connectivity as well as a Head-Heel Connectivity. The body was generally engaged in a most integrated manner. And this almost instantaneously as finally the instructions made their way, so to say, into the body.



Figure 24

Most importantly, however, is the facial expression that is attributed to anger, including the bulging pupils, that emerged from connecting all the way up. We have seen in the descriptions in the NS how many gestures are attributed to anger, revealing how its depiction requires integrating the whole body. However, what stands out here is that asking the student to depict anger did not help as much as guiding her to access the relevant parts that needed to be engaged. Interestingly, in terms of a felt experience, however, while she felt change happening, as evident from her report, even if not in the detailed terms that I have analysed

her stance, her final response reveals that it was not anger she experienced, the photograph itself surprising her in the aftermath. It points, on the one hand, to what Damasio (2003) cited in Chapter 2 defined as composite experience and, on the other hand, to the notion of *rasa* as pleasure defined in the NS that arises from expressing emotional states corporeally.

Often, feedback is less specific but reflects the kind of composite experience expressed above. Recurring observations made in the experimental teaching sessions reveal that while immediate responses to movement execution can vary between feeling an ‘opening’, a ‘pressure’, ‘tension’ ‘lightness’. ‘difficulty’ and so forth, depending upon what the movement demands of the mover, there are often more overall responses, particularly after movement is brought about. Many of these post-movement or post-session responses, as were also seen earlier, are often positive, that it feels good, there is a sense of well-being or, as the student above describes, a sense of being happy. Even when participants do not want to or cannot always give elaborate feedback on experiences, they, however, briefly state at times a sense of feeling good. In Kestenberg’s work, it is the growing aspect that is related to comfort and the shrinking to discomfort, as cited earlier. This is something we experience and know in a bodily way, even if not consciously reflecting on it. There is the notion of experiencing in spatial terms indicated clearly here. Yet it is often also observed that while a sense of discomfort or even pain may be indicated while actually executing movement, the feedback in the aftermath is almost always of comfort or pleasure, whatever the rigours of doing the movement were.

All in all, we see that responses of felt experience, often specifically positive, are seen to be given where the process of arriving at any given stance or movement is addressed, whether it pertains to emotive expression, dance, yoga or daily movement. Essentially, when the process of change emerges forth from within, with the inner change itself determining the outer manifestations of shape as such. That this matters is underscored by observations that are the opposite, made, interestingly, with trained practitioners, even dancers, very perfect in outer form. To echo Hackney’s (1998:223) observations, they can be stuck on the right outer shape rather than engaging in the inner process of change to arrive there. When they are not ready to attune to inner changes or bring the outer shaping from the inner, they also do not have felt experiences to report about. Dancers then often also lack an expressivity, as spectators’ responses indicate. This echoes in turn LMA/BF’s emphasis on investing in the change occurring from within as an “*expressive process*” (Hackney, *ibid*, emphasis in original),

which as was explained earlier regarding the notion of Shape Flow as a Mode of Shape Change, is also about sensing being in one's body. As Hackney further explains: "It creates a sensation of movement" that is about sensing one's own body as "my own responses change my shape" (1998:222).

As the discussion laid out above exemplifies, in specifically movement analytic terms and by looking at actual movement that needs to be executed to bring forth emotive expression, that it is the very felt quality that lends itself to being attended to, that enables the felt sensation. And this resides in the process of change itself, in a profound *inner* bodily way, occurring inner to outer. Such a process is not only characterised by inner processes that are primarily emotions, but also by the very shape change happening. It is given, one may say, when these changes themselves speak to us as they emerge as shape change, which is first and foremost in terms of Shape Flow Support as a baseline change in shape, as Hackney defines it, that encompasses the body at a fuller range as it changes in terms of the spatial specificities of Kestenberg's Shape Flow. While it becomes apparent how Shape Flow Support factors are the most challenging to engage in, when they do take effect, they are accompanied by a sensate experience that there is a change. In the more specific feedback received, it also becomes apparent how it is the spatial dimension itself that is experienced in terms of opening, or lengthening. Or even when lightness or tensional qualities are expressed, it is essentially related to the narrowness that feels like tightness. That it resides in such movement is clearly indicated in how it is through movement that the inherent felt quality can become conscious awareness.

Yet, neither the change nor the felt quality need be a conscious one. What makes it a conscious experience, meaning being different to a non-conscious one, is an aftermath, a reflective one, as the student's reaction reveals; it came in the aftermath, after seeing the photograph. The report reveals that she was reflecting on what was experienced in a bodily way at the time of actually executing movement she was being guided through. It was not in her conscious awareness as such, at that time, but came into it upon reflecting on it. The consciously becoming aware was, so to say, a *reminder* of felt experience that was there as a sensate bodily awareness. Thus, telling us that there *is* a felt quality. As Sheets-Johnstone (2009, 2011) also emphasizes, movement has qualities that can be felt if attending to one's movement. They are there as what is defined as a primal sensing, as an affective-kinetic/tactile-kinaesthetic ongoing experience to which I referred in Chapter 3 of Part I.

Summing it up, the discussion above exemplifies in movement terms that, experientially speaking, there is a *Sensing* that is integral to the very process of *Shaping*. The term sensing that Damasio uses, as I cited in the preceding chapter, in defining the minimal features that even the simple single-cell organisms require to survive (2010:50), indicating in effect that it is an integral feature of emotions, is traced here to the kind of movement that accompanies bodily changes in emotions.

3.3.6 *Sensing and Shaping* – the felt and structural in emotive-kinetic processes

We see in the NS in the very defining of gestures recommended for emotive expression, particularly for experientially relevant emotional states, such as *widening*, *blooming*, *narrowing* and so forth, the implicit understanding for the relevance of such emotive movement for experience. It is not about eyes being wide open for astonishment or fear, or narrow in disgust or anger, as one may understand it, that defines the bodily manifestations that enable a felt quality. It is rather the process of arriving at the shape, so to say, of the eyes, or the process of arriving at the rigid or pulled in chest, for instance. In other words, it is in the process of change of shape occurring inner to outer that defines how bodily states of emotions can be manifested as a felt quality. In particular, given there is something profound indicated in the experience defined in the *bhāva-rasa* continuum that this should enable. It was also seen that the explanations in the NS tell us in detailed terms what is needed to express emotional states to enable this. The analysis above of actual executed emotive expression that draws from insights on movement principles from LMA/BF underscores these explanations in specific movement terms.

What becomes evident in the analysis above is that experience thus defined can be understood as residing in the very nature of movement at refined levels that underlies the bodily manifestations of emotions. One sees in the analyses, including the last example for anger, that the bodily process of changes run off almost instantaneously when movement is facilitated; taking effect the moment the eyes execute the gaze, or the anatomical landmarks are engaged, or the Core, not only the Breath Core, is accessed, and so forth. In Damasio's explanations that emotions effect changes in the body that run off automatically, we see the *why* for such changes. At the same time, we see in the process of *Shaping* *how* and also *where*

in the body such changes are brought about *and* felt. The process of inner change attributed to emotional states and definable as *Shaping* entails also a felt quality, a *Sensing*.

Experientially, there is in effect a *Sensing and Shaping* that comes *along* with the very process of such an inner change, both at minute and reciprocal levels as movement is connected along neuromuscular connectivity patterns. In short, shapes, spatial aspects, movement and felt qualities or feelings come together in what are seen to be *emotive-kinetic* processes that I noted above. Consequently, they tell us about the very nature of embodied experiences. They are integral experiential aspects to movement in emotive-kinetic processes that need not be conscious to be operative but can be sensed or felt in different ways and perhaps given different labels.

We thus arrive in tangible terms at the notion of movement-based experiences grounded in *emergent movement, inner to outer in emotive-kinetic processes*, having, as mentioned earlier, traced the discussion from 1) *expressive* aspects of movement as evident from the theory and practice of emotive expression in Indian performing arts to 2) the *functional* aspects of movement entailed therein given the correspondence to primordial bodily changes effected by emotions that Damasio illuminates, to, finally, 3) the *structural* and *felt* aspects evidenced thereby. Such movement, identified through analysis in this chapter is characterised by *Sensing and Shaping*, the very felt and structural aspects of experience that the study has been tracing from the offset as underlying meaning. Finally, that there is something fundamental and deep about the kind of movement identified here with all its characteristics is particularly substantiated by the correspondences I identify to current findings in fascia research. Then, they are reflected in the properties of fascia or connective tissue, as my analysis instantiates. In the following, therefore, I present central aspects from this analysis, taking some pertinent examples that relate to the analysis of actual executed movement presented above.

3.4 The primordial underlying *Sensing and Shaping* – a fascia research perspective

Let me briefly come back to the gaze or glance that reveals, as seen earlier, not only the finest of movements that characterise such emotive-kinetic processes, and a connection to changes in other parts, but also felt experiences that were briefly analysed by way of self-execution of the same when examining their definitions in the NS. The reader is again invited to try this. While widening or narrowing the eyes as much as possible without engaging in any other

movement, one may become aware of the sensate connections to the back of the head with changes occurring there. When engaging in widening or narrowing only the pupils, on the other hand, an internal sensation at a rather deep level surfaces that goes way down the torso, encompassing even the whole body. These experiences that, in addition to the ones discussed above, surfaced in the movement analytic explorations with regard here to the usage of gaze, both in an emotive and non-narrative context, coupled with a re-examination of the definitions in the NS in the course of this study, have been intriguing. This is so particularly given the current findings in fascia research that were part of the study of movement that preceded and accompanied the empirical study presented here. A closer scrutiny of the latter, thus, became part of the final analysis. The experiential connections for instance, related to glances in a sensate way or the reciprocal baseline changes in shape that occur automatically in emotive expression have correspondences to connections that fasciae are seen to have. This perspective, thus, adds to the understanding of what is fundamental about bodily experience as analysed above.

Current fascia research (Guimberteau, 2005; Myers, 2010, 2014; Paoletti, 2011; Schultz and Feitis, 1996; Schleip, 2003, 2012; Schleip et al, 2012; Schwind, 2014; Upledger, 2002; Ginter³²) is in a position to tell us more about connective tissue, thanks to modern technological means. They enable insight into the behaviour of not only pathological but also healthy tissues. Fascia today is understood as a large interconnected flexible network of continuous matter that spans the body as an “Endless web” (Schultz and Feitis, 1996), surrounding and intercepting muscles, bones and organs as supporting structure, also constituting the fluids and ground substance in the body. It in as much constitutes the architecture, texture, inner structures and connections in the body and occurs in two main layers: superficial (fascia superficialis) and deep (fascia profunda). At the same time, the structures a fascia reveals are defined by the very function of any given part of the body. All connective tissue is seen to originate in the embryological layer called the mesenchyme. Depending on its function, or rather the function it needs to take on, which is, in turn, based on any given body region and its function, fascia then becomes areolar or dense, fluid or firm, planar, rope-like or net-like, and thus becoming, for example, bones, cartilage, fluids, ligaments, tendons and muscles; essentially everything that makes up the structure of the body, to enable its functioning in tune with the various levels of existence – biological,

³² Ginter, Anita, physician/MD, fascia researcher and Laban Movement Analyst. All references to Ginter made here are based on personal correspondence and class notes while studying fasciae and movement under her.

environmental, social, emotional, and so forth. Thus, fascia is seen to take on the form a function, in an evolutionary sense, requires. Form here follows function by default.

One of the underlying mechanisms which give a fascia this ability to take on the structures as necessary is understood to be tensegrity, a mechanism based on the combination of opposing compressional and tensional forces (Levin and Martin, 2012:101). This enables fascia to adjust to the requirements, such as taking on, bearing and/or transmitting load as required. The bones are seen to function like struts in the tensegrity model, not connected to each other and, thus, in a load-bearing function. The tensional quality is seen in the tissue that makes up the elastic network spanning the body with the varying degrees of density required by the load. The interconnectedness of this tissue is finally relative to such load transmission. However, the load bearing elements are not like brick walls, nor are the elastic tensional elements without some firmness. It is only a question of where compressional or tensional factors predominate. Connective tissue is, thus, seen to have a basic organisational framework that is the same whatever the differentiation in the overall structure of the tissue based on its function. This organisation gives it the tremendous capacity to resist and adapt to change, thus, supporting and promoting life itself. At the biological level, it is a maintaining of internal equilibrium which, apart from biochemical factors or pressure and temperature, is also a structural one as mechanical stability, evident in the relation between stress and deformation. This is how the body adapts to the environment, which includes the forces that act upon it.

The fact that fascial structures are in constant motion or flux, sliding, gliding, compressing and extending, that gives fascia its ability in supporting, transmission, encapsulation or inner structuring (cf. Guimberteau, 2005), is important for the considerations for the purpose here at hand. It is a system that communicates in the body with movement as its essence. The function of the connective tissue is tied to movement and vice versa. Observations made by researchers like Schleip, who have come from movement education, are that healthy connective tissue underlies and is evident in graceful, fluid movements. Graceful movements are central to the understanding of Indian performing arts as well. In addition, the better the mobility, the better the biomechanics that come with tensegrity.

What does it mean in movement analytical terms? While current findings in fascia research offer several profound insights for the study of movement, and I have applied many an insight

to Indian movement disciplines, in particular, also to the movement vocabulary and its practised aesthetics basic to the so-called classical Indian dance forms such as Bharatanatyam, which stem from the notion of Nāṭya as defined in NS, I will take into consideration here only those properties of fascia that support the observations made with emotive movement above.

3.4.1 *Shaping* – Forming aspects of fascia

What becomes evident as a basic organisational principle in the behaviour of fascia is its structural ability to form and deform. This is seen to occur at minute levels of connective tissue, as insightfully captured with modern technologies, such as *in vivo* and computer-synthesized imaging and video endoscopy in the ground-breaking video footage available online under the title “Strolling under the Skin” (Guimberteau, 2005). Fibrillar *hollow* filaments studded with dewdrop like structures are seen to form and deform themselves into triangular, quadrangular and polygonal shapes. These so-called pseudo-geometric shapes are in constant flux, undergoing change as necessary, both in positions and shapes, revealing simultaneously the ability to return to their initial position. Their behaviour is accounted for as distribution of equilibrium between mechanical stresses throughout the network, which also explains its tensegrity. The dynamics of deformation lies in how stress is transmitted to the neighbour with lesser stress until it is deformed and so forth, until all, including the farthest component, gets its share. Such movement is involved in muscles, fluids, fibres and cells.

The shapes, thus, adapted vary with the dynamic role the tissue is called upon to play, as it responds, resists and adapts to this flow of information in terms of regulating pressure, intensity, energy or the like. The shapes identified in fascial organisation, such as a dodecahedron with pentagonal structures or the icosahedron with both triangular and quadrangular structures, have both been defined by Laban (1966) in his *Choreutics and Space Harmony Theory* as crystalline forms of solid matter that get their form in relation to the spatial pulls acting upon matter. In defining the spatial aspects of movement, Laban explains about the spatial pulls both in terms of the six cardinal directions up-down, side-side, forward-back, as well as combinations of these in three-dimensional space. Based on its architecture and relation to space, the body tends towards these spatial pulls, which stabilize the moving body as equal and opposing forces. Laban placed the human body within these crystalline

forms and developed what are called the Scales to define movement based on these spatial pulls.

In the Indian worldview, it is the square and circle, as Vatsyayan (1997) explains, that find relevance in the geometric abstraction of space in arts and architecture. The square denotes stability, the circle movement. Underlying architecture as given in the science of *vāstu*, is furthermore the understanding of spatial pulls given in nature as well as the movement of elements, defined, for example, as triangles, squares and circles and their three-dimensional structures (Schmiecke, 2000). The quadrangular notion of space with corresponding spatial pulls, for instance, underlies several pure dance movements in Bharatanatyam, giving it its linearity and stability (cf. Ramesh, 2014). As opposed to this, the circular notion given in the icosahedron as discussed by Laban is given relevance in LMA/BF as the most stable spatial structure. Within the icosahedron, movement is enabled towards all spatial directions, as multidirectional or circular movement. And yet, finally, the quadrangular planes that define the spatial pulls towards which the body tends in achieving these directions are the scaffolding of this polygonal structure, the peripheral surface of which is made up of 20 triangles.

Having briefly said this, what fascia research tells us is that polygonal shapes are the structures *within* the body reflected in the biologically fundamental and functional behaviour of fasciae³³. There is, thus, a living bio-tensegrity thereby (Guimberteau, 2005; Levin and Martin, 2012:101f, Myers, 2014:43-61). Fascia research for its part also applies the notion of physical forces to account for the tendency of fascia towards polygonal space, seen to be present in all matter. At this minute biological level, polygonal shapes are the means by which living structures subject to forces fill space, enabling biomechanical regulation. On this account, the icosahedron is considered the optimal shape to fill space. Various spatial pulls act upon the connective tissue, giving it corresponding polygonal shapes, as is seen in the multiple-directionality in which the fibrillar filaments communicate. Importantly, the images in the film cited above (Guimberteau, 2005) reveal what can be recognised and defined as a baseline Growing and Shrinking that was discussed earlier as Shape Flow Support underlying all change of shape. One sees how the fibrillar filaments lengthen, bulge, widen and narrow, with hollowness seen to be their very asset as mentioned above. Incidentally, Hollowing is an aspect that is intensively explored in movement in the IMS program of LMA/BF that was

³³ Fasciae is the term used to denote the plural of fascia, as becomes evident from the discussions by, for instance, Schleip.

mentioned earlier. It is an experience connected with the internal Core. One, thus, discerns in the behaviour of the connective tissue the Shaping that was seen in the analysis above to define the process of changes occurring in emotive expression. As Ginter explains, Shape Flow is one of the many principles identified and applied in LMA/BF, that characterises the nature of fascia, the central one in fact, as is evident above. Others movement principles conducive for fascia are the neuromuscular Connectivity Patterns such Core-Distal or Head-Tail, that were explained in the previous section, the principles that fall under Space Category as well as Effort, such as Time Effort.

Thus, what we can gather from fascia research is that this process, where both shapes and spatial aspects are inherently related aspects in movement, is an innate and fundamental biological property that is associated with how the body functions at the micro level, specifically how living structures stabilize and create states of equilibrium. The baseline change in shape is seen to be in the constant flux of forming and deforming that fascial structures are subject to as they respond to the functions they are called upon to adopt. Their form follows function thus. This echoes Damasio's (2010:263) notion of form and function of the "microworlds" in the body that was referred to while discussing primordial feelings in the preceding Chapter 2, while at the same time telling us how this form and function operate in specific movement terms. We see here how fasciae in adapting to change by way of forming and deforming behave in movement terms. In terms of a baseline Shape Flow Support, they fill three-dimensional space as they continue in their load-bearing function, thus encompassing as change the whole body. How this is a matter of fascial structures will be exemplified further below. Given these correspond with the properties of change occurring or enacted in movement terms in the body in emotional states, they, specifically, appear to be the structures that negotiate between the external physical forces in terms of spatial pulls and internal processes. While we see here how structural aspects of change are attributable to what acts on and in the body given its architecture at most minute levels, fascia research also exposes how fascia structures are also where sensitivity in terms of bodily perceptions lies.

3.4.2 Sensing – the sensitivity of connective tissue

Fascia is seen to be an endless connecting network in the body that is crucial in force transmission. It is simultaneously also known to be the biggest perceptual or sensory organ of the body. Apart from the nervous system consisting of the brain and the spinal cord, there is a more peripheral brain located in the fascial system that not only reveals sensitivity, but also

the ability to process information and transmit it independently, given fasciae build pathways of transmission (Paoletti, 2011:143-152; Schleip, et al., 2012:3-49, Myers, 2014). Several nerve endings are located within most of the connective tissue. Given that the receptors in a fascia are perhaps just as many or even more than in the retina discussed earlier, fascia can be understood as the most important perceptual organ of the body, as Schleip (2012:56) explains, whether regarding proprioception, nociception or visceral interoception. The first one is the ability to consciously and unconsciously be aware of the position, movement and orientation of the body and its parts, enabled, as the latest studies reveal, by receptors with many proprioceptive nerve endings in the superficial layers between the superficial and deep fascia. While nociceptors are nerve endings that respond to pain and its transmission, interoception involves the mostly unconscious transmission of signals by free nerve endings in organs and other tissue, and, thus, different physiological states of the body, that is seen to also include tactile experience given by touch (Schleip and Jäger, 2012:64ff). Interoceptive perceptions are not only sensitive, but also affective, standing always in relation to life-regulatory homeostatic processes. Essentially, it is the direct connection of the interoceptive afferent nerve endings in the most superficial layer of the spinal cord to the insular cortex that enables both sensitive perceptions and conscious feelings. We have seen in Damasio's explanation discussed in Chapter 2 how interoception is central for feelings related to emotions and underlies all other feelings. Schleip et al. also cite Damasio in thus discussing the neural implications of fascia. From the perspective of fascia research, insights are enabled as to what the bodily basis of these sensate feelings are. Above all, how they are connected to the very movement at the micro-levels of the all-encompassing tissue called fasciae.

As Paoletti (2011:137-140) further discusses, one should see the fascial system, with its own innervation, as motile, in fact, autonomous where motility is concerned, which stems from the embryological groundings of fasciae, with the eternal movement apparently maintained by the SNS. At the same time, the autonomic nervous system, particularly the sympathetic nervous system, the SNS is apparently responsible for the innervations that also influence the mechanical and biochemical factors of the fascia. Given the SNS, known for its regulatory function in homeostasis and in regulating the quick responses required when emotions are triggered at a primary level, its transmission of efferent messages is to generally bring forth changes in different body parts simultaneously, ranging from dilation of pupils, constriction or narrowing of blood vessels and organs, priming the body for action in threat situations, or goose bumps, perspiration, etc. These reflect in almost the same terminology the descriptions

given in the NS for bodily manifestations of emotions. Even the constriction or narrowing of blood vessels is mentioned when describing how change in facial colour should be brought about by putting pressure on the blood vessels (NS, Ch. 7:104-105). How organs are involved in constriction is not evident directly in outer expression, but from the role the fasciae play.

The function of a fascia in holding everything together, with the loose areolar kind of connective tissue, for instance, encapsulating organs. The internal organs are essentially suspended in them, like in net bags holding fruit or vegetables, as Ginter explains. Typical examples are the pleura and pericardium. The innervation of such encapsulating fasciae causes reactions therein, such as constricting, thus, influencing the structure, shape and function of organs. In doing so, thus, influencing posture during emotions. The visceral pleura, for instance, which encapsulates the lungs, receives autonomic innervation from the pulmonary plexus and is sensitive, not so much to pain, but to stretch. The insight that it is the fascia system that enables even the muscles to maintain and correct body postures, sometimes even substituting them so as to maintain posture, is important. One can generally define the outer fascia as a posture-enabling system and the inner fascia as support-enabling, apparent in the aforementioned holding or carrying function. This echoes the notion of proprioception and interoception mentioned above. Thus, we see how emotions and the structural changes they entail, which, as the discussions so far pointed to, are triggered inner to outer, are seen here to relate directly to the very layers in which fasciae are seen to be structured. Every form of sensate experience resides therein as well, given their innervation. In particular the encapsulating function of the dura mater, that not only encapsulates the most important nerves exiting the brain, but also is constituted of nerve fibre as, for instance, of N. trigeminus is seen to account for its extremely important function in sensate experience, also causing for instance head ache.

Thus, if there is a felt sensation, it is accountable directly to the functioning of fasciae. We may not experience the constricting of an organ, but the outcome of shrinking. This points to the fact that it is in shape change that there is a sensate experience, the most profound being the inner change given in terms of Shape Flow Support. Finally, fasciae also build lesion chains, whereby disorders and, thus, distortions manifest themselves primarily in their motility. While these are influenced by various factors, such as intensity, age and adaptability, fasciae then become fixation points rather than harmoniously carrying on movement and load.

This underlies the experience of pain. As the literature reveals, studying fascia is particularly extensive in enabling therapy.

In the brief laying out of the salient aspects by which fasciae are today defined, we recognise whence both the structural aspects of *Shaping* and felt aspects of *Sensing* evidenced in emotive expression can be traced. We specifically understand where the process of a baseline change of shape thus defined attributed to internal processes must reside, given a fascia's capacity to communicate and interconnect through transmission of load, and the innervation that is intrinsic to fascial structures. Finally, it is the actual and very specific pathways that fasciae construct, spanning the body as fascial chains and crucial intersections and thereby connecting different parts of the body, that underscore the full range of specific changes and the felt qualities that became evident in the analysis of actual executed emotive expression presented earlier. I will illustrate this below as a final and particularly pertinent insight from this perspective based on some most relevant examples.

3.4.3 How fasciae connect – an inroad to defining emotive-kinetic processes

Fasciae build long chains connecting the different fasciae in each body region via important intersecting points in a long encapsulating network of local networks that also go into the interiors by building what are called septa (Paoletti, 2011). Thus, there are the connecting superficial fasciae of the head, face, neck, torso, upper and lower extremities, the deep fascia of the neck that connects to the fascia in the perineum and the medial fascia, as in the pharyngeal fascia, of the pericardium, diaphragm, chest and abdomen. Additionally, there are the myofascial structures or visceral fascia, that Thomas Myers describes, particularly the Deep Frontal Line (2012:185-208, <https://www.youtube.com/watch?v=7zK-MZ2fjXA>), which goes all the way from the soles of the feet through, for instance, the pelvic floor, M. psoas, diaphragm and neck muscles right up to the tongue and chin muscles. This, is seen to be especially relevant for emotions or, better specified, their bodily manifestations, given its connectedness through the diaphragm and viscera. There are also the so-called buffer zones, where several fascial tissues intersect (Paoletti, 2001:147ff). Therefore, fasciae, in transmitting movement, are also where tension gathers. The buffer zones help to regulate this by not allowing disturbances to be carried forth into the whole body. Some of these are particularly important and loaded, given there are many intersections in these junctions. I will look at two of them that were seen to be conspicuous in all examples in the analysis above to

lay out some relevant connecting chains that intersect there and enable an understanding of some of the kind of reciprocal changes that were evident.

3.4.3.1 Cervico-occipital junction, neck and dura mater

One of the landmarks that was seen to be particularly relevant for movement and its experience in the discussions above was the back of the head. The cervical-occipital region at the base of the skull and between the neck and head is where the descending cranio-cervical fasciae and the chains below intersect. It is where the endocrinal and the vertebral chains of the dura mater connect and is the first buffer zone for all descending loads and the last for all ascending loads. At the same time, the region at the base of the skull and upper end of the cervical spine is also a very important intersection for many blood vessels and nerves. It is, therefore, a very loaded region, with the most important buffer function of regulating stress and, thus, protecting the brain with the help of several muscles.

Given these factors, and together with the atlanto-occipital and -axial joints, it is, together with the neck, a very motile region, not only taking on movement or allowing it to pass messages through, but also possessing tensional overload. For the same reason, one could say that it is also experientially a very highly sensitive region. We have seen how this is where every Lengthening or movement of the neck and head is felt, movements that were seen to be differentiated as such in the gestural descriptions of the NS. The atlanto-axial joint, for instance, enables the subtle neck movements. How this intersection is connected with the eyes is also of interest. Horizontal straps or bands influence the motility between, for instance, the chin or eyeballs and the back of the head (Schultz and Feitis, 1996:1326-1336)³⁴. One of them connects the chin to the cervical-occipital regions, restricting the movement of the head. The other spans roughly across the eyes and above the ears to about the main junction of bones of the skull. From the front midline it crosses, among others, the circular muscles that ring the eye sockets. At the same time, the sphenoid bone, which is part of the eye socket bones complex, intersects with the occipital bone. The orbit or the eye socket itself is a complex structure in which its fascia positions the eyeballs in a hammock-like ligament that restricts their movement and connects to fasciae of external eye muscles and their straps (Upledger, 2002:55f). It is fixed where the optic nerve has its entry point. This nerve is accompanied by the dura mater up to the eyeball.

³⁴ *Kindle Locations. Reference is from the Kindle edition of the book.*

The dura mater is an important deep connection that envelopes the brain and spinal cord as the outermost of the three inner membranes (Paoletti, 2011:75ff/96; Upledger, 2002: 120ff). Together with its extensions, it encapsulates and, thus, accompanies nerves and blood vessels. As it descends down to the sacrum, except for fixation points at the cervical segments C2/C3 and the Foramen magnum and the S2 at the sacrum, it is loosely anchored with fasciae and bones in between. This enables the spinal cord to move freely without being influenced or stressed by the constant movements in the neck and back. The dura mater is an important connecting membrane between the cranial and sacral region that informs the Head-Tail-Connectivity discussed earlier in LMA/BF. The sacrum itself is, just like the pubis, an important switching point for fascial chains, also influencing the dura mater as it ascends from the caudal end. The dura mater also connects to the neck band at the atlanto-occipital and -axial joints. As Upledger (2011:26) further explains, any tension in this membrane effects sight. On the other hand, the mobility of, for instance, the occipital region is important for normal tension in the dura.

Indicated, thus, in these functional connections of the dura mater is how the gaze must connect intrinsically and, thus, effect changes in the regions it was seen to in the analysis of emotive expression or be brought about when one engages in movement from the tail-bone for instance. Simultaneously, one discerns the source of the particularly deeply felt sensate experience it is seen to enable, to the occipital region and down to the torso. The dura mater is itself understood to respond well to subtle wave-like or sliding movements or sound vibrations. It must similarly respond to changes in pupils, eyelids, eyelashes and so forth that define glances at minute levels.

Finally, from these innermost membranes to the external or superficial fasciae, several layers that build tubes within tubes, support the neck in its important function between head/brain and body. Thus, the superficial neck fascia is the extension of the skull fascia descending into the upper extremities and the thorax fascia. The medial neck fascia descends laterally along the front of the neck to the sternum and connects there to the thorax fascia, while also connecting with the superficial and deep fascia. The deep fascia descends to the first thoracic vertebra and continues to the thorax fascia as well. From this fascia, the fascia endothoracica, there are connections to the pleura, pericardium and diaphragm, and further down to the perineum. All of them connect to different important muscles as well, apart from being

innervated, as discussed earlier. Given these connections, that are in their complexity quite far reaching as Paoletti's (2011) explanations of fascial anatomy particularly reveal, one also discerns the central role the neck was seen to play in the changes occurring in emotive expression. The brief laying out of how fasciae build connections at various levels is to finally illustrate here how the reciprocal changes seen in the analysis above between eyes, occipital region, chest and tailbone can be accounted for at the level of connective tissue itself.

3.4.3.2 Diaphragm

Another factor that was almost always seen to be engaged in emotive expression was the breath. While the activity in the chest is evidently the outer manifestation of the movement of breath, the inner manifestation is determined by the diaphragm. This region is again an important buffer zone where several fascial structures, here particularly the visceral ones of the deep frontal line as well, come together. The diaphragm is seen to be constructed to fulfil such an important function. Given its central role in several aspects, I will briefly describe its connections here. This thoracic diaphragm is a muscle which functions like a fascia, and one of the five horizontal fascial-like structures in the body. Its position in the body gives it a very central function as a structure that both separates the thoracic and abdomen area and builds several important connections to the structures and organs in these areas by way of fascial components. It, thus, connects to:

- the pericardium and pleura on the one side and, thus, to the heart, lungs and inner lining of thorax
- fasciae surrounding organs, such as kidneys and liver on the other side,
- various breath supporting muscles, such as the laterally relevant *M. latissimus dorsi*, the *M. trapezius* going all the way up to the base of the skull, and the *M. abdominalis* and *M. quadratus lumborum* in the abdomen.
- fascia of *M. psoas* in a 'handshake' as Ginter defines it
- the vertebral column at T12, L1 and L2 by way of the crus,
- the ribcage
- the neck by way of innervation through the phrenic nerve that originates between C3 and C5, which, in turn, branches out innervating, for instance, the pericardium, pleura, *V. cava superior* and *inferior*, and so forth.

As evident from this, the diaphragm not only connects functionally extremely crucial areas in the body, it is also central in enabling a continuous connectivity all the way from the skull down the neck, thorax and abdomen, and, given the character of further fascial connections and network not discussed here, from these to the upper and lower extremities. With such a strategic positioning, it is, among others, an important and central structure where movement and stance, and also their experience, is concerned. Its movement reveals a three-dimensionality in Lengthening, Shortening, Hollowing, Bulging, Widening and Narrowing. Its connections make it particularly central in terms of movement emergent in emotional states. All constrictions in organs, for instance, connect there. Every change is seen and felt there: for instance, the innervation by way of the phrenic nerve leads to reciprocal stiffness in the diaphragm and neck.

Essentially, the diaphragm is the only muscle that can be both voluntarily and automatically controlled. Thus, it is the link between conscious and unconscious movement, having implications for breath. It enables both the vegetative and conscious regulation of breath. In other words, while breath is there all the time below our conscious awareness, it can be steered if necessary, which has to do with experientially feeling breath. In addition, given the diaphragm's connections, breath is seen to connect the movement of the fasciae of the organs with those of the musculoskeletal system. This would account for the experience of breath as something happening at deeper levels during or when engaging in movement. Every change is felt as changes occurring in breath, particularly in its relation to the baseline Growing and Shrinking and attributed to Shape Flow Support. As Hackney (1998) defines it, this is the most baseline change that occurs in the body.

There are other factors that influence the diaphragm at the subconscious level that lie in the fact that it connects directly to the encapsulating fasciae around organs such as the lungs, heart and kidney. This aspect is important when considering the effects of emotions on the diaphragm. As was seen earlier, there is an innervation through SNS in such fascial ensheathing which influences constrictions of the organs and, thus, shape. The diaphragm with its central connecting function would be crucial in load transmission in terms of stress, for instance, as a result of constrictions during fear and shock. We have seen in the expressive description of movement of the chest that there is a lowering and bending of chest and shoulders, with back raised, reflecting a hollowing, narrowing and shortening in the chest in terms of Shape Flow Support, which reflects such a constriction. Thus, actual situations of

fright or even memory of the same stored in the organs, for instance, influence the free movement of the diaphragm.

At the same time, exhalation triggers the psoas chain. This is an important chain for our vertical stance that goes all the way from the thoracic vertebrae (T12) down the inner pelvic region to the adductors, thus, connecting to lower extremities. A freely swinging diaphragm is necessary for the automatic, i.e. reflexive, straightening of the spinal column and alignment of the body. Its activity is also responsible for giving the sense of a Core. Experientially speaking, this is an important aspect as the experience of the Core is simultaneously the experience of being supported, and also strengthened and enlivened. The exercise I mentioned earlier as a thigh lift with deep femoral flexion is such an experience. However, we can also see why we lose our stance in certain physical manifestations of emotions.

Thus, by just looking at the cervico-occipital region and the diaphragm, and the relevance given to the Deep Front Line thereby, we can now begin to understand where primary emergent movement that became evident in emotive expression, both at the structural and felt experiential level, resides. These two examples illustrate how the specific areas of the body or body parts, where, as analysed in the earlier chapters, the actual changes as simultaneous and reciprocal changes occur and are also felt, can be attributed to the very functioning of the fasciae and how they connect and span the body in specific ways. Thus, if the changes in the eyes/gaze were seen to bring forth simultaneous and reciprocal changes that were connected in a continuous manner all the way through the back of the head and down to the torso and breath, this can be traced back to the specific connecting/intersecting relevance of both the cervical-occipital region and the structure and function of the diaphragm. We discern the connections through the neck, thorax and abdomen, and the activity in the chest coupled with the connections of the diaphragm. We have also seen how the gaze itself can be powerful enough in its refined movement to effect changes. This is apparently a matter of even deeper connections at the level of the dura mater. This connection must also account for experiencing what was seen to be the finer the movement, the deeper it is felt.

We, thus, see how the analysis of felt sensate experiences concur with the regions and connections relevant in fascial terms. Where there is sensing, it is the connective tissue that is operative. From the perspective of fascia research, it is the innervation that makes fascial structures a very sensitive network. The notion of interoception, that in Damasio's

explanations underlies and accompanies all feelings, grounded in the baseline physiological homeostatic processes that also build the basis of all emotions, is accountable to fasciae given the innervation discussed, for instance, by Schleip et al. (2012:65). Furthermore, it is fascial structures that, with their innervation, particularly by the autonomous nervous system, in their function as constructors in order to adapt to change take on the changes triggered by emotions. They do so by changing shape, as they form and deform while transmitting load, tension, pressure and so on to the farthest points along the fascial chains. Given this, changes must get carried forth inner to outer, to the surface at the extremities including the face and eyes, as was evident in emotive expression. The deep visceral fascia in conjunction with the encapsulating function around organs have their crucial share in the internal changes observed in emotive movement, in the gestures of the chest or abdomen. Thus, fasciae are seen to function both in enabling the changes and transmitting the experience of the same as felt experience through the nervous system. All this exists in the setting of movement, echoing Damasio's (2010:64) formulation again, cited in the preceding Chapter 2.

Essentially, looking at fasciae underscores from a primary bodily biological and physiological perspective, here in exacting terms, the notion of *Sensing* and *Shaping* that characterised the changes occurring in emotional states that are primarily internal processes that externalise inner to outer as external manifestations of emotions. And the analysis based on LMA/BF tells us, in specific terms the kind of movement that is at the core of *Sensing* and *Shaping* I define here, underscoring how shapes, spatial aspects and felt qualities are integral to the very movement given in these changes. I have laid out how what is coined Shape Flow Support by Hackney, with the spatial specificities of unipolar and bipolar Shape Flow as defined by Kestenberg tells us what this movement underlying the form-giving function of fascia is in precise terms.

3.5 *Sensing and Shaping* – movement-based experiences in emotive-kinetic processes

Bringing this chapter to a conclusion, the analysis began with an examination 1) of the *anubhāvas* described in the NS in terms of varied bodily manifestations of emotional states to reveal how they reflect a differentiation in terms of movement itself 2) of the descriptions of gestures of body and facial expressions entailed therein, discussing thereby how refinement of movement is seen to progress towards the experientially relevant dominant states and *rasas*, and 3) the relevance given to the glances that reveal particularly minute movement indicating felt quality to reside in their execution. It led to the analysis of actual executed movement that is necessary to bring forth emotive expressions, drawing from examples from experimental teaching methodologies on a student, and based on the analytic conventions and the insights on movement principles provided by LMA/BF. Furthermore, a probe into felt quality residing just in this kind of movement was presented, based on observations and feedback when students are enabled to access such movement in relevant body parts. Here the very shaping nature of internal movement is seen to inform a felt sensate quality, the specific feedback also revealing how it is in spatial terms that it is felt, essentially as the lengthening, opening, tightening, or hollowing, that such a shaping inheres.

This chapter thus traced the insights offered by the theory and practice of Indian dance theatre, that were seen to reveal correspondences to Damasio's explanations of the same, to their underpinnings in movement. It enabled identifying through an analysis of *emergent movement* in emotive expression, how *changes occurring inner to outer* are essentially in movement analytic terms what Hackney defines as baseline change in shape that underlies all changes and coins Shape Flow Support. Given it is seen to underlie emotive expression, it is the nature of what Damasio postulates as inner physiological processes where emotions are grounded. Finally, the analysis unveiled how both *structural and felt qualities* as inherently concurrent factors of such an emotive movement, definable as *Sensing and Shaping*, are the defining characteristics of embodied experiences enabled specifically by *emotive-kinetic processes*. Finally, substantiating this insight were the correspondences that this study, in particular, unveils to current fascia research. Both the structural and felt dimensions of experience are a matter of the very form and function of innate innermost structures called fasciae that span body *and* brain in all-encompassing complex connections, which are effected precisely by movement in Shape Flow Support. This echoes in exacting movement

terms what I defined earlier as the *primordial rumblings of movement*, by way of which all feelings, as were seen in Damasio's explication, must accompany maps. Importantly, the notion of Damasio's (2010) microworlds of form and function, where feelings are generated, is a matter of such movement. Given the discussions, that have substantiated the notion of *primary, emergent movement, inner to outer, in emotive-kinetic processes*, we have arrived at identifying not only what the nature of such movement is, but also how it functions in the biological reality of the body, by way of just those inherently concurrent aspects of **Sensing** and **Shaping** that reflect structural and felt aspects of experience. In as much the discussion in this chapter takes forward the notion of movement-based embodied experiences, bottom-up, for an embodied grounding of both the notions of meaning, structural and felt, as discussed in the two parts of this study.

4 *Sensing and Shaping* – the emotive-kinetic grounding of meaning

This study set-off with the aim of examining what was discernible as a two-fold notion of meaning, gestural and emotive, in Indian dance theatre. Of interest was thereby to arrive at how movement is fundamental to embodied experiences that must underlie meaning indicated therein. The point of departure presented in Part I was an analysis of meaning evoked through gestures of hands and the correspondences it revealed to a linguistic/cognitive linguistic notion on meaning when placed in the context of current Linguistic Gesture Studies on spontaneous co-speech gestures (Croft & Cruse, 2004; Johnson, 1987, 2005, 2007; Kendon, 2004, 2013; Lakoff and Johnson, 1999; Langacker, 1991; McNeill, 1992, 2005, 2013; Mittelberg, 2008, 2010b, 2013; Mittelberg & Waugh, 2009; Müller, 1998, 2009, 2010a/b, 2013; Müller, Bressemer and Ladewig, 2013). Drawing from the referenced studies, it exposed the *structural* aspects of meaning, as evidenced in shapes, spatial aspects and movement, and their conceptual and embodied grounding. Part II examined the emotive notion of meaning as *felt* experience enabled by the corporeal manifestations of emotions, defined in NS (Bharata, ca. 3rd C BC – 5th C AD; Translations by Board of Scholars, Ghosh, 2007), the ancient Indian treatise on performing arts, laying out correspondences to Damasio's (1999, 2003, 2010) explications from brain research on emotions, and to insights on movement in LMA/BF (Amighi et al., 1999:109-139; Laban, 1966, 1975; Hackney, 1993, 1998) and current fascia research (Guimberteau, 2005; Myers, 2010, 2014; Paoletti, 2011; Schultz and Feitis, 1996; Schleip, 2003, 2012; Schleip et al, 2012; Schwind, 2014; Upledger, 2002; Ginter). The thus enabled inroad to the nature of both emotions and movement unveiled a ***Sensing and Shaping*** to be the structural and felt aspects intrinsically integral to *primary movement, emergent inner to outer*, in primordially fundamental *emotive-kinetic processes*. Given this, these evidenced movement-based experiences must in effect inform both meaning as defined in NS, and as discussed from the linguistic perspective in Part I. In this part of the study, I will take up the discussion on the movement thus identified as primordial, to argue how it is such movement that provides the embodied grounding for meaning as discussed in both parts of the study. Let me first give an overview of discussions in both parts of the study, before tracing meaning to these findings.

4.1 A summary – meaning gestural and meaning emotive

The analysis in Chapter 1 Part I of depicting meaning through hand gestures, based on examples from the dance theatre Bharatanatyam using the form-based linguistic analytic convention put forth by Müller and colleagues (2010b, 2013) in *Linguistic Gesture Studies*, revealed how such a depiction follows linguistic principles, just as observed in spontaneous co-speech gestures. Firstly, gestural meaning construction as practised in Indian dance theatre takes advantage of the same form parameters of specific shape, position, orientation and movement of the hands in different configurations to depict meaning. Secondly, in referring thus to objects, actions and events in the concrete world by way of the physical properties such as shapes, spatial aspects and movement, the gestures revealed what Müller (2010b) defines as a basic meaning, motivated by basic structures such as geometric shapes/gestalts, motor patterns or spatial configurations. There is thereby a conceptualisation of reality not only in physical terms, but also driven by structural aspects inherent to these properties. Form underlies meaning. Thirdly, such a conceptualisation was seen to be in mimetic/cognitive semiotic terms, that Müller (1998, 2009, 2010a/b) and Mittelberg (ibid.) discuss. Meaning depiction clearly revealed how one or more of the four mimetic modes, representing, acting, tracing or moulding were used, which tell us how different properties of the referred concrete entities get conceived in varied ways. Also, the metonymic profiling apparent thereby of object features shed light on the fundamental role of similarity in conjunction with contiguity relations as inherent associative semiotic modes, in guiding such a gestural meaning depiction.

Further to this, an analysis of the explicit construction of gestural meaning in Indian dance theatre based on observing what is needed by students of dance to bring forth meaning through gestures of the hands was presented. It illustrated how a kinetic conceptualisation is primary for such a depiction. This brought several insights in terms of the role of movement itself in meaning construction. It illustrated in clear movement terms that a conceptualisation of reality in physical terms, is a conceptualisation of form driven not only by the structural features of objects, events and actions in the concrete world, but by the very structures that movement produces: shapes, spatial aspects and movement are *emergent* properties of movement, and most importantly, come into the awareness of the gesturer/mover only in and through actually executed movement in the specific configurations that correspond to these structures. Not only do gestures reflect how there is a foregrounding of object features, as formulated by Müller and colleagues (2013). Echoed herein was also the notion that Croft and

Cruse (2004:3.2) formulate from a cognitive linguistic understanding of meaning, namely that properties of physical phenomena lend themselves to being attended to, thus increasing the salience of such phenomena to one's attention. While on this account attention is discussed as a basic cognitive ability, the gestures revealed specifically the role of movement thereby. In the context of gestural usage in dance theatre this is surely something that is explicitly taken advantage of in depictive terms. But, given these properties also constitute meaning in spontaneous co-speech gestures, it must mean that there is something inherently basic in why gestures thus take on meaning.

The extraction of form as a rudimentary ability, that is evident in the conceptualisation of reality, as Müller formulates it, must lie not only in mimetic/cognitive semiotic processes, but also movement-related processes of conceptualisation. The analysis underscored how in gestures form and meaning come together in movement, illuminating in turn the notion of meaning being literally shaped and construed, terms put forward by Langacker (1991) from a cognitive semantic perspective. On this account, meaning equates conceptualisation. From this notion of meaning informed by cognitive conceptual processes, Chapter 2 presented an analysis of the explicit gestures being examined here for the cognitive construal operations that Croft and Cruse explicate on. Gestural meaning depiction, given the kind of basic meaning evident therein, revealed a universal tendency to structure meaning that they postulate (2004:3.6) as a dynamic construal of meaning. While revealing figure-ground and gestalt structuring mentioned thereby, gestures specifically indicate the fundamental role attention plays. That there is a natural tendency to attend to certain aspects and not to others that lend themselves to attention in the physical world, is particularly taken advantage of in the kind of explicit gestural meaning construction in the performing arts context. Also given the fine-grained level of specificity as a construal operation evident here, object features are attended to in qualitative and quantitative scalarity, notions put forward by Langacker (1991, Croft and Cruse, 2004).

This brought the discussion to an image schematic structuring of meaning postulated thereby, that specifically reflects a structuring of experience given in a bodily way. A further analysis applying another criterion of the form-based linguistic analysis called Motivation of Form where image schematic structures are related to the basic structures gestural meaning, revealed how the explicit gestures under scrutiny embody the very image schematic gestalt structures that Johnson (1987) defines as arising from ongoing bodily sensorimotor

experiences, and that give meaning structure and coherence. They underlie all meaning as analogue structural patterns, that are mostly identified in linguistic terms in the cognitive linguistic take. Specifically, gestural meaning reveals basic image schemas such as PROPULSION, BALANCE or SUPPORT. This analysis revealed that there is an embodied process of meaning-making underlying the embodied meaning gestures bring forth, that is informed by bodily experiences. The structural analysis itself enabled only either an assuming that experiences are given in a bodily way. Even deducing these based on Johnson's (1987) discussions echoed what was conceded thereby, that the structural perspective leads to the erroneous assumption of a predomination of visual perceptual experiences as underlying meaning conceptualisation. Importantly, however, gestures instantiate how the structures of embodied experiences Johnson defines are directly embodied, revealing the role of movement itself in formulating them.

Subsequently, the cognitive take on embodied experiences underlying such an image schematic structuring of meaning (Gibbs, 2005a/b; Johnson, 1987, 2007; Lakoff and Johnson, 1999) were examined for what they revealed in terms of defining a bodily grounding. Based on several studies that included computer simulation of neural structures (Lakoff and Johnson, 1999), neuroimaging, neurobiology, phenomenology, infant studies and so forth Johnson formulates the notion of neural structures, which as activated neural patterns are the image schematic patterns that give experience meaning and coherence. They have evolved with how the brain developed to enable better survival of organisms, grounded in a primordial structuring of sensorimotor experiences occurring in ongoing body/organism-brain-world/environment interactions or couplings. The same primordial structures by means of which the world is encountered to understand and act within, continue to operate in the human beings as well, as “activation patterns (or “contours”) in human topological neural maps” (2007:142). These have individual functions in determining “what stands out, for us, from a situation or scene” (2007:76), or how objects are disclosed, because of how we perceive the things we need.

Reflected herein was the notion of attention operative in body-brain-world interactions and guiding sensorimotor experiences. Such an attention is discussed as a matter of bodily situatedness, given the bodies of any given organism. While, yet again, a visual perceptual notion of experience was seen to be deduced from this, there is in these discussions, also the notion of sensorimotor explorations and the experiences they enable. And the understanding

that, putting it this way, physical properties of worldly phenomena such as spatial orientation, shapes, sizes, positions, directions and other structural aspects seen to be meaningful elements in gestures, must apparently have a primordial *existential* function for organisms, and thus attended to.

Given motor experiences are evident, the cognitive take was further examined for accounts on these. There were several accounts on how motor actions and actions are seen as integral or central to perception to point to the role of bodily movement for embodied experiences, again drawing from the kind of studies mentioned above. Gibbs (2005a), for instance, referring to studies on gestures accompanying speech, sees in the activation of motor areas in the brain when action-oriented terms are conceptualised, an indication for motor elements being recruited. If so, gestures must then be the overt activation of these, given they embody motor elements. Yet other studies from neurocognition (Bläsing and Cruse, 2004) indicate even more specifically, the role of movement for memory and a bodily knowing, and the notion of tactile-kinaesthetic experiences informing actions.

A further analysis of learning gestural depiction of actions presented at this point exposed that there was what Gibbs (2005b) discusses as a dynamic engagement in sensorimotor experiences. In particular, the analysis revealed how known actions were seen to be produced with ease, but unknown actions needed the actual execution of movement, to reason about and understand them, albeit a perceiving or imagining. It pointed to how even an activation of motor areas must be a matter of bodily knowing in the first place. At the same time, it was instantiated through the analysis in tangible movement terms, that actions are also constituted of movement, essentially entailing specific configurations of simple movements that are there by default, such as those of the wrists. And are emergent in and through movement, just as spatial aspects and other meaningful elements, as laid out in the analysis of a kinetic conceptualisation of meaning. Gestural meaning depiction exemplified, yet again, that meaning manifested as structural, whether in terms of object, actions or events, entails structures provided by movement. And even where actions are concerned, bodily knowing matters as a knowing through movement, pointing to the role of movement as primary for embodied experiences.

Essentially, the different analyses from the perspective of both image schematic and kinetic conceptualisation of gestural meaning unveiled an understanding of how the structuring of

experience, that was first discussed as underlying meaning as a conceptualisation of experience to be communicated, and in bodily terms as a structuring of sensorimotor experiences, is fundamentally a structuring of what movement brings forth. This must also hold for an understanding of neural structures as structures that enable sensorimotor experiences, and thus being central for a structural nature of experience and meaning, as Lakoff and Johnson (1999) and Johnson (2007) formulate. In effect, when gestures bring forth meaning, there is so to say, to put it in Johnson's (1987) terms, an ongoing organising activity out of which continuous structures are produced; in gestures as concrete structures in gestural form features. Johnson's notion of a bodily-working-its-way-up of imagination, indicated in gestures as into the bodily itself in a direct manner, in and through movement. And if gestures embody images, as McNeill (2005) discusses, these are then not primarily grounded in thought as discussed on this account, but in bodily experiences, where, nevertheless, the notion of movement as providing these is clearly instantiated in the discussion of gestural analysis presented in the first two chapters of Part I.

Furthermore, the dynamic embodied process of meaning construction that gestures reveal, tell us, thus, that meaning depiction is a bringing forth of what movement experience offers in structural, but also felt terms. Johnson (2007) does concede that there is a felt dimension of image schemas and discusses such a notion by referring to Sheets-Johnstone's (1999) explications on the dynamic qualities of movement. The phenomenological descriptions from this perspective are seen as an indication for conscious experience or consciousness. Just as the role of emotions, drawing from Damasio's brain research on emotions and feelings. Gibbs (2005a) also discusses these perspectives, placing the notion of movement and emotions in the context of consciousness. Johnson (2007) at the same time emphasizes the non-conscious nature of experience given in body-brain-world interactions to define the notion of immanent or embodied meaning, stating that it needs to be sought for at levels below consciousness; at the level of the „*cognitive unconscious*“ (Johnson, 2007:139; Lakoff and Johnson, 1999:9ff, emphasis in originals). And therefore requiring other studies to be considered. Finally, movement, though conceded to be basic and fundamental in the discussions from a cognitive perspective, is considered to be only one of the aspects.

The cognitive take, nevertheless, brought important insights to understand how meaning as given in gestures must be fundamental and basic. At the same time they indicated that there was a need to go further down from where these studies are. To examine the bodily grounding

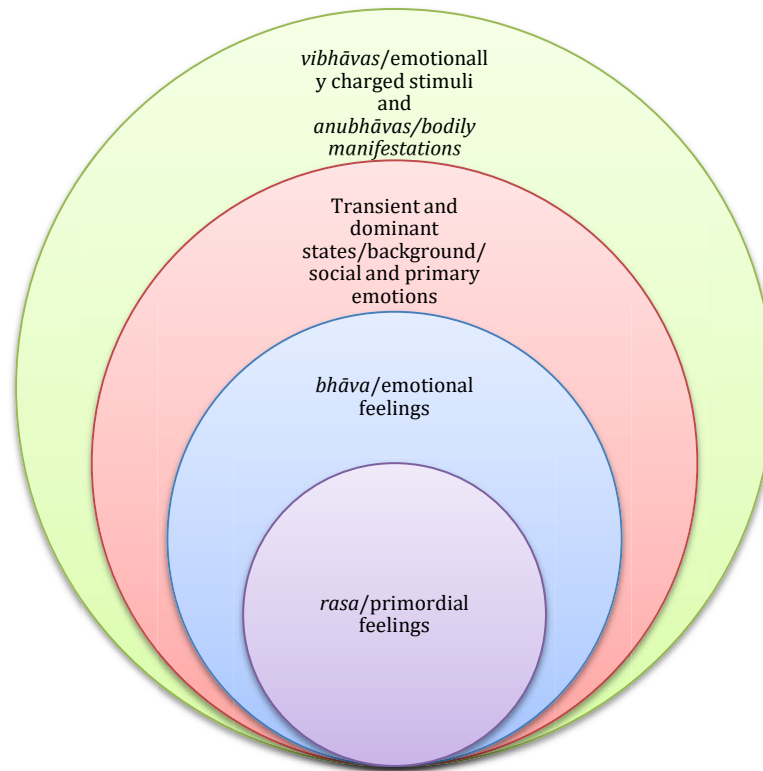
of meaning, it is not just a focusing on a “phenomenology of human body in action” as such, that is needed, as Gibbs (2005b:116) postulates, but of body in movement. As Sheets-Johnstone (2011) postulates, there is movement in living animate beings, all the time in a primal way, and which informs a primal sensing.

Given this, a further analysis of kinetic conceptualisation of gestural meaning is presented in Chapter 3 thereafter, to examine these dynamic movement qualities postulated by Sheets-Johnstone (2009, 2011). It is based on further analytic possibilities provided by LMA/BF, the major movement analytic convention being drawn from in this study. The analysis revealed that apart from structural aspects analysed earlier, movement qualities themselves inform meaning. And this was seen to relate specifically to affective or emotive connotations therein, reflecting the affective-kinetic/tactile-kinaesthetic notion of experience as put forward by Sheets-Johnstone (2011). Gestural meaning revealed how a conceptualisation of reality is a matter of both kinetic and emotive factors. Also, the analyses of learning gestural meaning depiction was further illuminated from the perspective discussions on conscious versus non-conscious. There is a non-conscious attending to what movement brings forth in a bodily way, which need not necessarily be a conscious awareness, but a bodily awareness, non-reflective and thus non-conscious. The analysis set the stage for fleshing out both emotions and movement in their role in enabling meaning, taking the discussion to the second notion of meaning in the practise and theory of Indian performing arts, namely felt, emotive meaning.

A reading of the term meaning defined in the NS, presented in Part II Chapter 1, revealed how it is understood as being instilled when a felt quality is enabled by a depiction of corporeal manifestations of emotions, i.e. emotive expression. This reflects meaning as equating experience itself, as opposed to the conceptualisation of experience discussed from the cognitive linguistic perspective in the cognitive take on embodied meaning. NS discusses the notion of *bhāva* in the context of what gets instilled as meaning. Stages of emotional states become evident here, classified into transient and dominant states. They together with *vibhāvas* or determinants described as objects, situations, events or actions as factors leading to them, and *anubhāvas* or consequents that by definition reveal a wide variety of corporeal manifestations of emotions, finally lead to the establishing of *bhāva* as meaning. *Bhāva* is thus source, process and product in what is clearly to be a meaning-making process. Finally, *rasa*, a further experience as relish that is necessary for meaning, is defined as arising from thus establishing meaning, arising specifically from the dominant states. Of interest thereby,

also for the further course of the discussion, is the notion that this pervades the body like fire pervades wood, and that it is in *rasa* that finally all *bhāvas* are rooted.

In Chapter 2 of Part II these insights were placed in the context of Damasio's (1999, 2003, 2010) explications on emotions and feelings from the perspective of brain research. Graphic 4 illustrates the correspondences. These shed light on two important aspects. Firstly, how emotions on both these accounts are constitutive of progressive stages towards a felt experiential state. Damasio's (1999, 2003, 2010) explications on how and why emotions have evolved thus, from internal regulatory physiological processes to emotions proper to feelings, expose the mechanisms underlying the evolution of the human brain: firstly, with the mechanism of emotions to react to situations as being good or bad for life, then with the mechanism of feelings that add a mental warning signal for these situations, anchoring the effects of emotions by influencing attention and memory permanently. In terms of meaning, emotions thus reflect a need-based value that internal processes as well as external objects gain in the process. Finally, feelings are themselves discussed as two-fold, emotional and primordial. The first pertain to what arise from bodily states of emotions as mental experiences or images, enabled by the brain, given there is a mapping of the bodily states therein. Underlying these are the primordial feelings, which are defined as a „neural description of relatively stable aspect of the organism” (2010:181). They are the most primitive feelings underlying all others, including the feelings that emerge from emotions. Thus, all feelings of emotions are variations of the ongoing primordial feelings and both these kinds of feelings accompany the structural mapping of all other objects, both internal in the body and external in the world.



Graphic 4

The correspondences to the stages as discussed in NS reveal that there is an implicit understanding here of the fundamental primordial relevance given to emotions for meaning in just the hierarchical manner as discussed above, these insights based on observations in the world. The stages finally lead to the bodily-mental experience as a felt quality that instils meaning. I further discussed how I see the notion of *bhāva* corresponds to the emotional experience or emotional feeling Damasio postulates, rooted in the bodily changes occurring during a emotion. And *rasa* arising from it to the primordial feeling, given the correspondences in their definitions; the *rasa* defined as pervading the body as experience, and the primordial feelings as pure experience. Of interest is that the latter are enabled by the neural design, and perhaps residing in the very micro-levels of the body at cellular-neural levels. Given these correspondences, there is *bhāva-rasa* continuum here, with emotional experience functioning as a stepping stone to experience what is even further deeply rooted, both notions indicating to two levels of where meaning must emerge in a bodily way. And given precisely the bodily nature of change, emotional experience gets accessed for experience primarily, as indicated in both the perspectives.

This bodily nature, secondly, is the other and particularly important aspect in the correspondence discussed here. The primordial hierarchy thus given in emotions, and which

leads to the feeling state is on both the accounts a matter of how emotions manifest and reveal themselves in bodily terms, essentially, as bodily changes occurring *inner to outer*. On Damasio's account, they are at the lower levels more in qualitative terms rather than external manifestations, with externalisation as behaviour patterns, gestures, glances, facial expressions or gaits becoming evident towards the higher levels. These manifestations, which relate not only by definition, but also description to the consequents in NS defined for all emotional states and the *rasas* as well, run off automatically as bodily changes that constitute the process that is an emotion. The emotionally charged stimuli that trigger emotions relate, in turn, to the determinants. This process, including the feelings that arise from the bodily changes, reflects according to Damasio, processes that occur below levels of consciousness or conscious awareness. They constitute the vast non-conscious.

The correspondences to Damasio's research thus evidenced puts the relevance given in NS to bodily manifestations of emotional states and a felt quality they enable in terms of enabling meaning into a primordial fundamental context. At the same time, the explications in the NS with detailed descriptions of bodily states and the gestures with which these are recommended for depiction, shed light on the very nature of these manifestations in differentiated movement terms. The in-depth approach to the role of movement itself that they enable was analysed in Chapter 3 Part II. In exposing how different manifestations reveal themselves in different ways, which one can say reflect specified and non-specified movement, the analysis revealed that the bodily manifestations defined for the more experientially relevant dominant states and *rasas* were in more and more specific bodily movement terms. The detailed description of how these need to be brought forth through corporeal means, particularly as gestures of limbs and facial parts, revealing a refinement of movement progressing towards specific gestures that were predominantly related to experientially relevant states. As particularly evident with those of the face or glances, these were primarily characterised by internal rather than overt external movement. This exposed, firstly, an internal process of change that was seen to be basic to bodily manifestations of emotions, and, secondly, factors from the Shape Category of LMA/BF evident.

Analyses of actually executed movement was presented thereafter, that again looked at what is needed to bring forth meaning as emotive expression. Here drawing from examples from teaching sessions that experimentally explored a locating of emotions in the body with the help of movement execution, observation *and* subsequent analysis enabled by the LMA/BF

analytic approach. This exemplified in clear movement terms, the nature of bodily changes that externalise at minute levels in various, and as seen pertinent parts of the body. The Shape Flow Support factor that Hackney (1993, 1998) defines as a baseline Growing and Shrinking attributed to internal processes such as breath, which as change in shape underlies all other changes, and corresponds with what Kestenberg (Amighi et al, 1999) discusses as unipolar and bipolar shape flow, was seen to characterise such emergent movement at the most minute level. The simultaneous reciprocal changes at minute levels in various body parts evidenced in the analysis, revealed the definition of Shape Flow Support as encompassing the whole range of the body, and underlying the very neuromuscular Patterns of Total Body Connectivity. Also, the other factors that describe external movement and discussed mostly in the LMA/BF context as expressive and qualitative factors of movement, such as Shape Qualities and Effort Elements, were seen to be an outcome of Shape Flow Support, underscoring its baseline function related to internal processes. Emotive expression reflects in as much a *Shaping*, that Hackney (1993) sees as a process that incorporates the complete process of change. In the analysis it was clearly evident as a process first and foremost of internal change, given the subtle hardly external level at which it is observable, inherently integral to which are the very structural aspects of shape, spatial aspects and movement.

Finally, through further observations on self-movement and feedback received from students and other participants in various set-ups of experimentally teaching emotive movement and pure dance aspects of Bharatanatyam, or even facilitating movement in general or in Yoga by way of Shape Flow Support, given it was seen to be most effective for movement execution, the integral felt sensate quality of such movement was also exemplified. There is a *Sensing* that is integral to the very process of *Shaping* in the kind of movement that can be defined as *emergent, inner to outer in emotive-kinetic processes*. The more specific feedback reveals how it is spatial aspects of experience such as a lengthening, opening, tightening or hollowing that characterise such a felt quality. The term sensing itself, that Damasio uses as well, as I cited in Chapter 2 of this part, in defining the minimal features that even the simple single-cell organisms require to survive (2010:50), indicates that it is an integral feature of the kind of bodily changes that emotions trigger. In the analysis it was clearly illustrated as relating to the very kind of *Shaping* that characterises these changes, instantiating the very notions of both structural and felt aspects, that were seen to define meaning both as discussed in Part I and Part II of the study, namely the linguistic-conceptual in gestures, and the meaning as experience attributed to emotive expression.

Finally, substantiating these insights on the nature of movement and its characteristics, were the correspondences at the end of Chapter 3 in Part II, that this study, in particular, also unveils for the first time, namely to current fascia research. Internal processes of change with their integral structural and felt factors of *Sensing and Shaping* characterise the very form and function of the innate innermost all-encompassing network of structures scaffolding the body-brain at micro-levels called fasciae. They were seen to account for a number of factors seen to be relevant in the kind of emergent movement identified in emotive expression.

- The chains they build across the body correspond to just those neuro-muscular connectivity patterns discussed in the Body Category of LMA/BF,
- The buffer zones or major intersections they build thereby are at the experientially relevant anatomical landmarks that integrate movement along these patterns
- They reveal, importantly, the very kind of *Shaping* as characterised by Shape Flow Support with uni- and bipolar shape flow at the innermost micro-levels of the body, namely, Bulging, Hollowing, Lengthening, and so forth. This is how they adapt and change in their load-bearing transmitting function, in terms of what is discussed today as bio-tensegrity. These structures reveal the same kind of polygonal shapes that Laban (1966) also identified in movement, given the spatial pulls the body is subject to. While his Space Theory mostly dwelt on external movement and space, today's fascia research instantiates in most exemplary terms how these are the very structures of the internal scaffolding of the body, all the way into its micro-nooks and micro-crannies, to use Damasio's terms, giving form based on the function any given part of the body needs to fulfil.
- And even more importantly, they are where every form of sensate experience resides, given the kind of maximum innervation in just these structures, as ongoing research continues to shed light on. They are thus responsible for *Sensing*, and thus are to be understood as relaying the same to the brain to become the feelings Damasio formulates.

This echoed in exacting movement terms, not only what was identified in emotive expression as *primary emergent movement, inner to outer* attributed to *emotive-kinetic processes*. But also what I underscored as correspondences from the NS to Damasio's (2010) postulations on a two-fold notion of feelings. Firstly, we see what the relevance of both "micro-nooks and micro-crannies" of our bodies, and also "microworlds of form and function" (2010:263) is,

that cannot be underestimated in their role in generating feelings and signalling them to the brain. Secondly, I see instantiated here, how the obedient chorus that Damasio calls feelings accompanying every image or map in the brain, is in essence indeed the *primordial rumblings of movement*, which I postulated earlier, given the movement nature of changes in bodily states, where these are generated. Finally, there was also the notion that the incessant mapping in the brain, seen to be in the very structural features, discussed in the cognitive linguistic understanding of embodied meaning as well, was defined by Damasio as happening often “*in the setting of movement*” (2010:64, emphasis added). I see in the discussion on primary emergent movement here, the very source for this.

Of importance is, finally, that the very notion of *Sensing and Shaping* as characteristic of such movement are to sought for in the very functioning of the body at utmost primary primordial levels. Putting the several perspectives together, that have revealed correspondences when placed in the context of the theory and practise of Indian performing arts, we have arrived at several insights in Part II of the study, that are far-reaching in terms of understanding the fundamental nature and grounding of embodied experiences. Most importantly, also in the repercussions they have for both the notions of embodied meaning discussed in this study, namely the gestural/structural and emotive/felt. Of importance is the fact, that in analysing both emotions and movement, but in their own terms, this study identified the very nature of movement, where embodied experiences must arise from first and foremost.

The outcome of the above perspectives and relevant for this study is essentially the instantiation that:

there is a primary emergent movement, inner to outer that is tied to bodily changes occurring in emotive-kinetic processes at the innermost micro-levels of the body. It reveals a Sensing and Shaping as intrinsically integral felt and structural qualities. It, thus, is to be understood as the source of movement-based embodied experiences that inform meaning in its different dimensions.

Before tracing this to the linguistic perspective on meaning analysed in Part I, as a conceptualisation of reality in physical terms grounded in mimetic/cognitive semiotic, kinetic and cognitive conceptual processes, it will be first examined how these findings have repercussions in understanding the very kind of meaning defined in the NS as experience. I

had identified it as a *bhāva-rasa* continuum based on the correspondences with Damasio's two-fold notion of feelings. To lay out why I discern this here in bodily movement terms, let me go back to the nature of movement presented identified with all its relevant characteristics that matter for this study.

4.2 Movement – primary, emergent, inner to outer in emotive-kinetic processes

From the discussions, what stands forth is the defining of the nature of movement enabling embodied experiences in structural and felt terms, and how it emerges inner to outer in the process that is an emotion. The following will take a differentiated look at the attributes that have been identified to such movement, from baseline growing and shrinking, to inner-outer to its felt qualities, to then forward the discussion on the two-fold meaning.

4.2.1 The Growing and Shrinking of primary movement

Emergent movement at the most subtle levels was firstly seen to reveal the factors that in LMA/BF are what Hackney (1993, 1998) differentiates in the Shape Category as Shape Flow Support. It is the process of shape change happening internally, rooted in a baseline process of Growing and Shrinking that is attributed to internal processes such as but not limited to breathing and underlies all change in the body's form. It occurs as change at a fuller range through the body with the specificities laid down by Kestenberg (Amighi et al, 1999) as bipolar and unipolar Shape Flow, i.e. how shape change is happening along the cardinal spatial dimensions of vertical up-down, horizontal side-side and sagittal backward-forward, and defined in terms of Lengthening, Hollowing, Bulging, Widening and so forth. Apart from this, we also saw how Laban (1966:11) discussing the cardinal directions as basic factors of the Space Category, defines them in terms of the human body as the three dimensions of length, breadth and depth as basic elements of orientation in space. In emotive movement we have seen how it is along these that internal processes of change take place, driving in the point of inner space.

The notion of inner space, that is instantiated particularly in the analysis in this study, would become an integration of outer space when the movement externalises, giving rise to movement characterised by different aspects or factors of the Shape Category. I had also laid

out in this context how Shape Flow Support was seen to underlie for instance, Shape Qualities, factors also defining the Shape Category in LMA/BF. They also define the process of change in shape; here, however as we move outwards in a process of Opening and Closing, a “towards where” (Hackney, 1998:22) defined by a primary spatial pull, but also influenced by a secondary pull in any of the spatial directions. In terms of defining emergent movement, a Lengthening, Widening or Bulging evident in torso or eyes were seen to underlie Shape Qualities such as Spreading that was evident in the elbow, or Rising or Advancing of the head. A Lengthening or Widening continue, so to say, into distal edges, as they connect inner to outer. Thus a movement emergent from a Lengthening can become Rising, from Widening can become Spreading, with a Bulging underlying either; a Narrowing can become Enclosing with an underlying Shortening. An so forth. There is an inherent integration of spatial aspects of movement in the very notion of *Shaping* that was discussed as inherent to emergent emotive movement.

Even Effort Elements from the Effort Category, such as Bound Flow Effort that restricts movement by keeping the insides in, as one can generally define it, or Direct Space Effort that was evident in how the gaze was pinpointed, or the student was focussed in the process, were variables so to say, accompanying the process of change happening in Shape Flow Support, as these emerged forth and crystallised into any specific emotive expression. This was particularly evident in the variations in Time Effort as at times Instantaneous and then Lingering change in, for instance, the eyes.

Generally, in the Laban/Bartenieff Movement Analytic system, the categories Shape and Effort are discussed as reflecting the intentional, attitudinal aspects of movement, that also have to do with expressivity. While these aspects, that however need not be conscious to be operative, are often addressed in terms of Shape and Effort Qualities respectively, the analysis underscores the primary relevance of Shape Flow Support, that as Hackney stresses, is an important inner process of baseline change of Growing and Shrinking that underlies all change. I see this emergent factor inner to outer when changes occur in emotive-kinetic processes, and rooted in spatial factors, as the aspect of movement that must intrinsically enable the kind of structural experiences discussed in Part I.

Finally, and importantly, the changes in Shape Flow Support were seen to underlie the Patterns of Total Body Connectivity discussed in the Body Category as neuromuscular

connectivity patterns. In the analysis of emergent movement, we specifically evidenced changes occurring in instantaneous and reciprocal ways, literally enabling the Connectivity Patterns. It revealed not only how change in one part brought changes in another part or in the body as a whole, but also how relations and patterns connect inherently within the body by way of these changes. And that these connectivity patterns also have spatial dimensions inherent to the body. The Head-Tail Connectivity is essentially a vertical one and would enhance a Lengthening. The Core-Distal has possibilities that can be in three-dimensional space, given the distal edges, hands and feet, can move out into outer space in externalising movements.

At the same time, the Body category tells us about how the body organises itself in movement and gets connected in an integrating manner. As was mentioned earlier, Bartenieff Fundamentals (BF) constitute the category. It is fundamental as Hackney (1998:17) explains, because change, relationships and patterning body connections are fundamental, one leading into the other. Bartenieff essentially recognised in what ways movement is all about change. The Patterns of Total Body Connectivity that were discernible in the analysis are one aspect of BF. Hackney (1998:42) defines these as adult patterns, differentiating them from Developmental Progression, which is about stage-specific patterns such as early postural reflexes, righting reactions or equilibrium responses that build the neuro-physiological basis of movement. This is a reference to Bonnie Bainbridge Cohen's insights, labelled Body-Mind-Centering® (Cohen, 1993/2012; Hartley, 1989/1995), in which Bartenieff's insights on the neurological aspect of movement have been further fleshed.

Cohen identifies several Basic Neurological Patterns, from Cellular Breathing, Pulsation, Mouthing or Spinal Reflexes to Patterns such as Homologous or Homolateral that relate to the Patterns of Total Body Connectivity. They tell us about the developmental progression from fetal to bi-pedal movement, from cellular to complex movement, each influencing, overlapping, underlying and supporting the other, as Hackney (ibid) elucidates. Underlying the Breath Pattern is for e.g. the not visible Cellular Breathing. Similarly, there are Spinal reflexes in Head-Tail Connectivity and so forth. Of interest is the understanding of Cellular Breathing. As Hartley (1989/1995:10) explains, it is primarily in breathing at the cellular level, happening independently from the external respiration of the lungs, where a perpetual expanding and contracting occurs at subtle levels, as the cell takes in energy and eliminates toxic waste through its porous skin. It is this movement pattern that integrates the whole body.

And when “every cell simultaneously knows and feels itself and every other cell”, there can be a feeling of stillness beyond this minute activity. Of interest is thereby the understanding that cells communicate through movement and in a felt way. The correspondences laid out in the previous chapter to insights from current fascia research shed light on the function of fascia structures in enabling this. Also, this points to a state of equilibrium and balance in inner physiological processes that enables primordial feelings according to Damasio, and that lies beyond emotional processes and experiencing the changes they bring forth. It also reflects what the unique experience that pervades the body is, that defines the notion of *rasa*.

From the Body perspective this is, in as much, grounded in the basic Growing and Shrinking of change, happening at minute levels of the very life of a cell, building relationships and patterning body connections. Then, patterns develop progressively in the growing body, from embryonic movement or the undifferentiated movement of the baby to the more differentiated patterns (Hartley, 1989/1995, Amighi et al, 1999); getting integrated, as Hackney (ibid) explains, into the next stage and sequencing into neuromuscular pathways that fire habitually given an intent for movement. While spatial intent is discussed in this context, we have seen in the analysis of emotive expression and the movement therein, how intent is rooted primarily in emotions, with spatial intent integral to the changes they effect in terms of the Shape Flow Support factors. Such a spatial intent is both informed by the three-dimensionality of the body and the outer spatial pulls that influence its movement in its environment.

Going back to Kestenbergs’ (ibid) perspective on LMA/BF we have seen how Growing and Shrinking and Shape Flow in this context are discussed. In this account as well, which is a psychoanalytic perspective on LMA/BF, there is the notion of a basic Growing and Shrinking related to the formation of life. These generalised patterns continue to influence development in the span of life. And it is in this context that Shape Flow is defined (Amighi et al, 1999:110-136). Unipolar and bipolar shape flow³⁵ factors are seen to develop in various stages in the first years of life, whereby in the neonate unipolar shape flow is understood as evolving from the bipolar shape flow. This develops respectively from horizontal to vertical to sagittal dimensions in the course of the first three years of life. And yet there is something basic to both these factors of shape flow. Unipolar shape flow is seen in the activity of the

³⁵ As opposed to conventions in LMA/BF the terms in Kestenbergs’ account are not seen to be in capitals. I will thus not use capitals when discussing insights from this account.

one-celled organism, the amoeba being the typical example, as it expands towards its nutrition and shrinks into itself thereafter. We saw in Chapter 2 of Part I how Johnson (2007) refers to the locomotion of the amoeba. Here we see the nature of movement therein. On the other hand, symmetric bipolar growing and shrinking is not only evident in breathing but also in growing associated with the intake of food, and shrinking in expelling it, as also evident from Cohen's work, at the cellular level. Further, „the functioning of the heart and other body organs replicate this process.“ (Amighi et al, (1999:111). Underscored thus is what we saw as the principle of movement that defines change at the fundamental level, namely the baseline process of change as growing and shrinking in shape flow.

Kestenberg's insights also underscore the observation in the analysis, that such a unipolar and bipolar shape flow underlies the other aspects of the Shape category. Kestenberg sees what are called Shaping in directions and Shaping in planes to develop out of shape flow (Amighi et al, 1999:143-172). The former relate to the Directional Modes of Shape Change defined in LMA/BF, and the latter to the Shaping Qualities. These define, also noted earlier, the externalised movement. From a developmental perspective we see in Kestenberg's explications only unipolar/bipolar shape flow and a Directional Mode of Shape Change. Finally, all the different movement patterns from shape flow to shaping in planes are understood as not being mutually exclusive (Amighi et al, 1999:177). What the analysis of emotive expression exemplified is, thus, a fundamental developmental aspect of movement. We saw there how the Spreading, seen for instance in the elbow when the hand was used as well, was the outcome of Widening together with a directional movement to the side as emotive expression emerged forth, extending outwardly into the distal edges. I had also noted after the analysis that even if Shape Qualities are understood as the expressive qualities of movement, it is the unipolar and bipolar Shape Flow factors in revealing themselves in the minute levels of emergent movement, inner to outer, that are the primary defining factors of emotive expression.

Kestenberg explains that only when these factors are present as an added component in the Shaping in directions or planes that the emotional or expressive meaning of the movement becomes evident. A child reaching towards a toy with bulging shows desire for or attraction towards the toy, more than just a „dispassionate“ pointing to the toy with no shape flow evident in, for instance, chest or breath (Amighi et al, 1999:146). This is, of course, from the perspective of reading meaning in the movement of the body, that Kestenberg's Movement

Profile is about and applied to. That expressivity, and a felt sensate experience for that matter, are a question of investing in internal processes of change rather than just arriving at an outer shape, was also echoed by Hackney. And investing into unipolar and bipolar shape flow factors, or addressing them, as I discussed in the previous chapter, enabled emotive expression to emerge forth in the first place; in fact unfold automatically, revealing the very inner processes of change in movement terms. Other aspects of change emerged from these.

Hackney while emphasizing the multi-dimensional aspect of movement, stresses nevertheless on distinguishing the baseline change that such a Growing and Shrinking denotes from other expressive aspects of shape change including Shape Flow. We had seen that Hackney prefers calling this baseline process Shape Flow Support to differentiate it from Shape Flow, which is in LMA/BF originally one of the Modes of Shape Change, in addition to Directional and Carving. An „adjusting to get comfortable“ (1998:222), which is an example of such a Shape Flow Mode of Shape Change, was evident often with the student in the analysis of bringing forth emotive expression in the previous chapter. At times as I had analysed there, it was just an internal movement seen in the chest, which was distinct from the actual Widening or Lengthening or other shape flow factors occurring. Having said this, what the analysis revealed as primary in emotive expression is just these factors as defined by Kestenberg, the specificities as I mentioned, that Hackney includes under Shape Flow Support. At the same time, I see the notion of Support reflected in the very fact that unipolar/bipolar shape flow is the baseline change occurring at the level of the fascia, the inner structures, whose nature is support in various ways, as I traced in the previous chapter.

Looking further at Kestenberg's definitions, symmetric aspects of change in bipolar Shape Flow are defined as encouraging stability and internal sense of balance, and asymmetric unipolar Shape Flow such as bulging forwards or hollowing inwards are seen to reflect basic notions of attraction and repulsion, or moving towards and withdrawing. Essentially, relations with the environment are thus seen to be structured by shape flow, at the same time giving the sense of comfort or discomfort associated with them, that I had mentioned in the earlier chapter. „Growing in shape flow tends to create open shapes associated with feelings of comfort. Shrinking in shape flow tends to create closed shapes associated with feelings of discomfort“ (Amighi et al, 1999:110). Here again, Hackney attributes Growing and Shrinking to the baseline change in Shape Flow Support, while Opening/Closing as a most general aspect of movement is related to Shape Qualities, i.e. toward where in terms of spatial pulls

the change is happening while Opening and Closing (1998:222). It has to do with external movement again, as we saw for instance with the hand gesture for the lotus flower in Chapter 1 Part I. The fingers in Spreading open to create the shape of the flower.

We gather from Kestenbergs account that general feelings of pleasantness or unpleasantness, and emotional associations to bipolar growing and shrinking develop in various ways from experiences such as basic responses in infancy to environmental changes of warm or cold air. Growing and shrinking responses to physical comfort or discomfort generalise to corresponding responses in positive emotional sensations and moods or emotional pain (Amighi et al, *ibid*:112). From Damasio's (2003, 2010) explications we gathered how emotions are grounded at the basic level in physiological processes, the basic emotional experience or feelings they generate accompanying all other feelings. Experiences of comfort or discomfort, or pain or pleasure have evolved accordingly to be labelled further in various ways and as the emotions we know today. In this sense, changes in the perpetual growing and shrinking attributed to the inner regulatory processes as in breath or at organic levels are not just responses to emotional sensations and pain, but the very source of these. We do not grow or shrink, because we have a positive or negative emotional sensation. Emotions bring changes in this baseline Growing and Shrinking, and experiencing emotions as such is a result of these changes that as defined from both movement and emotions research perspectives discussed here, occur at regulatory levels.

Furthermore, shape flow not only structures, as mentioned above, the interactions with the environment, but also provides structure to what are called tension flow attributes and rhythms. These are essentially discussed from a psychoanalytic perspective and in terms of child development and their shaping of psycho-social changes thereby (Amighi et al, 1999:24ff). Briefly, tension flow rhythms are defined as patterns created due to periodic alterations in muscle tension. They are seen to originate from biological zones with adaptive associations to specific biological functions. Thus, the Sucking in the mouth is suited for ingestion of food, while the Strain/Release rhythm that originates in the anal sphincter supports defecation. Other rhythms related to these regions include, for instance, Snapping/Biting or Twisting respectively. Rhythms can in terms of developmental progression spread from the region of origin to get integrated in various other functions in life. Of interest here is the alteration of muscle tension between free or bound flow associated with these rhythms. They are present in both voluntary and involuntary muscular activity.

Through shared rhythmic patterns, voluntary and involuntary behaviour, psychological constellations and emotional qualities in each developmental phase interrelate. Then the variations in tension flow rhythms are defined as arising in response to psychological and biological needs. Attributes of free and bound flow characterise the animate aspects of tension flow related to aliveness, alertness and healthy tissue. Whereas, a lack of either is defined as neutral flow indicating lack of emotions and vitality.

The attributes thus „express attributes or qualities of emotions and reflect the core temperament of an individual“ (Amighi et al, 1999:60). Free flow is associated with mobilization and release of tensions, and with pleasant feelings and safety and thus emotions of happiness, also giving a sense of liberating. Even Shrinking can be experienced thus if it is in free flow. Bound flow on the contrary protects and is associated with restraint and caution, accompanying emotions such as anger, fear, anxiety and so forth. While tension flow rhythms are thus seen to have emotional qualities and are finally used to read the afore-mentioned behaviour, psychological constellations or emotional qualities, they are also defined as responses, here to both internal emotions and external reality, but with emphasis on internal subjective experience. In this sense, alterations in tension flow as responses to emotions indicate that these also constitute bodily changes in emotions. And to put it in Damasio's terms, would, as emotional experience or feelings, get associated with certain kinds of emotions, and also ways of thinking, indicated also in Kestenberg's notions of safety or caution.

Essentially, tension flow attributes are defined as giving indication about movement qualities that in terms of developmental progression define how weight, space and time come into play in the first years. These define the Effort Elements in LMA/BF. In Kestenberg's understanding, just as external factors of Shape extend from unipolar and bipolar Shape Flow, Effort Elements are the outcome of tension flow attributes, mediated by what are coined pre-efforts (Amighi et al, 1999:75ff). These pre-cursors enable the further development, from having tension flow attributes, to regulating them for use in an effective coping with environment. By attending to the inner regulation of tension flow attributes, one learns to encounter the environment and respond to the forces of weight, space and time with corresponding movement qualities. At the same time a modulation also enables regulating tension flow rhythms themselves, such as controlling the impulse to jump or gulp in food. They are thus seen as a measure of how expression of needs are regulated or satisfied, in

effect giving indication for how one has learnt to regulate emotions. The emotional component of pre-efforts is seen in how they are used defensively in dealing with anxiety, fear, etc. that are encountered in new situations.

We had seen in the analysis how Effort Elements are operative in the expression for different emotions as well. A Bound Flow Effort, for instance, was evident in the expression of even wonder, which is not an unpleasant emotion. It had to do with the high intensity that emerged in the expression. One could also say that, in the absence of using other parts of the body in spite of an intense expression of wonder, or that a gaze cannot become an external movement as such, Bound Flow constrained it to the emergent facial expression. This was nevertheless a non-conscious act; an understanding in LMA/BF as well, that expressive elements of movement need not be conscious to be operative. Bound Flow became part of the shape flow factors of expression as it crystallised, in just the kind of automatic process of bodily changes that are defined by Damasio as accompanying emotional states.

In general, in examples where actions such as jumping are described as having high-intensity tension flow, or states of being tired, depressed or without emotions or feelings, i.e. listlessness, are related to neutral flow, we discern the movement qualities in actions and behaviour patterns that were seen to be one aspect of physical manifestation of emotions discussed in the previous chapter. One could thus account striking out or any of the overt actions in anger to tension flow variation in high-intensity free flow, whereas bound flow would restrain the action to a fist or throbbing nostrils. The tension flow attributes thus inform how emotional states externalise with different intensities. As was observed and analysed in the actual expression of emotions, Effort Elements revealed themselves as variables in the baseline change occurring in Shape Flow Support. Also underscored are my observations that there are different movement qualities for the more overt nature of actions and behaviour patterns. I will come back to these movement qualities in the next sub-section.

Finally, given tension flow is attributed to emotions, alterations therein and the behaviour they influence, whether reflecting high or low intensity, constraint and control, excessive activity or complete lack of it, must in the end effect be informed by varied intensities in which emotions get triggered, to put it in Damasio's (2010) terms, depending upon the need-based value attached to an object, internal or external. At the same time, given they manifest as Effort Elements, they tell us about the qualities of externalised or overt manifestations of

emotions, like actions, elaborate gestures and so forth. While the emergent level of physical manifestations of emotions reveal the underlying shape flow aspects. There is, nevertheless, as the analysis of emotive expression in Indian performing arts reveals, a difference in felt quality terms, with the qualities tension flow attributes manifesting in Effort Elements such as Weight, Time or Flow different to what shape flow factors themselves enable. This is apparent in the differences seen in behaviour patterns vs. the gestures of the limbs, and finally within these as well, as was analysed. I will come back to this further below, while discussing the *bhāva-rasa* notion of experience. From Kestenberg's insights we can essentially specify the nature of bodily changes which are in Damasio's understanding the process that is an emotion. They are definable as changes in the perpetual Growing and Shrinking in shape flow effected by variations in tension flow between free, bound and neutral flow with varying intensities, the intensity depending upon the intensity of emotions itself. Finally, this is best definable when looking at the functioning of fascia as discussed in the previous chapter.

We had seen there that changes emotions trigger are enacted in the fascia, becoming conspicuous in regions that are most loaded in fascia terms, i.e. at intersections and along fascia chains. There is a basic function of fascia in load transmitting that we saw as happening in just the kind of unipolar/bipolar shape flow of Lengthening, Bulging, Hollowing and so forth. It was seen that stress is transmitted through the fibrillar hollow elements that connect by way of what is defined as pre-stress until the adjoining ones attain the deformation (Guimberteau, 2005). Release in pressure brings fascia to their original form. Furthermore, another important aspect from insights gained through current fascia research, is that fasciae essentially enable movement by means of release in pressure in closed spaces in the body. Muscles, fluids, fibres and cells are informed by such movement. There is in as much a build-up and release in pressure in shape flow, which is reflected in Kestenberg mobilization and release of pressure attributed by Kestenberg to free flow. It enables movement, as opposed to bound flow which restricts it. While we see here where the notion of shape flow structuring tension flow attributes must be operative, we also discern where and how movement is *effected* in the first place. It is effected in the very interplay of tension flow and shape flow, which is, so to say, in the behaviour of fascia itself, given the correspondences in definition. There is a build-up or mobilization and release of pressure, in particular in the very understanding of release in pressure whereby fasciae not only revert to their original form, but enable movement thus. While Kestenberg's insights tell us about the nature of movement in terms of how it is characterised by shape and tension flow, fascia structures tell us that such

movement is effected in the very innate structures that span the body, in the nature of form and function in the micro-levels of the body.

At the same time, we gain insight from fascia research that this is not the activity of muscles as such, as Kestenberg relates tension flow attributes to, but occurs in the fascia structures that constitute them. Based on observations in actual movement sessions, we have seen how movement facilitation and execution reveals to be most effective when addressing Shape Flow Support factors in unipolar/bipolar shape flow in conjunction with the anatomical landmarks and/or Patterns of Total Body Connectivity. And this is the case not only when bringing forth emotive expression, as seen in the analysis, but also movement in general, whether in dance or daily activities. In particular, it was evident in the analysis that addressing Shape Flow Support together with specific connectivity between anatomical landmarks sufficed to even bring forth variations in Effort Elements. When placed in the perspective of fascia research, one is addressing movement at the level of the shape flow that structures tension flow; to be precise at the level of where movement is being effected in shape flow at the level of fascia as a result of release as seen above. Initiating movement at the end of an exhalation, i.e. when there is a release, is emphasized in LMA/BF. It not only eases movement initiation, but also enable a fluid execution as well. This is an important aspect also in arriving at a more differentiated understanding of felt experience that I mentioned above, and to which I will come back to further below.

At this point there is a fundamentally important aspect to hold, which the above discussion illuminates in specific terms. In thus fleshing out the insights from the analysis, we discern how movement is not only defined by a baseline Growing and Shrinking in shape flow, but is generated in the first place in a process that can be defined as the interplay between shape flow and tension flow in the perpetual process of Growing and Shrinking. And given the continuous formation and deformation in fascia in its load transmitting function, such movement in turn gets transmitted in just this shape flow to the farthest regions of the body along the fascial chains that I had discussed with examples in the earlier chapter. I had also mentioned there that this accounts for how bodily changes triggered in emotional processes and revealing just these shape flow factors, are seen to externalise as movement in these farthest regions. Underscored in the above discussions are thus the very defining factors of movement identified in the analysis and with which I started this discussion, namely that a baseline Growing and Shrinking in shape flow characterises *primary emergent* movement.

And it is effected in the first place in internal processes, both at the cellular level and the fascia structures that emanate from there. And also how understanding movement thus can provide a differentiated approach to felt experience, which will be discussed further below. There is namely, both the notion of perpetual expanding and contracting which is the nature of cellular movement that integrates the whole body and an experience of stillness when cells communicate with each other in the explications of Cohen. And the notion of different qualities attributed essentially to tension flow attributes by Kestenberg, whereby I would like to hold that tension flow is structured by shape flow as defined in this account. We have also seen how shape flow itself informs felt qualities. Apart from this we discern that there is an *inner to outer* evidenced in conjunction with such movement, both in terms of a Developmental Progression of movement as well as the larger context of organism-world interactions in which emotions are rooted, as I will discuss below.

4.2.2 The inner to outer of primary emergent movement

From a developmental perspective, we see that primarily there is the orientation *inner to outer* in the progression of patterns as discussed in the Body Category of LMA/BF. As stated earlier, Hackney (1998:44) discusses the notion of inner-outer as fundamental, listing it under the aspects of BF. Both Cohen's and Kestenberg's perspectives on LMA/BF discuss how the basic pattern, which is the Growing and Shrinking we have seen, defines fundamental neurophysiological processes. This pattern at the most basic cellular level evolves into more complex patterns integrating the body in various ways to become what Hackney defines and discusses as adult Patterns of Total Body Connectivity. The very first stage of progression, the Core-Distal Connectivity Pattern, illustrates how *inner to outer* is evident there already. In this next most basic pattern to Breath Pattern, orientation of the patterns is primarily to the six distal edges or extremities of the body, the hands, feet, head and tail. In terms of unipolar/bipolar shape flow it is towards these that we, for instance, sense a Lengthening or Shortening from the Breath Core, which as movement sessions reveal, also facilitate execution of movement and bring about a felt sensation. Cohen's work places this pattern in an evolutionary perspective. It is the level of the starfish that has evolved from the single-celled organism, whereby its limbs are the pre-cursors to the six distal edges of the human body, hands, feet, head and tail, also in terms of sensitivity in these regions and the sensory organs in the head. Then the starfish has at the end of each limb „sensory receptors and a

pigmented light sensitive spot that serves the function of the eye“ (Hartley, 1989, 1995:26). That these limbs have evolved to move out into the world and interact with it becomes evident.

There is here the understanding of movement inner to outer based on acting in the external world. Hands and feet in particular are important means by which we act in the world. All our daily actions, but also several behaviour patterns we have seen as constituting physical states in emotions pertain to these extremities. In the case of the head, we know that it is also the location for sensory organs and the most essential brain. The sensory organs are also again the means by which we deal with the environment and the world. The physiological basis of such a function is again evident in the connections fasciae build, in the pathways through the body in shape flow, to both extremities as well as sensory organs such as the eyes and tongue. Of interest is also how the neck and occipital region at the back of the head, and the tailbone, are seen to be important fascia-loaded regions, the former in their intermediary function between the body, sensory organs and the brain, and the latter as an important intersection of various pathways between upper and lower body. Head and tailbone are at the same time two of the six extremities discussed in LMA/BF.

In the human body the distal edges are the movement initiating parts. NS also defines hands, feet and head amongst others as major limbs. I would however specify that the six distal edges are where movement in terms of outer movement is initiated, that have to do with acting in the outer world. The relevance of sensory inputs and motor actions such as grasping from distal edges becomes more than apparent in the discussions by Johnson (2007) and Gibbs (2005a) presented in Chapter 2 of Part I in the context of body-brain-world/environment interactions where the sensorimotor capacities as embodied experiences are embedded. *Primary* movement itself is initiated, as I laid out above, much deeper within, in the very processes occurring as the interplay of shape flow and tension flow. And that this interplay is informed by emotions also becomes evident, whereby we have seen how changes externalise inner to outer in shape flow. From a generalised growing and shrinking in shape flow at the undifferentiated level of embryonic movement and that of the baby, patterns are seen in Kestenbergs account to become more differentiated, the unipolar/bipolar shape flow finally extending into Shaping in dimensions and planes, i.e. the Directional Modes of Shape Change and Shape Qualities respectively, the outer aspects of movement. Also, these are seen to emerge forth in response to increasing interactions with the external world, underscoring

how this is a matter of externalising into the distal edges and the important role they play in these interactions.

From Kestenbergs' explications we gain insight about the relevance of yet other extremities for purposes involving the inner-outer. Tension flow rhythms are understood as emanating from specific biological regions identified as oral, anal, urethral or genital, to which specific biological functions are attributed (Amighi et al, 1999:26f). Given their functions, these regions are also extremities at the interface of inner-outer, the regulating functions such as intake of food or the expelling of waste reflecting essentially how the outer comes into play in the regulation of the inner. The role of such extremities becomes evident from another perspective as well. Even if going into insights from the Indian worldview is beyond the scope of the current study, given this perspective is large and complex, there are points that call for mention as and when they correspond to discussions here, opening thereby pathways for further study. I had drawn attention to some correspondences in Chapter 2 of Part II when discussing emotions and feelings from Damasio's perspective. Hands, feet, the oral, anal and genital regions also find reference in the ancient Indian scriptures as five additional sensory organs to the five classical ones³⁶. In their being named *karmendriya* the notion of actions attached to them as having sensory function becomes evident. Subhash Kak (2002/2009:105)³⁷ refers to the actions grasping, walking, speech, evacuation and procreation as „organs of actions“, the listing thereby referring as apparent to the functions related to the five organs rather than the organs themselves. The Indian worldview in placing the ten senses in the larger context of the interrelatedness of the body, mind, self and consciousness, which is central to discourses therein, thus indicates how these notions were discussed in terms of both fundamental functions of the body, but also fundamental experiences.

In the specific example of the tongue, for instance, which is related to the oral region rather than the mouth and considered to be both an action organ for speech as well as the classical sensory organ for taste, we see how the outer-inner is operative in the functions that specific extremities carry. The sensory function of the tongue, or the sucking function that Kestenbergs discusses as rhythm in the oral region reflect a function outer to inner, the sensory inputs of

³⁶ Viswanadham Satyanarayana, personal correspondence – notes from seminars as stated earlier. Personal correspondence also with other Indian scholars who have brought the function of hands, feet and tongue in this context to my attention in discussions.

³⁷ In search of literature in English in this regard, I was recommended this particular reference, which is a larger discourse on the physical, mental, self and consciousness dimensions of reality and the individual, based on two ancient Indian schools of thought.

taste and the ingestion of food respectively having primarily the function of regulating the most basic inner physiological need, namely hunger. Here again, it is fascia structures that substantiate the notion of inner-outer relations. The tongue is defined as the most forwarding thrusting muscle of the visceral self. As I had cited in the earlier chapter from Meyer's (2014) insights, the Deep Front Line DFL is a connecting chain from the feet to the tongue through the viscera. Given the visceral connections, the DFL was seen to also be relevant regarding changes occurring due to emotions, the constrictions in the organs, for instance, effecting movement in other connected parts. The connections that fasciae build in as much imply an inner to outer function in terms of movement, the action of the tongue or feet reflecting the externalisation of changes occurring in any part along the DFL, in particular the viscera. As Damasio's discussions illuminated, changes occur in the inner, even if they pertain to outer factors, in turn externalising inner to outer, to become externalised expressions or also activities or actions.

Finally, by coming back to the analysis in the previous chapter, we have seen the emergence of changes inner to outer was particularly evident in regions of the face, such as eyes, nose, eyebrows, pupils, or even eyelashes, where emotions externalise in the most minute and subtle ways, and that we read as emotive expression. They in this sense constitute extremities as well. At the same time, emergent movement evidenced in chest or belly reveal the inner changes themselves. Essentially, we saw the very relation between internal processes, primary emergent movement and the process of inner to outer exemplified in just the kind of externalisation evident in emotive expression. Here as well, the discussion from the perspective of fascia illustrated pathways, namely how the diaphragm with its central function connects by way of various complex fascial pathways the regions where changes were evident, of particular interest the regions in the face. These were seen to be connected in especially deep ways, as was exemplified with the eyes. Also, given the diaphragm connects by way of breath the inner organs and the musculoskeletal system, these connections are reflective of the further externalisation of changes into actions.

We see in the above discussion, also how progression in patterns in terms of inner-outer, begins to define the very architecture of the body, leading finally to the kind of three-dimensionality that is unique to the human body. As I cited earlier from Hackney, patterns develop as neuromuscular pathways that fire when an intent such as a spatial intent is given. I must add here that in this study I have not gone into the outer aspect of spatial pulls or the

notion of outer space that Laban (1966) specifically discusses in detail. The focus being an examination of the internal aspects of movement based on the inner to outer that was evident in emotive movement. In the analysis we have seen how primary movement as change in unipolar and bipolar shape flow is operative first and foremost within the body and inner to outer, the basic intent given by emotions themselves that trigger the processes leading to such movement. As Hackney further defines, “Inner impulses are expressed in outer form” (1998:40). On this account Inner-Outer is encompassed within the framework of Bartenieff Fundamentals. At the same time involvement in the outer world is seen to define inner experience. Thus Inner and Outer reflect each other. And movement becomes meaningful.

In the instances discussed above the inner-outer reciprocal processes become evident in specific terms. While fascia chains tell us about patterns getting fired as pathways inner to outer informing the very architecture of the body which resides, as seen, in the fascia structures itself, we also discern the notion of inner to outer as grounded in the larger context of body-brain-world/environment interactions. What becomes evident in the discussion above from the perspective of movement, is the development of the more complex patterns inner to outer to distal edges based on the need for acting in the world in terms of organism-world interactions. In tracing the relation between inner processes, movement and inner to outer from the different perspectives, we also see how involvement with the outer has to do with inner needs. Reflected therein is the fundamental relevance of emotions as postulated by Damasio (2003, 2010) and discussed in the preceding Chapters 2 and 3. They are embedded in the kind of inner-outer given in the very body-brain-world/environment interactions in which emotions are embedded. Responses to both inner and outer stimuli trigger bodily changes, which *are* the emotions. And the brain has evolved thus to cater to the needs of the organism, both internally and in dealing with the world. It is herein that the function of emotions in enabling the very notion of inner-outer is discernible. And whether there is an involvement with the outer or a catering to inner needs, changes are primarily inner to outer, grounded in regulatory physiological processes, internal and in the background. Most importantly, the thus triggered inner bodily changes can externalise into the visible bodily manifestations. In other words, these are the inner impulses that get expressed in outer form.

Summarizing, the discussion in this section from the perspectives on movement in both evolutionary and developmental terms as discussed by Hackney (1993, 1998), Cohen (1993/2012; Hartley, 1989/1995) and Kestenberg (Amighi et al, 1999) essentially underscores

the notion of *primary movement, emergent, inner to outer*, as integral to emotive processes, and defining the inner processes of change. We discern a baseline of ongoing physiological processes in the body such as breathing, the intake of food, the expelling of waste, to mention the most basic, the defining factors of which are the baseline changes in growing and shrinking in shape flow underlying all changes. And on these changes, in that sense, perpetual changes occurring all the time as changes triggered by emotions must get effected, defined in their broad range from physiological processes to higher emotions. While studying the various regulatory physiological processes based on the needs of the organism is not the aim of this study, of particular interest is the insight that if movement is about change, it is because change itself is enacted in movement, at the interface of tension flow and shape flow. And while tension flow attributes can enable or constrain movement, telling us about the intensity of change effected by emotions, the externalisation of internal changes is in shape flow or what Hackney coins Shape Flow Support, and this at the most minute subtle levels, becoming more overt and external as other aspects of movement take over. This is where I see the inner to outer of primary emergent movement rooted, in the basic growing and shrinking in shape flow over which changes triggered by emotions must get effected. It is first and foremost generated in the inner, in the very processes that are emotions, in the deep structures of the body, and specifically inner to outer. And evidenced in the very load-bearing and transmitting function of fascia, carried forth in just the shape flow factors to the farthest points in the body, and externalising at distal edges and different extremities having various functions as was seen above.

The movement at the distal edges is at the emergent and often subtle level also characterised by shape flow factors. This externalisation in the very outer form of the inner changes is what we read as expression and thus meaning. In doing so it is not just a reading meaning that became evident. The discussions underscore insights into what can be defined as meaning-making processes, evident in the very emotive-kinetic process presented here, with the emergent movement itself defining the embodied experiences informing these processes. Most importantly, *primary movement, emergent inner to outer* generated in these processes is not only about outer expression, but also the very notion of bodily movement-based experiences. Based on insights the very analysis of emotive expression brought forth, we can discern this in particular, in the function of the eyes. While they are a source for sensory input and thus visual experiences coming from the world, the sensate felt quality of experience is enabled by the movement that emerges forth there as the externalisation of inner changes,

exemplifying the nature of experiences as residing in the most subtle minute levels of such movement. It lies in the above explications on primary emergent kind of movement, both in developmental and evolutionary terms.

As I will discuss below, such an understanding has repercussions for the notion of feelings and felt experience, bringing us to the notion of two kinds of feelings that Damasio postulates. We had seen in Damasio's classifications and explications how feelings are the very defining factors of what made emotions evolve in their need-based value-giving function for the organism. The value thus given, and attached to internal processes and encounters with the outer world, is essentially based on the meaningful movement-based experiences they enable. In Damasio's terms they range at the basic level between comfort and discomfort, pain and pleasure, evolving into the experience of all the higher emotions they get associated with. We also discern from Kestenberg's understanding that the baseline Growing and Shrinking relates in terms of feelings to comfort/discomfort. Pain and pleasure are also attributed to shape flow and tension attributed to these, as was discussed above. In the following I will argue based on the notion of both tension flow and shape flow, how we can arrive at a differentiated understanding of feelings.

4.2.3 *Sensing the Shaping* in primary emergent movement

Kestenberg relates Growing and Shrinking shape flow to pleasant and unpleasant sensations and emotional feelings. And furthermore, what the analysis of emergent movement in emotive expression exposed, namely that emotional expressivity is attributed to just the unipolar/bipolar shape flow aspect of Growing and Shrinking and to internal processes. Similarly, tension flow attributes of bound, free or neutral are seen to define dynamic aspects of experience. Neutral flow is seen as lack of emotions. Given this, tension flow and shape flow tell us about feelings enabled at the body level. Alterations in tension flow rhythms, that restrict or enable movement in bound or free flow are, for instance, responses to emotions, enabled internally and from external reality.

I had discussed above, how movement qualities attributed to tension flow attributes reflect the kind of qualities the more external forms of actions or behaviour patterns would have, underscoring my assessment in the examination and analysis in the previous chapter of the different kinds of bodily manifestations of emotions. Thus in the very nature of the emotions,

which in turn have to do with the need-based value an object gains, lies in how far they can be experienced in varied intensities, and how far emotions externalise into the outer. The more external they get, the different movement qualities they would gain. For instance, there could be an instantaneous or sustained Time Effort as variation in the emergent movement, or include Weight in terms of LMA/BF Effort Elements, reflecting at the same time temporal and tensional qualities, that were also seen in the listing of dynamic qualities Sheets-Johnstone (2009, 2011) attributes to movement. We recognise based on Kestenbergs insights, how these are qualities of movement characteristics that are extensions from internal tensional flow attributes having varying intensities based on the emotional responses. Similarly, the amplitudinal and linear/curvilinear dynamic qualities, which I analysed in the gestural meaning depiction in Chapter 3 of Part I, relate to unipolar and bipolar Shape Flow, reflecting structural qualities of movement emerging there from in Directional Modes of Shape Change and Shape Qualities.

For instance, it was seen in gesture for denoting the climb on to the tree, how the hand moves in a curvilinear trajectory with some expanse in it in terms of the amplitudinal. This is an Arc-like Directional Mode of Shape Change, the amplitudinal quality in it enabled when the movement gets a Spreading Shape Quality. A tensional quality can be experienced in conjunction with a quick movement which would be a Quick Time Effort. In this quick movement one is also investing in weight and thus Weight Effort Element, just as in actually taking a jump. We can say a tensional quality can also be experienced when executing it with Sustained or Lingering Time Effort. Here one would be investing in addition in a Bound Effort Element, which constrains movement. Whereas, when executing it with no specific temporal quality, there is no prominent tensional quality. This is like neutral flow that Kestenbergs also defines as a tension flow attribute.

In another instance, in the gesture for the fully-blossomed lotus flower, the fingers are spread, revealing Spreading Shape Quality. In using this *alapadma hasta* or hand form even in the context of general dance movements, it is often observed how students have difficulty in spreading the fingers, or cannot maintain the finger positions while executing larger movements. In figuring out how to facilitate this as well, I explored with the notion of Spreading as emerging from Widening, the internal aspect of shape flow, instructing students to widen in the palms thereby. Interestingly, while fingers spread out effectively, in terms of movement qualities, there is a tensional quality in thus executing the *hasta*, which is most

pronounced when the fingers get fully stretched in Spreading enabled by Widening. In order to spread, but also maintain the position of the fingers, there is need to apply the bound flow attribute of tension flow, which is defined as constraining movement. It is also necessary for holding movement or maintaining positions and postures. At the same time, it reveals that the more external the movement needs to get in thus opening, the more tensional quality is required, which is essentially applying pressure to the Growing in terms of Shape factors.

However, if tensional quality, i.e. a bound tension flow, is internal in the torso itself movement becomes very restricted. In this context I have explored in addition, the very notion of Widening or even Lengthening as given out of the inner to the outer into distal edges, depending upon where to such a hand form, or even other hand forms, need to move, or be maintained. Here interestingly, it is possible to also release pressure in terms of internal tension flow, thus enabling fluid movement, while the tensional quality is only maintained in the hand itself. Thus tensional quality, just like temporal quality, is in as much a variable, and given in the notion of externalisation of movement. It can, however, also be changed by the very notion of release in pressure that is attributed to free flow, and which also effects movement in the first place. At the same time the release in pressure gives, as already evidenced in other movement, a general sense of volume.

Free flow is associated with pleasant feelings, safety and thus emotions of happiness, as Kestenberg notes, also giving a sense of liberating. Even Shrinking, generally associated with discomfort or pain is seen as becoming pleasant if it is in free flow. Taking this thought further, given there is a mobilisation and release of pressure associated with free flow, it is this aspect that must enable the pleasant category of feelings thereby. This is particularly evident in Shrinking attributed to breath itself, which is clearly a release providing the experience of liberating. At the same time there is the experience of volume, which is attributed to shape flow. We can also say that about Narrowing, for instance, which is also the Shrinking aspect of movement in shape flow. It can be unpleasant, since it would mean applying pressure again rather than release of it. At the same time, when one brings about a release in pressure, the same Shrinking can feel less tensed so to say. Bulging as Growing could, on the other hand, feel unpleasant as well, when it comes with build-up of pressure, as with something as mundane as, for instance, excessive eating, which NS also attributed to a Bulging gesture of the belly. An emptying releases the pressure here as well. Thus, growing

while generally providing feelings of comfort, can be an experience of discomfort or even pain. This is also evident in breath when restricted in the chest due to bound flow.

Build-up of pressure is also restrictive where movement is concerned. Kestenberg attributes restraint and constraint to bound flow. While release in pressure, attributed to free flow, is where, as was discussed above, movement gets effected. Movement execution is not only effective thus, but has another, in fact, pleasant quality. Nevertheless, while excessive free flow would make movement unrestricted, bound flow is an important aspect in the ability to control and manage movement. Weight is mobilised for instance in jumping. But I can also mobilise and release pressure to do so, by yielding into the ground and pushing off with the feet. Yet if it has to be a hurried jump, Weight, Time and Flow as Effort Elements become operative non-consciously, causing the tensional attributes that accompany such a connotation. In most of movement the two attributes, bound and free are alternating as required by the inner intent, in the case of emotions, their intensities varying as mentioned above by the intensities of emotions themselves that inform them.

Kestenberg defines bound flow as accompanying emotions such as anger, fear, anxiety and so forth, because it protects and is associated with restraint and caution. These are what Damasio calls emotions proper, the emotional states that were also seen as transient or dominant states in NS as well. We have seen in the functioning of fascia how fear that leads to constrictions at the very level of the organs restricts a free movement of the diaphragm, which in turn, given its connections to other regions, such as the neck, or the most important psoas that is central for our bi-pedal stance and movement, restricts movement there as well. We see herein how inner bodily changes that emotions effect get manifested, here freeze associated with fear. At the same time, if bound flow becomes manifest, due to specific continued emotional states or constraining them, as Kestenberg notes, this would in terms of fasciae mean adhesions. Their sliding, gliding movement in shape flow is then restricted. Thus, while bound flow's restraint and caution are necessary to control and manage movement, in terms of emotions, high intensity bound flow not only leads to restriction of movement, but also pain. And given the load transmitting function again, the experience of pain is carried to another region of the body than where it originates.

On the other hand, given bound flow is the opposite of free flow and movement is restricted, the very function of release in pressure effecting movement must get curbed. This at the same

time means, that here as well, the notion of mobilization and release of pressure would effect movement. It can again be best illustrated with breath when bound flow restricts it as mentioned above. Growing in breath is three-dimensional as shape flow in Bulging, Widening as well as Lengthening, the three-dimensionality evident specifically in the movement of the diaphragm itself. Given this, bound flow would restrict movement along any or all of these, thus restricting the flow of breath. Addressing these factors by way of investing into Shrinking and release associated with exhalation, eases inhalation and Growing again, based on the same principle as we know now as being the characteristic of fascia, here of breath. The notion of actively investing into exhalation is a standard practise in traditional yoga, whereby breath is addressed for its own sake as well, with inhalation allowed to set in on its own at the end of exhalation. Given the central function of the diaphragm as we have seen, this can be understood as an effective way of regulating the changes emotions cause, or regulating emotions themselves, given they are the bodily processes as we know from Damasio. Taking a deep breath to overcome something is a natural tendency.

That emotional states lead to bound flow, but that release helps to influence bound flow and also informs experience, was particularly evident in a few cases, some even while writing here. Three long-time participants of yoga sessions revealed changes in their breath flow; specifically observable in the shape flow factors and as bound flow in the chest. While it occurred to me that one of them has been revealing these for a longer time, since the loss of a child, with bound flow and restricted movement from the Core pretty manifest in the meantime, the other two revealed these just when family members were going through phases of illness/surgery and hospitalization. And this happened at the same time, making me notice the similarities. Of interest here is, that with regard to felt qualities, sensations and even feelings, bound flow did not seem to inform these. They showed or indicated no signs of discomfort or pain while executing movement. Except for the one student where it has been manifest longer and who knows it, the other two did not even notice the temporary changes. Also, apart from the time frame in which this occurred, an emotional state such as anxiety were not externally evident, the dealing with corresponding situations in general positive. And yet I observed the same kind of changes effected by bound flow in all three, exposing how changes effected by emotions must bodily manifest at levels below conscious experience, and in bound flow.

At the same time, considering the participants wanted to attend these sessions at any cost, in particular, just during the difficult phases, expressing how it does them good, indicated that these sessions provided them experiences that can be labelled pleasant, liberating or positive, felt qualities attributed to the free flow aspect of tension flow. And the notion of release in pressure that effects movement in shape flow, but also provides such experiences is underscored here again. It was mentioned earlier while discussing the methodology and data for the movement analysis in Chapter 3 of Part II, that these sessions are also where movement is addressed primarily in terms of unipolar/bipolar Growing and Shrinking in conjunction with Patterns of Total Body Connectivity and anatomical landmarks, where Touch to release and enable movement is also used when necessary. Also breath in terms of exhalation is used for release and initiation of movement, a notion that is, as was stated earlier, a practise in LMA/BF approaches, as well as Yoga. In particular the release in pressure at anatomical landmarks itself is central to these experiences. At the same time I must add that while Touch to facilitate release and enable a free flow of breath was used in these particular instances, where bound flow in the chest was noticed, it was effective to a much lesser extent than during normal times, revealing there was quite an intensity in bound flow that can be attributed to emotional states, perhaps here of a latent anxiety, that however did not seem to surface in any specific behaviour pattern, except observable in the very state of inner movement.

What becomes apparent is that executing movement by way of a primary release and addressing shape flow factors, which can be defined as being conducive to fascia itself, seem to override any discomfort or pain that may be caused by bound flow. Even for the student who has had it longer, these sessions have been important. Experiences enabled thus are definable as those enabled by shape flow, given there are pleasant or unpleasant sensations. Thus it is not tension flow only that informs felt experience, but what I identify as that moment of release where movement is effected and carried forth in shape flow factors. Such a release must momentarily neutralise any tension flow attributes, taking one to the level of the baseline perpetual Growing and Shrinking in shape flow that is there at the primary levels of emergent movement. Then such movement reflects the very notion of where it is generated, namely in the release of pressure and its transmission. Regulation is seen to be a matter of forming and deforming in shape flow at the level of fascia. Perhaps the bodily manifestations of emotions as movement in unipolar and bipolar shape flow are just such a regulation. And the experiences that come with thus executing movement were seen above to be those

attributed to shape flow. And the pleasant aspect of these experiences echoed in the recorded feedback reflecting in turn the notion of free flow that release in pressure is related to.

What we also gather from the above is that bound flow and the experiences it brings can be understood as temporary and given in the event of extreme emotional states, or even when physiological processes are not regulated, which lead in turn to restricting movement. Yet, what informs experience in more profound ways, is that moment of release itself, that effects movement. This is also substantiated from the perspective of structure and function of fascia. The build-up, or mobilization to use Kestenberg's term, and release in pressure is not only structured by shape flow. This process effects shape flow and thus movement itself as I discussed. It is in this emergent movement in shape flow that felt experience is seen to reside at a primary internal level, as the insights from examining actually executed movement themselves reveal. That it is thus not just an indicator of expressivity, but also the source of these experiences, is instantiated in these findings.

Coming back to the insight that it is not in muscles, but fascia where this is happening, I also mentioned above that it is relevant for defining sensate experience. One observes when initiating movement at the end of exhalation as is practise in LMA/BF, how movement is not only effected, but execution comes with ease. In exhalation there is emptying, shrinking and thus release in pressure. Free flow is thus enabled. In terms of experience, I would define it as that of volume, an experience that Kestenberg also relates to shape flow. This is particularly evident in the thigh lift, which I mentioned in one of the feedback reports in the earlier chapter. When initiated from the femoral joint at the end of exhalation, it gives the experience of a hollow in the deep femoral flexion that is thus effected. While initially one would experience constraint and bound flow, which can be felt as tightness in outer muscles that jump into action, given the instantaneous activity of muscles as such, in due course of time and by learning to release during exhalation, it becomes a profound experience. We see here yet again, that it is the movement itself that enables the felt quality.

I have been using in my movement analytic approach, the quality of deep femoral flexion to enable dancers to not only take the deep-seated stance that is necessary in most of the Indian classical dance forms, but also move effectively in it. In particular, when doing the typical footwork while still maintaining the stance, it is a powerful tool to address the *deep* aspect that is experienced here, and literally *sit* into it, rather than addressing flexion in the knees as

is normally instructed. The latter and the gradated rotation at the femoral joint (cf. Fernandes, Ramesh, 2005) that go along with such movement, get supported by the deep femoral flexion, making movement fluid. This in turn, also necessitates, as the experimental methods using LMA/BF have revealed, a release at the femoral joint, coupled with a movement initiation at the feet to enable a free movement of the feet and thus legs. This is not a given in every instance. Even this requires attending to what lends itself in and through movement. It reveals how it takes time to get the release in areas one may have not accessed earlier, which in turn has to do with not having moved effectively. It is often seen in excessive bound flow at the femoral joints, coupled with having to maintain stability of the pelvis. And when the release is effected, it is also felt, the experiential feedback then positive. So experience as tensional dynamics and attributed to muscles, need not be a defining factor, if shape flow is applied.

Furthermore, based on observations in actual movement sessions, we have seen how movement facilitation and execution reveals to be most effective when addressing Shape Flow Support factors in unipolar/bipolar shape flow in conjunction with the anatomical landmarks and/or Patterns of Total Body Connectivity. I also laid out how in doing so one is primarily addressing fascia. As feedback similar to that I had discussed in the earlier chapter continues to reveal, an inner felt quality of movement is most pronounced when thus addressing movement, bringing forth various sensations, but in general experiences tending to the pleasant category. We can define this to be at the deep levels of primary movement. I believe that the very notion of release that brings forth movement is thus being addressed. This would account, for instance, for the pronounced sensate experiences of what I mentioned in the earlier chapter as space or volume at anatomical landmarks, given their movement initiating and/or integrating function. These were seen to be, as the discussion from the perspective of fascia further substantiated, specific fascia-loaded intersections or buffer-zones. And given changes in shape flow connect by way of reciprocal changes occurring simultaneously in various body parts, a sensate felt quality is experienced in the spatial dimensions in which unipolar/bipolar shape flow is happening, as, for instance, Lengthening through the neck and Widening at the chest. I also mentioned how sensations can be experienced in an integrated manner in most profound ways by just effecting the most minute movements in shape flow as in the eyes and pupils. Evident from the perspective of fascia were the deep connections in this regard, in fact at the particularly deep levels of the dura mater (Paoletti, 2011; Schultz and Feitis, 1996, Upledger, 2002) that would account for the fuller range of experience enabled by shape flow factors related to eye gestures.

In effect, if there is a felt sensation and a general sense of pleasantness and comfort in the execution of movement by addressing shape flow factors in conjunction with anatomical landmarks, such a felt experience at a fuller range must also be enabled by just the same means of release in pressure as fascia revert to their original shape when load moves on in unipolar/bipolar growing and shrinking in shape flow, the build-up and release in pressure repeating along the specific pathways that fascia chains have already built due to their very load transmission function. We have seen this to be inner to outer with internal movement then surfacing towards the extremities and other facial areas. Indicated therein I see in effect something primary about sensate experience, apart from the sensitivity given by the innervation of fascia itself. The point of release in pressure when movement gets effected must in itself be key to it. Free and bound flow alternate and as one continues to move, there is bound to be more free flow. It can then be a total body sensing, in an integral manner.

And yet, it is not pressure or lack of it, but a general sense of space or volume that is the more profound experience, as is evident from feedback, but also from experiences that movement initiation at the end of exhalation that I mentioned above enables. Kestenberg attributes volume, dimensions, mass or the differentiation between inner and outer to shape flow. We have also seen above how spatial dimensions can be experienced. And given the very notion of movement in shape flow to be the internal factor of movement, the inner vs. outer is also the experience it enables. And this within the body, as Hackney also, cited earlier, defines, rather than making something happen out there. Essentially, the sense of inner volume must be understood as being essentially provided by spatial dimensions as defining factors of unipolar/bipolar shape flow, enabled by the very architecture of the body based on the processes inner to outer as discussed earlier. The experience here is profound if the internal spatial dimensions in conjunction with the inner-outer aspect is addressed. And can be particularly felt, for instance, when addressing such movement along the just the spatial dimensions that lead towards the distal edges and applying the Core-Distal Connectivity Patterns.

After one particular session where I specifically explored the notion of inner-outer by addressing thereby a sensing of growing and shrinking both outwards and inwards simultaneously, participants, who attend sessions regularly but do not always give feedback, mentioned that it was a particularly good session, again reflecting the general feeling of

pleasantness most often expressed when working with inner aspects of movement. While such feedback is not specific, it nevertheless indicates that there is the kind of pleasant sensations that Kestenberg attributes to free flow and shape flow. I see both defined by the notion of release of pressure. At the same time, I do not see mass being experienced in shape flow at the most minute subtle levels of its emergence. In particular, if it means mass as weight for instance. It is rather a volume that is experienced.

Observations and feedback thus underscore what I mentioned above, that it is the experience of space or volume that is most profound and immediate when it occurs. In turn it instantiates the very notion that it is experience enabled at the inner primary emergent level of movement itself, specifically by growing and shrinking shape flow. Also, even if such experiences themselves can be labelled conscious when attending to movement, they must be understood as operative at levels below conscious experience, given volume, spatial dimensions or inner vs. outer are integral to such inner movement, even if they do not surface for us to reflect on them. But then, as noted in the previous chapter, if there is no felt experience, movement has not been effected at this level either. It is not as easily accessible as outer movement, as I had also discussed there. At the same time, it does surface as experience, when the internal process of change occurs. And if there is an experience of pleasantness, it seems to override any specificities in experience, as the often general feedback reflects. Often as I said, participants are surprised when a felt sensate experience surfaces. It comes as an unprecedented experience, the felt quality itself lending itself to attention by of the movement it is concurrent with. It is not the product of reflecting on it, but of executing such movement itself; specifically I would say the product of the very release of pressure, as one specific feedback exemplifies, that I present to conclude this discussion, given its relevance for this discussion.

I did not understand the relevance of it at that point as the conversation in this connection exposes, but realise now based on the insights on how release in pressure could effect both movement and experiential aspects. It was given verbally in the aftermath of a yoga session, as we all sat down together for a conversation over dinner. When the student started talking about her experience, I instantaneously captured it on video. It was quite an animated feedback. Here is what was discussed, the points the student is bringing forth translated from original in German.

She started with: „...and anyway, and funnily, I had through the compression as I then there went out of it again, I had all of a sudden incredibly lot of expanse here in the jaw. And had literally the feeling that it had space“. I am translating the word „Raum“ that she used in German as expanse rather than space, because this is what the experience was about, given her gestural articulation as well. And the word that I have translated as space is translation for „Platz“ in German. Someone in the group then asks at this point, „ and after letting go?“. And the answer is, „well, before that it was so compressed, and was not at all really so free again. And yet, I had the feeling, that there is an infinite expanse in here“. And even as I try to explain that on that day it was exactly what I told them, that they were supposed to create space here and not compress, she continues, shaking her head in disbelief saying, „it was unbelievable“, lost in her own thoughts about the experience. And that, well, she did already, before that, have the feeling that it was a bit so compressed, mumbling something further as she presses with her closed hands, almost like fists, on her jaws, pulls in simultaneously her head and raises her shoulders, as if squeezing into her neck. As I continue to try to explain that they were supposed to, in their throat and back of neck, she waves it away with the hand, turning away and laughing. And when I repeat it, says „well, I know. I did try it, but that it is not so easy..“ and laughs again. My further explaining that it is through her attention that she experienced it, goes unattended as she continues to dwell on her experience. And then trying to find words, she says, talking quite fast „after that I had, I had, ... the space, that it that it..let goes.. that it lets go on its own in here. That was, that was the crazy thing about it. Therefore, where I thought, I expected when one stretches it. That then the space is there. You know! Therefore I expected it to be exactly other way round. That through the compression there is more expanse. That made me wonder. Du you understand? Is it understandable what I say mean?“ When I reply that I understand very well, she turns away her head and says okay, and that she does not understand. Then I explain further what prompted me to ask them to open there and not compress. She says „aha, perhaps it was so, perhaps I got it. I don't know. In any case, I was totally confused, from where this space came suddenly. And that it was after the compression, I had not expected it to be so. Yes. Was pleasant“ and smiles.

In this conversation we begin to discern at the end, what the point was. Even though she knew she had to open up and not compress, she tried and it was difficult, she was primarily experiencing a compression in the jaw. Finally, that experience of expanse and volume just dawned on her, coming suddenly and unexpectedly, given the compression in there before. She did not know where it suddenly came from, in fact wondering from where there was this

sudden sense of vast space. The experience of space in the jaw was not due to her trying to open, in other words through a wilful trying. It is interesting what her thoughts in the aftermath were further constituted of. She had expected a letting go to come when one stretches. And not the other way round. Normally, what I notice during relaxation sessions is that when participants are asked to draw their chin towards their neck and lengthen softly at the back of the head, they crunch into the neck, by pressing into it. It becomes evident as a Shortening with Bound Flow, exactly how one sees the student's corporeal accompaniment to her verbal as she mumbles something about there being compression. At such times they are told to relax neck muscles at the same time. On that particular day, noticing this I spontaneously asked them to feel space between the ears as an added cue, feeling this is what would help them perhaps. Apparently the participant was not able to do so, as the reactions stated. And yet there was this sudden sensation.

Looking back at this conversation, I only now begin to understand the impact of this feedback from a couple of years ago. There must have been just that release in pressure that informed the experience of what we discern as volume or space. The release came unprecedented, on its own, taking the participant by surprise. It becomes evident that it was again an experience that was emergent essentially as movement enabled by release emerged as shape flow. The reaction again exemplifies how profound such an experience at the inner level can be.

Free, bound or neutral flow were seen to define tension flow attributes. And even if tension flow attributes are seen to “provide the dynamics and breathe life” (Amighi et al, 1999:176) into what structures them, namely growing and shrinking shape flow, and would thus define the build-up and release of pressure, it is finally the notion of pressure release that, as exemplified above, reveals itself, that is central for a felt quality of experience in a profound manner. From the feedback above, we again gather in specific terms, that such an experience can override any physical experiences that are on the unpleasant side. In terms of fascia, pressure release is given as a reverting to original form in the perpetual process of shaping. Finally given shape flow is essentially the baseline change, perpetually present in the very nature of fasciae, it must get addressed during release in pressure, informing the felt sensate experience as vastness in the sense of volume.

What stands forth, is that there is a profound sensate experience enabled by movement at its very level of emergence, residing at the moment of release as an innate opening informed by

shape flow itself that enables it. Essentially also, there was no wilful act here. And awareness came with the release. This is the nature of a sensate experience that is primarily a question of a baseline Growing and Shrinking in shape flow. It is a whole body sensation accountable in the very nature of how load gets transmitted just in this shape flow, inner to outer and along fascia chains. And given the feedback time and again, there is finally a pleasant experience on the whole. Also, on Kestenberg's account qualities of movement in shape flow are defined as portraying the self and the self in relation to others. They are also understood as providing the structure for the expression of self-feelings and relationships. But of interest here is the understanding of where self-feelings are generated. In other words, even if movement itself is generated in the interplay of tension flow and shape flow, and tension flow attributes are discussed as providing the dynamics underlying this, it is the movement that is enabled in shape flow that provides felt experience in profound ways.

Bringing this discussion to close, given Kestenberg's account, and placing it in the context of actual movement explorations and execution, one can identify two sources for the experiential sensing enabled by such movement, namely unipolar and bipolar shape flow and tension flow attributed to the baseline Growing and Shrinking. We have seen how free, bound or neutral flow define tension flow attributes. And these build the baseline for movement qualities defined in LMA/BF as Effort Elements, getting manifest as Weight, Time or Flow qualities as movement externalises, related often to actions of the body. As was discussed again above, they relate to what Sheets-Johnstone describes as dynamic qualities of movements. They were also seen to relate mostly to behaviour patterns described in NS. Even more specifically, I see instantiated in the findings laid out above, the primordial relevance of the shape flow aspect, or Shape Flow Support as Hackney coins it. It not only defines the baseline growing and shrinking inner to outer underlying all change, but also the movement emergent in the interplay of tension flow and shape flow enabled at the moment of release in pressure. It is this movement where profound aspects of sensate experience reside. While tension flow is also seen to be an aspect of growing and shrinking, it is structured nevertheless, as Kestenberg defines, by shape flow. Given this, tension flow variations must articulate themselves in shaping, getting subsumed in the larger notion of *Shaping* and thus influencing varied levels of experience. Underscored thus in the discussion is the notion of *Sensing* in the larger process of *Shaping*, given at the most basic innermost level at the very emergence of movement. The discussion from the perspective of LMA/BF and its different applications in developmental and neurological terms, clearly instantiates in specific movement terms the

notion of a primary innate *Sensing*, underscoring thereby how inherent integral spatial aspects, shapes, movement and felt qualities, as was discussed earlier, are happening first and foremost at micro-levels of the body.

Cohen's (2012) work also discusses the notion of Sensing when focussing on movement at cellular level, in fluids, in how fluids enter and leave cells through their membranes. In a personal correspondence during a workshop in 2006 in Bratislava, she pointed to such movement in the vocabulary of Indian dance forms. This was an interesting aspect to explore at that time, and was also one of the motivating factors to study LMA/BF in-depth. In this work the cellular consciousness is itself understood as the preconscious level of awareness, given the biological relevance of the cell for life, and that cells need to communicate with each other (Hartley, 1989/1995:8f). The notion of Sensing that we recognise here at the emergent level, reflects what Sheets-Johnstone (2009, 2011) defines as a primal sensing that is always there in the body, that was cited in Chapter 3 of Part I. And the analysis in the earlier chapters has exemplified in tangible terms how emotions and movement concur to enable the affective-kinetic/kinesthetic experiences postulated on this account. In particular, the statement cited there that emotions move through the body, simultaneously moving us to move (2011:456), has been instantiated from the insights provided by the theory and practise of Indian performing arts and placing these in the context of both emotions research and movement studies, all of which have enabled approaches from a specifically bodily basis. Thus, the material being analysed itself has provided the far-reaching insights. In other words, the conclusions have been drawn by looking at actual practise itself.

We saw how Damasio referred to the notion of sensing as a minimal feature with regard to how the amoeba reveals this. Moving in certain ways thus enables just this kind of sensing to surface, over and above the kind of sensate experiences changes enable. We have seen what movement underlies this. I would say, that the notion of felt sensate quality is open to more study, a gathering of experiences and feedback, coupled with the possibility current fascia research itself enables, that has been introduced here as a possible approach, as an ongoing process. Future study could include, for instance, observing fascia activity at times when felt experience is enabled, also coupled with brain research.

For now and of particular interest for this study, is the conclusion most essentially about how we can, firstly define the notion of movement itself, that enables embodied experiences and

what it means for the two levels of meaning that have been discussed in this study. The above discussion based on the various perspectives that in their core reveal corresponding insights, thus underscores in specific terms the salient points that were stated at the offset of this discussion. Namely, that there is, firstly, a process of change happening at very innate levels of the body. From all the discussions we gather that these are grounded in physiological processes, as Cohen's insights tell us at the cellular level, and as Kestenberg's insights tell us both at this level and in biological regions associated with biological and psychological needs, but essentially caused by emotional processes. And secondly, and most importantly, that such a change is happening, as clearly evident, in the setting of movement, to use Damasio's (2010:64) terms; primarily in the setting of minute levels of innermost movement. And as underscored above, this movement is characterised by shape flow, even if the change itself is a matter of tension flow attributed to emotions. Coming back to what was stated as conclusion in this context, we see underlined the very notion of emotive-kinetic processes, specified yet again from the perspective of movement, whereby we discern how movement is the change and regulation at the same time, just as emotion is change and regulation at the same time. Thus, the discussion from the movement analytic perspective discussed here, while substantiating the notion of what I defined as *primary movement, emergent inner to outer, in emotive kinetic processes*, where *Shaping and Sensing* continue to reveal the inherent characteristics, has also brought forth what I see as a two-fold level of experience that movement provides.

While changes occurring during emotions can be understood as the source for one kind of primary experience, given they effect the changes in tension flow in ways that become felt and thus feelings in dynamic qualities of movement, we can also discern the notion of a baseline state of growing and shrinking, a state of equilibrium, ongoing and over which changes are effected, which also provides sensate experiences. It is here that I see a differentiation, specifically the continuum, that became evident when placing the *bhāva to rasa* experience discussed in NS in the light of Damasio's research, in the sense of accessing emotional experience or feelings to arrive at primordial feelings.

4.3 The emotive-kinetic in the *bhāva-rasa* experience as meaning

Taking forward the discussion above regarding the function of tension flow and shape flow, let us see how the bodily manifestations of emotions discussed in Chapter 3 of Part II reflect these in my opinion.

In Damasio's (2003) explications, we had seen how emotions are always bodily and internal, even if triggered by external stimuli. Thus the term emotions takes a specific connotation when placed in this context; emotions are clearly differentiated as the very process that occurs in the body as changes. Feelings on the other hand, are what have evolved together with the bodily changes, thus enabling the very need-based value that emotions reflect. There is thus a sensing in an inner way that happens at levels below consciousness and enables speedy responses. In the context of performing arts, the felt quality provided by corporeally representing the bodily states of emotions through the use of corresponding gestures, bodily movements and verbal expression, is seen to enable the manifestation of the experience of the emotion as a felt quality. I see therein reflected Damasio's (2003, 2010) emotional experience, or emotional feeling, which is a perception of the body as being in a particular state, a bodily emotional state. Thus, feeling as felt quality enabled by the very bodily manifestations of emotions, is defined in both the perspectives to reflect the experience emotions provide. Based on the further enquiry into inner bodily states in previous section above, my observation from the analysis of bodily manifestations of emotions in the previous chapter become more pronounced.

Given the description of tension flow variations, as was discussed above, they characterize the bodily changes triggered in the process that is an emotion. And give the feeling state of an emotion, the experiences they provide, varying in intensities depending upon the emotions in their broad range as triggered both by internal processes as well as interactions with the external world. The thus informed variations in tension flow are seen to be bound, free or neutral, bringing forth according to Kestenberg, experiences of comfort/discomfort, pleasant/unpleasant, pain/pleasure and so forth. They, thus, influence in profound ways our feeling state, which range finally between joys and sorrows as Damasio (2003) explicates.

The analysis in the preceding chapter unveiled in what ways the gestural representations of consequents or physical manifestations of emotions, called the *anubhāvas* in the NS, would enable the felt quality leading to meaning. Though they have been defined themselves for each emotional state, they are also supplemented by specified and detailed descriptions of gestures of the face and body. This appears like there are some other gestures that need to be applied to bring them to expression, and not the consequents themselves. But, as a detailed examination illustrated, the gestures shed light on the detailed corporeal aspects of these

bodily manifestations, thus enabling us to arrive at a differentiated approach to movement underlying them and the felt quality they would enable. They revealed how there is a differentiation between what are movement qualities in actions and behaviour patterns, and the felt qualities in the subtle minute movements that are more internal and emergent particularly in facial gestures. The kind of movement inner to outer thereby, externalising in various ways to other aspects of movement, enable different ways of looking at the movement-based experiences emotions enable. The practise of not expressing the consequents themselves, but rather the movement they entail and getting more specific about it towards the experientially relevant states, as I had analysed, has seemingly a design. Taking the notion of a baseline growing and shrinking, shape flow factors characterise the inner subtle emergent movement, while tension flow are seen to characterise the externalisation of emergent movement.

Firstly, we saw that some of the several behaviour patterns evident did not reflect any specific movement detail or the kind of movement that might define them. They were defined more in terms of what one can define as body attitudes. And others that are actions, or essentially external movements, like striking or hitting, or those of the whole body such as running, jumping or rolling, reveal what are defined as movement qualities, and are generally movements people execute in ways that reflect they need no heightened attending to them, or an intensive engagement into inner movement. Thus the qualities they provide, such as weight, or temporal or tensional aspects are easier to experience. These behaviour patterns are described for the most part for the transient states. NS also recommends that these states need to be only depicted by gestures and actions, since it is the other states, relevant for the kind of meaningful experience defined, that should stand out. Here is already an indication that the felt quality they provide, or the experience they provide is not the same as the experience that has to get established as a dominant state and finally dominant *rasa*. Let us look at the action examples cited here.

In the earlier section I mentioned how movement qualities attributed to tension flow attributes reflect the kind of qualities the more external forms of actions or behaviour patterns would have, underscoring my assessment in the examination and analysis of the different kinds of bodily manifestations of emotions. In a jump, where one needs to stem off the ground, or to be more specific, yield and push for propulsion, one uses weight of the body. If this movement is to be executed in a hurry, as was evident in analysing the gesture for a jump, it

gets a temporal quality. Weight and Time Elements of Effort category thus define such movement. Effort qualities are in normal circumstances executed out of inner impulses and intention of, for instance, an action, and are not necessarily conscious to be operative. In the case of the gesture for the jump it was clearly informed by the reason for a jump, namely the hurry and need to do so before being noticed, as the context of the narrative, or the final intended meaning indicated. Such a jump thus would need an Active Strong Weight, as opposed to a Passive Weight which would not get one off the feet. Propulsion also needs a quick movement. Interestingly such variations do not need guided cues. Intention suffices.

Effort Elements were seen to be operative in the expression for different emotions as well. They result in Kestenberg's understanding from tension flow attributes, mediated by pre-efforts, as was noted in the discussion above. We can thus further analyse how tension flow alterations inform the Effort Elements, in terms of whether bound, free or neutral flow would be operative. A Bound Flow Effort, for instance, was evident in the expression of even wonder, which is not an unpleasant emotion. It had to do with the high intensity that emerged in the expression. I had observed there that, in the absence of using other parts of the body in spite of an intense expression of wonder, or that a gaze cannot become an overt movement as such, Bound Flow is seen to constrain it to the emergent facial expression. This was clearly a non-conscious act. In the gaze for instance, where there was Sustained Time Effort observable, I would attribute that to Bound Flow as well. Bound flow attribute became part of the shape flow factors of expression as it crystallised, in just the kind of automatic process of bodily changes that are defined by Damasio as accompanying emotional states. The very need to move reveals that free flow as mobilization and release of pressure is required for the movement to be effected, even if bound flow might restrain the result.

High or low intensities are what Kestenberg discusses for tension flow attributes as alterations therein and the behaviour they influence, whether reflecting constraint and control, excessive activity or complete lack of it. A jump, or an overt facial expression would have high-intensity tension flow, whereas other states such as tired or depressed, or even listlessness mentioned by Kestenberg, that also find mention in the NS as transient emotional states, would be a case of neutral flow. Similarly, an overt action like striking would be in high-intensity free flow. If restraining the action, bound flow manifests, where a fist or other forms of restraint, often seen in the facial expression would be revealed.

In terms of movement-based bodily experiences, actions or behaviour patterns, which as overt movement and behaviour patterns reveal tension flow variations, reflect, as was also analysed earlier in several instances, a qualitative experience such as tensional, projectional or temporal, which Sheets-Johnstone (2011) discusses as dynamic qualities of movement. These tell us primarily about the qualities of externalised or overt manifestations of emotions, like actions, elaborate gestures and so forth. This is underscored in Kestenberg's account, namely that it is a coping with the environment, particularly in terms of the forces of weight, time and space, that define how tension flow attributes become Effort Elements. As a note at this point, most of the time Effort Elements come in combinations, which Laban (1975) defined as States when coming in two, and Drives, when coming in three. These constitute a major part of analysing movement. They, in turn, also reveal how from inner changes, states, motivations and drives arise, a notion that Damasio explicates.

Yet the analysis presented in this study, based on what the insights from the theory and practise of Indian performing arts reveal, was an identification in less packaged terms and in more specific differentiated terms, taking the discussion thus to the very nature of primary movement at its core. As teaching exposes, the actions and behaviour patterns discussed above get executed without much ado. They come easily, the movement qualities they reveal easily lending themselves to attention. In particular weight or temporal aspects are executed with ease, their experience also thus given easily. Even in the case of the more emergent kind of movement as in the facial gestures, the externalisation or overtness of these is something that comes with ease, as a projected behaviour almost. Finally, I have, however, also observed that these manifestations are temporary manifestations, i.e. changes lasting for the period in which movement or emotion lasts. NS is right in placing them under transient emotional states. This in turn tells us, that the nature of the experiences they enable are also transient, momentary, as opposed to the experiences bodily manifestations related to dominant states and *rasas*.

Also, the kind of emotive expression defined in the NS towards these experiential states requires other means of accessing it, as experimental methodologies of teaching and facilitating such expression discussed in Chapter 3 preceding revealed. This evident in the detailed descriptions of the gestures of the major and minor limbs, that are recommended for kind of consequents I had differentiated from the behaviour patterns. They were seen to be defined in more detailed movement terms. In fact, the systematic examination of the gestures,

revealed how these are in movement terms, very refined and fine-tuned. The ones that could be identified as such, also for the gestures of the major limbs, were seen to be attributed to the emotional states that were either the dominant ones, or *rasas*, the states that are experientially relevant, namely where their manifestation leads to meaning as experience. Or for states that can be defined as background emotions, that given Damasio's definition, stem from the inner regulatory processes, their bodily manifestations thus informed by these processes. The kind of movement described was seen as indication for what matters for felt quality, given they revealed an internal rather than overt movement. Here as well, it was observed that gestures of the eyelids, lips and chin gestures, which reveal more overt movement and can easily be overtly produced, were seldom attributed to the experientially relevant emotional states. In today's notion of aesthetics, as transmitted by the masters in this field, they are not to be used extensively. Kalanidhi Narayanan, cited in the earlier chapter, for instance, was against any usage of the oral gestures. Finally, it was seen how glances are separately described for all states. And these revealed the most refined movement descriptions. Subtle, as one can define them, requiring as was further discussed, the ability to access these only through a felt quality.

The analysis of the descriptions of these gestures, substantiated by an analysis of what students need to bring forth for emotive expression in movement terms, revealed how these gestures, associated with experientially relevant emotional states, are for the most part, revealed at their emergent most subtle levels, inner to outer, just at that baseline change in shape flow that underlies all other change, which is discussed by Hackney, Kestenberg and Cohen, all of who have developed upon the insights provided by Irmgard Bartenieff on the neurological and/or development level of movement. The baseline shape flow underlying all other movement principles that became evident, such as Effort Elements, or the Patterns of Total Body Connectivity, was evident in how simultaneous reciprocal changes in uni- and bipolar shape flow were observed in body parts along these Patterns. Here we see how these gestures, even if defined in the context of performing arts, are nevertheless, a corporeal representation of the inner bodily changes occurring in emotions, reflecting the more primary kind of internal movement.

In other words, as opposed to the transient states, or actions, which reveal movement dynamics defined in terms of Effort Elements, and are attributable to tension flow factors of growing and shrinking, it is the more subtle aspects of the gestures, as of the eyes, that are, so to say, closer to the inner shape flow happening as innermost change, and matter for the kind

of envisaged experience as meaning. Shape flow is where sensations of pleasantness, or even joy, emerge, not only as Kestenberg describes, but also as was registered in the feedback. Also, executing movement where it is enabled, at the point of release of pressure and where it is carried forth in shape flow, the sensate experience was seen to be profound, and immediate as movement emerged. The deep felt quality experienced, or even necessary as felt quality to execute the finer kind of movement in the gestures, takes one to an experience that stems from inner movement, given in the baseline growing and shrinking shape flow essentially. It is not about movement happening out there, as Hackney cited earlier also observes.

I thus see a differentiation of how a baseline growing and shrinking operates in what I call a very refined differentiation of that which needs to be used for corporeal expression to enable the felt quality to manifest itself as experience that is meaningful; specifically, in terms of the experientially relevant states, the dominant states which correspond to what Damasio calls primary emotions, and the *rasas*, which correspond to the feelings themselves. This differentiation in experience must thus account for why expressing emotional states, as understood in NS, must lead to the kind of two-fold feelings as experiences given in the *bhāva-rasa* experience as a continuum, and when placed in the context of Damasio's explications. On the one hand, tension flow attributes bring forth the experience of an emotional state as in a transient state. But as the consequents of these emerge and become the determinants for the higher states, as was analysed in Chapter 1 of Part II, they give rise to even more subtle experiences. And the closer the expression gets to the finer quality of movement in shape flow, the more profound this experience. The very accessing of a baseline growing and shrinking in shape flow, or the notion of a baseline Shape Flow Support, necessitated by way of refined movement and the kind of sensate experience it provides, must account for gestures in such movement gaining relevance in the higher experientially relevant states, the dominant states and finally *rasas*, as underscored in the examples cited. This is also indicated in the notion of shape flow structuring tension flow, as Kestenberg explains. In doing so, it must also regulate the experience it provides. And given all this happens at the level of the innermost structures, namely the fascia, the very function of build up and release of pressure through shapes, and transmitting it thus along the connective chains to distant parts of the body, must enable the experience of *rasa* to pervade the body.

Also, in the ability of fasciae to revert to their form again, there is implicit, the notion of neutral flow. This must not be just inertia or lack of vitality, but also a neutral state as such, as

when needs are fulfilled and the oscillation between bound and free would not necessarily be pronounced. It reflects the state of equilibrium that Damasio discusses where primordial feelings arise, that build the substrate of all feelings including emotional feelings. I had suggested that the notion of pure experience that Damasio postulates, reflects the state of *rasa* as defined in the NS, as of experience pervading the body. Coming back to what Hartley (1989/1995:10) explains, in discussing Cohen's work, when "every cell simultaneously knows and feels itself and every other cell", there can be a feeling of stillness beyond this minute activity. While this would refer to the kind of state that is aimed at in meditation, there is indication in this cellular communication of the notion of pure experience, which could be enabled by addressing the movement itself that is at the cellular level, than mindfully putting oneself into a meditative state, where thoughts are still involved. In general Cohen's work looks into the very notion of Sensing at the level of cellular, fluid or organic movement, as was stated above. These aspects are taught at the IMS Certification programme of LMA/BF. And as this study illustrates, these are the very notion of aesthetics practised in Indian performing arts.

Taking up the notion of meaning as explicated in the NS and practised in Indian performing arts in general, and as analysed here from the perspective of dance theatre, one discerns a profound distinction in understanding how to access two levels of feelings by way of movement itself, and thus specifically where they are generated in the first place. Then this is what enables the two-fold experience from *bhāva* to *rasa*. While emotional experience can be anything between pain and pleasure, joys and sorrows, grounded in the very notion of tension flow attributed as Kestenbergh defines these, we also discern how this experience given in shape flow movement enables accessing states that are primordial in a deeper sense, also attributed to the very functioning of the body, as states in equilibrium that as mentioned are traceable to the notion of neutral flow.

Thus in the very nature of the emotions, which in turn have to do as we know from Damasio, with the need-based value an object, internal or external, gains, lies in how far they can be experienced in varied intensities, and how far emotions externalise into the outer. This understanding goes into the conceptual process underlying corporeal expression in the performative context. Let me go back to how Damasio defines the notion of value as attached to items that are indispensable and difficult to obtain, that is attributed to emotions. And take the discussion from this primordial perspective back to the primordial aspect of movement.

It is essentially, a biological value, of imperative needs that arise in the struggle to maintain life (2010:46ff), that relates directly or indirectly to survival (2010:48). In this sense, it has a quality. At the most basic level, as a primitive of value, is the very “physiological state of living tissue within a survivable, homeostatic range” (2010:49). This is associated with the need for constant representations of chemical parameters in the brain, thus, enabling brain devices to monitor and take corrective actions to cater to the internal homeostatic needs of the body non-consciously. A “sensing” of the organism’s interior and exterior, developing measures to respond and move when changes occur, i.e. a “response policy” and “movement”, were, in effect, as Damasio defines, minimal features that even the simple single-cell organisms required to survive (2010:50). Thus, brains evolved as a device to improve these in an increasingly effective and differentiated manner, with movement itself being refined, changing bodies in turn, as evident in the human beings’ striated muscles. This account, that I stated in Chapter 2 reveals itself to be the most relevant aspect for understanding what the analysis of emotive expression and the subsequent discussion about emotive-kinetic processes and the felt qualities entailed therein reflects.

Finally, the introceptive sensing expanded, as Damasio further states, to detect several more parameters and the sensing of the exterior, i.e. exteroception to include the sensory modalities and vibrations. In order that sensing and movement are effective, the response policy had to have a plan of operation with guidelines to achieve goals, specifically homeostatic goals, a “homeostatic design” that creatures of all levels have, and “incentive”, because conditions of the living tissue could at times require urgent corrections or opportunities for betterment so advantageous that responses had to be rapid. Damasio sees herein the reward and punishment mechanisms. Brain structures developed further, thus, evolving more complex programmes becoming drives, motivations and emotions that enabled exploring environments, “complete with endless curiosity” (2010:55).

In terms of meaning, emotions thus reflect a need-based value of the most primordial kind. Thus it is emotional states, reflected in the term *bhāva* enabled by the felt quality or feeling that is inherent to them, that instil meaning to any dramatic content, as NS expounds on. Any object, event, situation or action, becomes meaningful in this primordial sense, when each of these are depicted based on the emotional connotation they carry. Finally, given the primordial relevance these have in terms of emotions, thus accessing or experiencing of

emotional states must lead finally to the notion of relish or happiness, due to the very primordial meaningful relevance emotions have as experience. In other words, one may say, such a representation takes one to the primordial level of meaning, that resides not only mentally, or better said, physio-mentally, but at the non-conscious levels of existence itself.

Given they are essentially bodily processes that give rise to the experience that Damasio calls feelings at a mental level, and thus enable acting in the world accordingly, it is through corporeal means that such a primordial meaning can be accessed. Meaning here is the very value that both internal processes as well as external objects have gained in the process. And yet, interestingly, while external objects constitute what triggers emotional states as defined in the NS, the subsequent experience takes one to the internal state where these emotions are grounded. Therein lies the implication of the *bhāva-rasa* experience of meaning enabled thus. And this lies in the understanding that one leads to another and also why this may be an even more profound implication. I briefly mentioned the two-fold notion of feelings that Damasio. That it is happiness, and not necessarily the negative implications emotions can have if being actually manifest, is something that the performing arts perspective specifically points out to and instantiates.

Even if *rasa* is described finally in physical terms, has physical manifestations and labels similar to the primary emotions it arises from, its understanding as an experience is not of the emotional state. The feedback from the student that was presented in the preceding chapter illustrated how corporeally manifesting anger gave her a myriad of experiences, that had nothing to do with a direct experience of the emotion anger, but rather the kind of power and strength that gets mobilised when anger manifests corporeally. Finally, as the student writes, bringing forth *abhinaya*, though difficult and she is exhausted at the end of such sessions, makes her feel happy. *Abhinaya* is as was mentioned in the earlier chapter, the terms used in NS for the modes of expression, and in dance theatre particularly practised as corporeal modes. Then it must enable the kind of composite experience that Damasio explains. This is the general understanding of *rasa* in practice as well. As was seen in Chapter 1 of this part, Bharata describes in the NS in various ways, how one can understand such an experience, from relating it to the experience of well cooked food with many good ingredients to the experience as pervading the body, like fire pervades wood. I find just in this definition of pervading the body as experience, the essence of the experience that *rasa* denotes. Often

horripilation and tears appear as experiences, emotional states bring forth, have been mentioned in the consequents listed. Horripilation would be one way of defining *rasa*.

There is another notion from brain research, that may account for not actually experiencing an emotional state in its more towards sorrow or pain tending aspects, namely the as-if-loop that Damasio explains. If the bodily state is not the actual emotion, but such a state is stimulated, it must enable maps that are related to states of joy, that are generated by both actually having these bodily states or not. Sorrow however is apparently for the most part generated in an actual bodily state that gives rise to it. In the Indian worldview I had mentioned citing the vedic scholar Satyanarayana in Chapter 2 of Part II, this is understood more explicitly in the happiness that the experience of emotional states in the context of performance enables, as opposed to the sorrow that actually experiencing emotions can bring. This also calls for more study for sure, where insights as presented here from a cross-disciplinary perspective need to be taken forward.

What we essentially gain for now, as insight from the analysis and discussions presented hitherto, is that when movement is executed, conducive of its very primary emergent nature in shape flow, and this is best enabled in emergent emotive expression, it brings experiences that are profound, the pleasantness lying in the very nature of movement executed. That it is a pleasant experience, is in this sense, not primarily given in the simulation of expression of emotions, as NS indicates, or as further defined based on Damasio's understanding, because it is not the actual experience of emotions. It is first and foremost, because there is an innate profound experience enabled by the very emergent primary movement that as was discussed above with examples, brings pleasant sensations.

But in bodily terms, we can relate this to more fundamental processes. As was seen, the primordial feelings, that I see indicated in the notion of *rasas*, are defined by Damasio as the by-product of the living body, from the internal milieu, viscera and so forth being mapped in the brain. Of the "neural description of relatively stable aspect of the organism" (2010:181). The state that builds the substrate underlying all other feelings. The ongoing state of the body, where there is no perturbation, and over which all changes occur, but without changing it. This is then the state where, one may thus specify, the changes due to emotions are not there. There is no emotion colouring it so to say. This may be relative, given as Damasio notes, there is always a value, internal or external, which causes changes. Yet there is a stable

ongoing state below all this, where the physiological processes are functioning. Primordial feelings thus reflect the feeling that is the result, of the microworlds of form and function in the body that Damasio describes, being mapped in the brain.

In bodily movement terms, as the study here exposes, this means that it is the kind of primary movement at these micro-levels, or neural-cellular level that Damasio defines Qualia II to reside in, with a neural design in enabling pure experience. We have seen how this is best evidenced from current fascia research; given the innervation of fasciae, there must be such a pure experience residing there and thus pervading the body. And given such movement is in shape flow, the accessing emotional experience as through emotive experience in the context of performance, is enabled by accessing such movement, as seen the refined gestures recommended for the higher experiential levels. And this without however having to have the actual emotional state with all its tension flow attributes, that could also lead to pain or states that tends towards sorrow. This is the state of perpetual experience, underlying all other colourings of sensate experience that emotions in their broad range cause as changes. The root of all feelings in Damasio's terms, but also the root of all *bhāvas*.

Then, placed in the context of fascia, changes, when occurring, are changes in the intensity in shape change, leading to constrictions, dilations, bulging and so forth, all of which are the amplitudes of the incessant shape flow. And given the load-bearing and transmitting function of fascia, these get carried to the farthest regions. They can become overt if they emerge forth as Effort Elements or Shape Qualities. But when remaining more internal, they become evident at subtle levels, and connect internally, as best enabled by the gaze. It was seen to reflect not only subtle changes, but profound ones as well, encompassing other body parts along which the changes occurred, as was evidenced from analysis of actually executed emotive expression, and becoming sensate experience at deeper levels. I had substantiated this by tracing the kind of innermost connections evident thereby to deeper connections at the level of fascia, right through the occipital region, down the neck to chest or tailbone. The fascia structures also indicated, importantly, that the dura mater itself, as a particularly sensate membrane at innermost level, must be involved, the felt sensate experiences during the execution of gaze underscoring this. I would define just this experience as horripilation.

There is, thus, a bodily felt quality enabled by movement, that is there first and foremost at the deepest micro-levels of the body, and emerges forth as expression inner to outer, as and

how an emotion manifests itself, but in the case of the performer, as movement is addressed in the first place. It is this then that translates to mental experience, as Damasio postulates, but also NS specifies. It is an emotional experience not in the sense of some psychological state, but as a felt sensate state, enabled by the bodily state of emotion manifesting itself as emotional experience. From this emerges *rasa* as pervading the body, or the notion of pure experience that Damasio formulates. This is, essentially a felt experience that is profound in terms of volume and dimensions, enabled by the very nature of shape flow underlying such inner movement, carried along these fascia connections, or neuromuscular connectivity patterns with integral anatomical landmarks discussed in the Body Category of LMA/BF. When such movement finally does get effected, the experience is always positive. Apart from the smiles, nods with head or „ahs“ observed, there is a pleasant feeling even in the aftermath, as feedbacks reflect. Such experience seems to override any other experience enabled in terms of tightness, compression, difficulty, or even pain that is often momentary and in the moment of attempting to execute movement. Also, it was seen that it emerges forth unprecedented to the mover, when there is an opening. This continues to be so, as these factors continue to be addressed, or explored when applying the insights in ongoing sessions.

Emotional experience is thus enabled through the qualities of movement that it entails, whether in tension flow or shape flow, as the movement analytic approach unveils. But the profound experiences shape flow provides seem to override, when such movement is executed in accordance, in emotive expression at its emergent level inner to outer. While executing movement thus inner to outer has in general profound experiences, in the context of performance, presenting these movements through corporeal expression of emotions, must enable it in natural ways. This in turn simulating the very movement that one knows as inner ongoing experience, often latent, surfacing in the corporeal representation as experience, and connecting one with the innermost level of existence. There in lies, in my opinion, the special relevance given to meaning as experience coming from emotive experience, namely as enabled by the very movement it entails.

Finally, given the neuroimaging studies cited from discussions by Johnson (2007) and Gibbs (2005a/b), perceiving these movements must simulate the movement experience and thus mental experience of the spectator as well in similar vein. But for the performer as was discussed in the previous chapter, there is need to invest in the qualities of these movements, or to hone in to the internal aspect of movement. Finally the *bhāvas-rasa* continuum is a loop,

with one informing the other, with the root leading to tree and seed, and the seed back to root, as Bharata makes attempts to explain the experience. However, without experiencing it in the bodily dimensions discussed here and through movement, it will remain an abstract mental notion. Such a loop is also the notion of emotions and feelings that Damasio expounds on. In this body of research one finds the body-brain grounding of these notions, that are thus beyond any cultural or aesthetic notions that specific traditions or arts as such may be labelled as.

Putting it together, the analyses in this study substantially laid out that accessing experience through emotive expression specifically in terms of *primary movement*, *emergent inner to outer* in emotive-kinetic processes, would be meaningful in a primordial way. This is the meaning as experience, the emotive meaning, as explained in the NS. And it is the function of bringing forth emotive experience by placing it in the context of both emotions in their understanding as both bodily states and feelings, as well as specific movement terms. In doing so, emotional experience or feelings thus takes us to primordial feelings, where according to Damasio all feelings arise, to the substrate or primordial level of all experience. In terms of NS, it takes one to the level where all *bhāvas* are rooted. This has implications for gaining insight into what the purpose of corporeal forms of representation and expression are, as seen in performing arts. Meaningful experience gives meaning to life. This is the message in NS, stated in the very first chapter. *Nāṭya*, as performing arts is called there, entails all arts, science, knowledge and craft (Chapter 1:116). It offers solace to the sorrowful, educates and enlightens the poor intellect, offers entertainment to the affluent, empowers the weak, gives incentives how to lead life, and so forth. The incentive part sounds familiar to how Damasio sees the development of the brain and emotions and I discussed in Chapter 2. It leads to more sophisticated life management.

Bringing this section to a close, Damasio's insights enable giving *rasa* a primordial, functional understanding. And the practical tradition of performing arts provides the insight into defining what this primordial level of feeling may be as experience, and what such experience means to whoever is experiencing it. Then, *rasa* when emergent is experienced by the performer and spectator. Finally, given the movement analytic approach, and the possibility to identify such movement, it enables meaningful experience apparently when moving in accordance to the inner design of the body, where the feelings are generated in the first place. The loop finally becoming *rasa to bhāva to rasa*. And this is the complete

understanding of meaning as experience enabled at the most primordial levels, below levels of consciousness, consciousness itself a product of these levels, as Damasio's (2010) also explicates. Finally, thus placed in the context of a *bhāva-rasa* continuum that is discussed in the performing arts context, and the empirical material it provides for a tangible analysis in movement terms, we begin to understand the notion of meaning as experience in even more profound ways. At the same time the insights laid out tell us where embodied experiences underlying meaning should be sought for. And this not only in movement terms, but also in terms of emotions, as was aimed at unveiling when taking forward the insights from Part I to Part II of this study.

The discussion on meaning grounded at the basic level as discussed in this part, that is not only a matter of emotions and feelings, but their embeddedness in the bodily, at the level primary movement itself in its structural and felt qualities emerges, can be traced up to the meaning discussed in Part I. I had laid out in Part I of the study in conjunction with gestural meaning, the embodied grounding of such meaning from a cognitive take, based on the image schematic structures they reveal. The meaning that has been discussed above, points to that immanent or embodied meaning that Johnson (2007) defines and discusses at length. The level of meaning that is pre-conceptual, pre-linguistic, below the levels of consciousness, and providing the basis for all other forms of meaning, reasoning and thought. The discussion in this part of the study, however, unveils where understanding the primordial basis of such meaning needs to be sought, bottom-up. With this, I will go back to the discussion in Part I, to see what the findings here may tell us about meaning discussed there.

4.4 The emotive-kinetic in the structural aspects of meaning

Firstly, the above discussion exposes just that factor discussed by Johnson (2007) in the notion of embodied, immanent meaning that was discussed in Chapter 2 of Part I of this study, namely the role of emotions and the felt quality they enable at levels below consciousness. It was also referred to by Gibbs (2005a) while discussing the role of emotions and consciousness for an embodied notion of cognition from a Cognitive Science perspective. In Damasio's discussions, that I laid out in Chapter 2 of this part of the study, it was cited how felt quality is tied to emotions, because there was a primordial need in emotions. Essentially, the notion of emotions and feelings as having a reason to be tied to each other that is primordial and fundamental, is enabled, as Damasio's explications particularly reveal, is,

because given a primordial function in survival factors, the brain has evolved to map bodily changes, whether enabled by inner regulatory processes, or due to sensory inputs from objects from the external world. Their occurring in the setting of movement is also indicated by Damasio in the notion of mapping. If there are always feelings stemming from inner processes and they accompany all other feelings, this lies in the movement in which it occurs. Emotions and feelings come together in movement. The emotive-kinetic processes implied herein, is what was laid out explicitly in the discussion in this part of the study, giving us an insight into the very innate nature of primary movement, emergent inner to outer in emotive-kinetic processes.

At the same time it was seen that such movement, as baseline change in shape in growing and shrinking is given at the very inherent level, by means of which all physiological processes function, precisely the processes that Damasio also sees as basic for all emotions and feelings, determining our state of being, as Damasio calls it. The experience such movement enables was seen to be the baseline for all other movement qualities that movement may have. Let me come back at the structural aspects such movement revealed, that will also be relevant for the discussion in this section. Firstly, spatial aspects and shapes are integral to the kind of baseline shape flow identified. Defined by lengthening/shortening, widening/narrowing and bulging/hollowing, given the three-dimensionality of the human body. And depending on where it is taking place, it is restricted or enabled, pronounced and along longer stretches, as in the Head-Tail Connectivity. Or confined to the chest as was seen in its gestures. Secondly, a felt quality is concurrent with these very structural aspects of change that define movement thus. It is felt there where it occurs. One may say, it thus functions as a marker. *Sensing* is thus integral to the very aspect that stands forth as an essential integral part of such movement, namely *Shaping*. All these factors are finally evidenced in the innate functioning of the body at the micro-levels of fascia.

The structural aspect of change in terms of spatial aspects and shapes, also giving rise to polygonal configurations seen in crystalline forms of solid matter, that Laban (1966) recognised by observing movement and mathematical computations, are seen here to be the innermost structure of our connective tissue at micro-levels. At the same time, it is also where, due to innervation, all perceptual experience of the body is rooted. In the understanding of fascia as also the level where communication in the body takes place, it has been observed by researchers such as Schleip (2012) and Paoletti (2011) how fascial

structures are responsible for the signalling to the brain. And current knowledge tells us that innervation is maximum at these minute levels that constitute the structure of the body along its length, breadth and width. Form and function is the very nature of such fascia that spans the body, and gives it its movement. And such movement is in the internal milieu, in the viscera, encapsulating the organs, muscles and so forth; the very nature of the connective tissue, that spans these and thus, essentially all-pervading and all-encompassing. The “microworlds of *form and function*” that Damasio (2010:263, emphasis added) defined while discussing Qualia II is indicated therein. Given the discussion in this context about the two-fold notion of feelings, maps of the body, the interoceptive ones that Damasio discusses, that are the primordial feelings, originate there. In this micro-world shape, spatial aspects and movement, emotions and felt quality, to mention the least, but what is necessary for this study, come together as one entity.

If transmitted through the neurons, which are described by Damasio as being themselves organically similar to cells, they must have the same movement of ongoing shape flow, essentially, the polygonal structures of space. These are shapes in constant movement, given, as discussed, the forming and deforming nature of fasciae as they transmit load, carried by way of the fascia chains that span body and brain, as was exemplified by the description of the essential dura mater, for instance, to the brain as well. Both as the structures they are, as well as felt quality, each informing the other, enabled by the very nature of the biological reality at this level. Finally, such structures must themselves inform the structuring at the neural level, that was discussed by Damasio and referred to as the basis for image schematic structures by Lakoff and Johnson (1999) and Johnson (2007). And as Damasio further specifies, accompanied by feelings. In other words, structural and felt aspects enabled by the very processes that emotions characterise, have been laid out in this study in tangible movement terms. And having arrived at the level where Part I of the study concluded, where structural aspects of meaning were identified, and felt aspects implied, the structural notion of meaning discussed there can be examined bottom-up as the embodied meaning-making process that gestural meaning revealed. To trace the discussion back, a brief excursion into Damasio’s exquisite explication on all that the brain maps, will be useful. In particular, gestural meaning that was seen to reveal all the cognitive conceptual processes of meaning making. How do the structural and thus felt integrate and can be defined?

In Chapter 2 of this part, I laid out Damasio's description of the brain constructs maps incessantly, observing that this would be useful to look into, given the larger scope of this study. Damasio explicates how the brain maps everything external from the world as exteroceptive maps, and everything internal, i.e. from the body, by way of interoceptive maps of the internal milieu state to functional condition of body tissue, and by way of proprioceptive maps that range from musculoskeletal system and viscera, to body structure in terms of limbs and their movements and injuries on the skin. In general of every "micro-nook" of the body (2010:263). We have seen how feelings are understood as a by-product of the interoceptive mapping.

The external maps are constructed when interacting with objects of any kind "from the outside of the brain towards its interior" whereby there is an action to begin with (2010:64). . This applies to every kind of sensory pattern that begins at the sensory organs themselves and relayed to the brain, of every object and action outside and all the relationships between these in time and space, in effect, of every object in the world, places, weather conditions, textures, sounds, tastes. Thus aspects of the structure of things and events, of actions external and carried out by the body's various parts, with such a mapping defined by Damasio (2010) as a mimic of the irrepressible variety of everything.

Furthermore, in the detailed description of the structures of the cerebral cortex it becomes evident how the maps enabled there reflect topographic, geometric and other spatial relations, enabled by the horizontal grid like structures, whose main elements are the neurons. Maps reveal themselves as momentary activity. This is where lines such as straight and curvilinear appear when neurons are on in certain spatial distribution, and stand out against the ones not active. Similarly the vertical columns in conjunction with other layers have other input and output functions. Also how structural aspects seen to be in spatial terms and considered as enabled by visual perception are accounted for in Damasio's reference to how specific patterns such as a cross or circle, that get mapped on to the retina of the eye are preserved as they get signalled forward to the visual cortices.

Thus we see here, an account of how the body-brain relation, that was about enabling survival and governing behaviour in all life threatening situations, holds forth in the refined body-mapping of both the interior and exterior. And with the inner opening the way to also know the outer as Damasio thus notes. Then, the connection to the others occurs not just through

“visual images, language, and logical inference but also via something deeper in our flesh” (2010:106). Damasio does mention how this is a four-way translation among actual movement, somatosensory representations of movement, visual representation of movement and memory. As was stated there, an example for this assessment is an experience of his walking like another person that brought forth a visual image and thoughts of the person. Damasio continues by discussing how this must enable simulating the body states of others.

There are several relevant points that stand out in Damasio’s account. Firstly, that there is rapidly changing mapping going on in the brain or everything internal and external of the body. This cartographic ability began, as Damasio (2010:64) further notes, with the brain mapping the body, the internal milieu so to say in the first place. Secondly, this is where feelings are defined as originating, and continue to accompany every mapping. They accompany everything that comes via the sensory organs from the external world as well, given they are part of the body. Thus mapping also includes the very structures that support the sensory organs, namely their surrounding tissue, muscles and skin for instance. Damasio sees in this the feeling a sensory perception holds. Finally, what this account tells us, is that everything that comes as an image to the mind, which is what Damasio calls a map that becomes an experience, is mediated by the body and its structures, namely its physiological realm. And given this, a felt quality is integral to every image. In this sense, every felt quality must acquire a label of comfort or discomfort, pain or pleasure, just by way of how the signalling must take place, which is then associated to the object being mapped.

And here Damasio’s reference to movement, that was also cited in Chapter 2 is most relevant, in particular, in the wake of the discussion on movement, innate at the micro-levels of the body as mentioned above. Such maps are not passive representations, but involving active contribution of what is available in the brain from early development, the assembly happening “in the *setting of movement*” (2010:92, emphasis added). While Damasio does not go into what this is, one may assume based on the discussion with regard to Qualia II, that it must mean the setting at the level of the micro-levels of form and function. The analysis of movement in conjunction with fascia research presented in the previous chapter illuminated the movement at just such a micro-level. Given the analysis of movement and movement-based experiences presented in this study, there is reason to believe that an assembly must take place in a setting of movement in its basic structural shape flow. The structuring inherent to such movement must then inform the structures that these maps are, given the very aspect

of structuring is evident in all the cited examples of mapping above. And the felt sense aspects of such movement must inform the feeling quality of every perceptual experience. The cartographic function, originating primarily from the inner cited above suggests this.

This notion of structuring is evident in the other maps the brain constructs of the more abstract kind that I cited in Chapter 2 as well, such as additional aspects of spatial relationships, the descriptions of which reveal the kind of spatial image schematic structures discussed earlier such as trajectories, paths, relationship of objects, positions, etc. In Chapter 2 of Part 1, I referred to one of the examples Johnson cited while discussing the neural grounding of image schemas and the correlation of the neural patterns to structures from the external world, namely, how a straight line in a frog's visual field causes a pattern of activation as a sequential firing in a straight line in the retinal map of the frog's brain (2007:127). And this was enabled by a point of light being moved. In other words, the visual representation of a line was enabled by movement. The line being a product of movement in the external world. Taking the bottom-line of it, as Damasio's account reveals, we arrive at an understanding, that there are no perceptual experiences, sensory or motor, that are not mediated first and foremost through the body, the mothership as Damasio calls it, the body in which the brain sits. The brain is essentially and first and foremost responding to what is coming in there in a setting of movement, which must be understood as transmitted by movement at the micro-levels of form and function in structural and felt ways. These must translate to the visual representation of objects, entities, etc. in their structural features.

In Chapter 2 of Part I it was discussed how Johnson (2007) sees image schemas to be bodily, in that they arise as neural patterns of ongoing sensorimotor experiences. That they are these structures themselves, as activated neural patterns that take on individual functions and thus determine what stands forth in such ongoing experiences as focal emergence. According to Johnson, meaning enabled by image schemas is that of just these patterns and structures of sensorimotor experiences. Image schemas are these very basic structures by means of which the world is encountered, to understand and act within. It is based essentially on how neural networks have individual functions in computing spatial orientation, detecting motion or edges and colour perception, in short, in determining "what stands out, for us, from a situation or scene" (2007:76). Objects stand forth or are disclosed, because of how we perceive the things we need. I had observed how the notion of attention is indicated here. Brains have evolved to enable such a primordial meaning-making, based on the bodies we have and how

they need to interact with the environment in order to survive and flourish. Sensorimotor capacities are enabled thereby. Given their nature as recurrent, stable patterns of sensorimotor experience, in the sense of preserving the topological structures of perceptually whole experiences, Johnson, thus, sees image schemas to be like images, both bodily and mental, linking these experiences to conceptualisation and language (2007:144). While Johnson takes the notion of neural groundings of image schemas as their bodily basis forward into the realm of an embodied grounding of meaning, thought, language and cognition, we see in Damasio's explications the direct relation to where the felt quality should come from. And given the notion of the neural grounding of image schemas that give coherence and structure to experience, in particular, in terms of a felt quality, this is best related to Damasio's explications of maps and images.

We have seen in Damasio's explications, how images in their perpetual flow in the mind acquire value, given the appraisal of objects based on needs. And these are the felt aspects of the maps the brain generates incessantly of everything internal and external. We have also seen how this was discussed from the perspective of the mapping function of the brain, where maps become images in the mind. "Especially valuable images, given their importance for survival, were "highlighted" by emotional factors (2010:174f). The brain probably achieves this highlighting by generating an emotional state that accompanies the image in a parallel track. The degree of emotion serves as a "marker" for the relative importance of the image". Thus enabling assessments that needed speeded responses to be given apparently in a bodily way for this purpose. Given the nature of emotions, it is the triggered change in the body, and thus the physical state and the feelings it generates, which enable quick responses, and at levels below consciousness. We saw how Damasio defines it thus. There is not enough "display space" (2010:174) in consciousness for all images to find assessment at that level. The conclusion to be drawn from this, is that in a primordial way, changes occurring as emotions in the body are tied to a felt quality due to reasons of quick action for survival purposes. And these changes concur with those that occur due to internal regulatory processes, which as defined accompany all feelings, that can range between pain and pleasure at its basic level, clearly also stating that we later have given these labels due to a conscious experience of these.

In this sense, we see how and where objects that stand forth or are disclosed, because of how we perceive the things we need, in order to survive and flourish, as Johnson rightly notes,

attain their value. And also why. Such a value is enabled by the very felt quality that accompanies the just the kind of mapping of anything. It accompanies all maps as a chorus, as Damasio was cited in Chapter 2 of Part II here. Such a need-based value is finally given in the very emotional connotation anything holds. And this notion of what attains a felt value in which situation, based on needs, tells us where attention seen to be a cognitive ability resides, particularly, how objects gain salience in attention, based on what lends itself to attention at any given time. As then evident from what the brain maps in terms of external objects, the very spatial orientation, shapes, sizes, positions, directions and other structural aspects seen to be meaningful elements, must gain a primordial meaningful function for organisms. Therein must also lie how these aspects lend themselves to attention in precisely these structural ways, which has to do with having to know the shapes and sizes of prey or predators, or spatial aspects, such as orientation, position, height, length, distance, and so forth, which I had observed earlier from the discussion in Chapter 2 Part I, as having to be *existentially* important.

Given the notion of selection Johnson defines, these properties get selectively attended to, as they emerge and lend themselves to the attention of each of the organisms based on the needs of the organism. And given the examples above, both attending to and lending to attention must be understood as operating at the level of various sensorimotor modalities. Finally, that they are experienced as structural aspects, is seen to be a matter of how neural structures or patterns get activated and have evolved as a result of the individual sensorimotor interactions with the environment. From Damasio's explications it is clearly evident, that what makes these structural aspects to be experienced thus is rooted in emotions and the feeling quality they accord to objects for speedy responses.

What, becomes evident first and foremost, is that a felt emotional value is the meaning accorded to the objects. This is the message in NS as well. Johnson (2007:61ff), drawing from Damasio's findings, also sees emotions to be in a primary sense important part of meaning. Given in the very appraisal of a situation, in the salience given to objects. But thinks Damasio's understanding is misleading, if it suggests that emotions are about the internal milieu only. And states that emotions are not just feelings of bodily states. But are directed out into the world. That they are not private feelings, but subjective and objective, "*in us and in the world at the same time*" (2007:67).

I think it is clear from Damasio's explications, that it is not emotions that are feelings of bodily states, but feelings are from bodily states of emotions. It is of importance to note, how Damasio (2003) clearly differentiates between the two stages, of the bodily and the felt, in their functionality. Emotions, as we have seen, are to be understood as the bodily states themselves, that *become* feelings due to the bodily states being mapped in the brain. We should understand them then, as the cause of the feelings, due to the changes they bring forth in the bodily state. Feelings emerge due to these changes being felt, because they effect the body, as was illustrated in the last chapter, at minute levels in the body. And given emotions are, on this account as well, the responses to interactions with the outer world, their directedness to the world is also clearly stated in Damasio's account. Even if emotions occur as bodily manifestations in the internal milieu, there is nevertheless a distinction made between the responses to external stimuli, and the responses to needs of the internal state of the body. So they are internally and externally directed. Feelings on the other hand are as stated above what is felt. And in this sense, Damasio differentiates them as being a subjective experience, of belonging to the mind of the one who is feeling. Emotions show themselves to the outer, and are also directed to the outer, amongst others. But feelings can remain concealed, given they belong to the person feeling. They are 'personal property of the organism in whose brain' they get generated and therefore known only to their owner (Damasio, 2003:38).

Johnson discusses further, the relevance of the bodily states, and emphasizes the need to consider these, discussing as well, the bodily changes emotions initiate as explicated by Damasio. However, we have seen by drawing from the Indian performing arts context, that it is more than just about running and freezing, feeling fear or experiencing surprise, that is thereby mentioned. There are different ways in which emotions can manifest. And as the chapters hitherto have illustrated, the inroad to the bodily basis itself, enables insight into what these are, and how emotions and feelings may become relevant. The systematic examination and analysis of these bodily states from a tangible corporeal source as given both in theory and practise of performing arts based on the NS revealed the myriad ways in which emotions manifest themselves. We have seen what happens at the minute body levels for any emotion. The few examples analysed of actual movement instantiate the need to approach a notion of embodiment, by looking at the moving body. And not making assumptions how the body moves and what may be felt. It can differ with every emotion and every kind of movement emerging inner to outer. It has taken us, given the insights provided by the perspectives that were drawn in for analysis from LMA/BF, to the subtle and deeper level of

the changes effected in emotions, at the level of primordial movement, where felt quality and thus any experience that may surface to awareness and consciousness is seen to reside.

Finally, and what Damasio's body of research gives us, is the differentiated notion of what feelings themselves are. Placing this in the context of performing arts underscores the understanding that feelings thus defined are not of the abstract sense. Nor necessarily always in the sense of emotions as feelings, in particular of the primary emotions kind of fear or anger. A wide range of experiences colour feelings, which are all in a broader sense emotions, as Damasio defines. And NS has explicated it long ago. Thus, experiencing strength or fatigue, is also experiencing emotions. But, and most importantly, we have seen, as illuminated in Chapter 3, that it is the kind of movement, inherent to the body but emergent in emotion as emotive movement, that is the primary defining factor of feeling. In looking at such movement, enables specifying firstly, how we may understand the nature of feelings as experience. They are a felt quality that is given to experience, given by the movement that generates them, grounded in the depths of the body. And this pervades all experience. Therein must lie the embodied grounding of meaning. One enabled by the changes emotions effect, and the other of the body as it is. This may help understand, why we may have felt sensate experience, but need not have an experience of an emotion as such, such as sorrow, anger, fear and so forth. As Damasio states, they come to be pain or pleasure, joy or sorrow, positive or negative for us, as we have evolved to mind and consciousness. But the grounding of these is in that primordial need to appraise, which was given in felt sensate ways, by way of sensing as the minimal feature.

Having discussed the felt aspect of what experiences are, and how they have to be understood, let me come back to the structuring evident in the discussion on mapping, which reflects the structuring given in the very inherent innate movement of the body. The very structuring that is discussed in terms of image schemas, which are activations of neural patterns, is instantiated in Damasio's explications. If image schemas are as was cited there from Croft and Cruse (2004) the schematic versions of images enabled by embodied experiences, here we see what these images are. And if image schemas have both structural and felt dimensions, these are clearly instantiated above. And if they arise from our ongoing sensorimotor experiences, and from images enabled by neural structures, as the discussion reveals, these images are mapped in the brain in the setting of movement, enabled by such movement one may say, given it is movement at the very cellular-neurological level. The bodily is also

involved in sensory perceptions as Damasio's explications reveal. And tissue surrounding sensory organs contribute to the mapping. We have seen how fasciae that transmit information through their structural and felt aspects are the all-encompassing network in the body. Thus sensorimotor experiences are also a matter of how these experiences work their way up through the body into the brain as signals generated from sensory organs, as Damasio explains.

As I had noted in Chapter 2 of Part 1, bodily movement is not one more in the list of embodied experiences. The discussion in this part instantiates how it is central to it. Then, we have seen how a probe into this has given an insight into where these experiences must originate, namely at the very minute level of the body in the first place, where movement is generated. And it is such movement that first and foremost must structure the images created from the maps in the first place; the very nature of primary movement speaks for this. This can be said about the notion of embodied domains in which image schemas are seen to be grounded in, or arise from. As Langacker (1991:2, 61) notes, perceptual experiences, can be sensory, kinaesthetic and emotive experiences to a concept, both novel and fixed, a conceptual complex, an elaborate knowledge system or "recognition of immediate context (social, physical and linguistic) and so on". In terms of the embodied part of it, sensory, kinaesthetic and emotive experiences integrate in the notion of *emotive-kinetic* processes. They are all part of the movement-based experiences discussed here, with primary movement with its structural and felt aspects of *Sensing and Shaping* enabling these at the same time, including as apparent from Damasio's discussions, as mentioned, the sensory as well. .

Finally, the very structuring of experience, in particular, of embodied experience, understood as cognitive conceptual processes underlying meaning, also discussed in Chapter 2 of Part I, can be accounted for in this understanding of structuring that the brain enables, and how this must occur in the setting of movement, which is itself structural at the most primary level. We had seen how gestural meaning revealed just that universal tendency to structure that Croft and Cruse (2004) discuss, namely by means of 1) figure-ground, implying as I discussed the spatial relations that underlie such an organisation, 2) gestalt which is evident in the geometric forms gestures reveal as basic structures, and 3) by way of attention, and how certain objects lend themselves in certain ways to attention. Even this is clearly instantiated in the discussion above. Attention, as Johnson (2007) also postulated, is entailed in the notion of appraisal. Such an appraisal and structuring in terms of spatial aspects and gestalts must

primarily be a matter of how primordial movement itself must structure these. A structuring of experience is a structuring enabled by the very inherent structural aspects of self-movement, the means by which the brain must structure maps.

Coming to what gestures depicted as meaning, which was seen to be the structuring of bodily experience understood from a cognitive take, the analysis of the kinetic conceptualisation of gestural meaning construction, analysed in Chapter 1 and 2 of Part I, illustrated, how properties depicted in gestures as meaningful elements are essentially those provided by movement, whether spatial aspects, shapes, actions, or other characteristic movement. They were seen to be the structural features of physical properties of phenomena in the world. We discern from Damasio's explications on maps and images, not only that gestures bring forth just these structural images, but also that they are the meaning, given the need-based value they might be attributed in any instance. If gestures are the images, as McNeill (2005) has always discussed, these have to be understood as arising primarily from the bodily and are not just images of thought or mental constructions per se. Also, it was revealed that properties were seen to lend themselves through movement. Shapes and spatial aspects, or even action, were seen to become accessible to attention and thus awareness through movement. The students having to depict spatial aspects and shapes, need to not only attend to their movement. These properties came into attention as they emerged in movement. That they lend themselves to attention, as Croft and Cruse (2004) were cited to define, was seen in how they lend themselves to attention through movement.

Given the notion of a mimetic/cognitive semiotic conceptualisation of gestural meaning, that was discussed in Chapter 1 of Part I, and given the explications by Damasio, gestures must articulate what the brain then as mimic maps. These conceptual processes, grounded in the fundamental semiotic modes of association, similarity and contiguity relations, are apparently a part of the primordial body-brain-world set up. And associating shapes and spatial aspects thus as well. The two associative modes, observed there as inherent mechanisms, are seen here to be mechanisms in primordial processes of experiencing the world by way of maps. If they guide the gesturer, as was observed as well, we see here that the gesturer apparently does take advantage of an inherently available resource or ability of metonymically abstracting features of objects, actions or events of the concrete world in terms of their physical properties, guided by these two fundamental inherently given semiotic modes, that reside apparently in the mechanisms of the brain.

And if the mimetic modes reveal the kind of foregrounding or attending to object features, whereby the semiotic modes are also operative, this must also lie in not only how, but also what reason any structural property would be highlighted. An image must then, due to the degree of value accorded to any object, event or situation, or any mimetic object, to use Müller's term, become more, or less pronounced structurally. This would account for the different mimetic modes, from well-defined sculpture like representation of high iconic similarity to the sketchy tracing of shapes and spatial aspects. Attention is the driving inherent ability to do so – the degree of attending to any aspect that naturally lends itself to being attended to, lies in the emotional connotation the object has in terms of its properties and thus becomes a pronounced image. If the shape matter, it gains prominence in the image mapped. And if it is a spatial aspect, then this is what naturally lends itself to attention, based on how the brain has evolved to map what is needful.

In the very notion of the brain mapping everything within the body as sketchy neural patterns as Damasio (2003: 195) postulates, we note how a refining of senses, as Rohrer (2005) cited also in Chapter 2 of Part I suggests, or for that matter attention, might bring forth more refined gestures, as is the practise in Indian performing arts. Such a practise must lie in the very notion of recreating or refining senses, by refining bodily movement and thus what such movement may transmit to the brain, once manifest in the “micro-nooks and micro-crannies” of our bodies and “microworlds of form and function” to put it into Damasio's (2010:263, emphasis added) terms.

Finally, Müller (2009:512) formulates, that gestures are not simple reflections of the world. They reflect meaning „mediated by processes of conceptualisation and interaction“ and in doing so take advantage of the depictive possibilities of the hands. With the hand reflecting the “rudimentary” ability (1998:125) to analyse form, and abstract meaningful elements of the perceived world. There is more to that. It is not just the depictive possibilities of the hand apparent here. In producing the properties of the physical world by way of basic structures such as geometric shapes and spatial configurations enabled by the movement possibilities of the hand, gestures produce or articulate the very inner structures the brain mimics by way of maps assembled in the setting of movement. Therein is the rudimentary ability to abstract form. It is form there in images already, enabled by movement thus. At the same time, a line, a circle, a shape, a geometric pattern, a spatial aspect, and so forth, can be traced back to the

very innermost structures of not only what gets mapped in the retinal map of the brain, but is structural aspect of movement in the body. Gestures produce through movement what is inherent to movement of the body. If objects and their properties, as was observed there, reveal themselves by way of movement, we see in the discussion on the kind of structuring the brain enables in the setting of movement, the grounding for this. Not only, because we hold them, manipulate them, go around them, towards them etc. Structures hands produce are structures enabled by movement, innermost movement.

I had suggested while discussing the embodied grounding of meaning there, that gestures must be the embodied simulation of bodily experiences, that Gibbs postulates, given the image schematic construal of meaning they reflect. But given gestures reflect the same structural features that relate to the afore-mentioned images, they are not just a simulation, but the very embodiment of these. They are seen here to articulate them by way of the very setting they are embedded in, namely in the setting of movement. And such movement informed by just the kind of structural and felt aspects of primordial movement in the micro-levels of the body. In the *Sensing* and the *Shaping* that is perpetually in flux.

Summing up the discussion, it was observed the gestures reflect a conceptualisation of reality in physical terms. This was examined by way of linguistic mimetic/cognitive and cognitive conceptual processes that were evident in how meaning in gestures were conceptualised. It was, however, the analysis of the kinetic conceptual processes involved therein, enabled by how gestural need to be brought forth when explicitly constructed, that illustrated in movement terms, how movement must place not only a depictive role, but more. The image schematic construal of meaning evident in the gestures revealed, how gestures directly embody the very image schematic structures discussed by Johnson as enabled in ongoing bodily and perceptual experiences, discussed later as ongoing sensorimotor experienced enabled in the body-brain-world interactions. The discussions led to a review of the cognitive take on this, which revealed several studies in particular from brain and neurocognitive research, but also referred to movement and the felt qualities it enables as a primary source for meaning. Emotion were also discussed for their felt qualities as enabling embodied experiences relevant for the notion of an embodied meaning. And gestures, as was briefly analysed in Chapter 3 of Part I, reveal dynamic qualities of movement that inform affective aspects of meaning. The second part of the study looked into both emotions and movement, given they were seen to be concurrent factors in informing meaning.

This probe into both emotions and movement has enabled insight into the role of primary emergent movement in primordial emotive-kinetic processes, not only for an emotive meaning, but also gestural meaning. Then it is the same movement in which the structuring process defined by Damasio must take place, at primary innate micro-levels of the body accompanied by feelings as “an observant chorus” as Damasio (2010:193), defines it. I had proposed in Chapter 2, that this may be defined as an observant chorus grounded in the *rumblings of movement*, that needs elucidation. Just this has been elucidated and laid out here. Gestural meaning as a conceptualisation of reality in physical terms grounded in the very movement-based experiences of Sensing and Shaping enabled by emotive-kinetic process, which in turn are body-brain-world processes.

Finally, the discussions in Part II reveal how Indian performing arts, take advantage of the very meaning emotions enable. Meaning is a matter of both the structural and felt dimensions, informed both by *Sensing* and *Shaping* grounded in *emotive-kinetic* processes. And have provided an inroad to arriving at these findings. In general, as the practised tradition, but also theory and understanding of performing arts in India reveal, through gestures or corporeal expression, we need to be constantly relating to and in perpetual contact with those internal *rumblings* of movement, where all embodied experiences arise, felt, sensory, of the internal kind and of the external kind. And all emotive aspects of meaning integrate. A smell, shape, or sound is presented in the explicit use of gestures in Indian performing arts, entailed in its very depiction. And these presented with the precise feeling quality enabled by movement itself, by *Sensing* and *Shaping* meaning with the help of *primary emergent movement, inner to outer*, enable, as my conclusion of this study would be, the felt quality of meaning, while at the same time, the structural aspects of conceptualising reality in physical terms are integrated into them. A body-brain-world interaction articulated through the corporeal for the emergence of meaning in a primary sense, as a *bhāva-rasa* continuum that relates to the value that objects, actions, events, and situations have in a primordial way.

4.5 Coming back to gestures - a final analysis

Let me finish this discussion with another final gestural analysis, by going back to the gestures presented for analysis in Part I of the study, and analyse here how the student further learns to integrate into her gesture the deeper meaning of thus depicting the lotus. Why the

lotus is accorded relevance, must be expressed as well. Figure 25 illustrates the progress of the movement. The corresponding table describes the form features again.



Hand form/handedness	Orientation	Position	Movement	Modes of Mimesis
RH <i>mukula to alapadma</i>	PU V	CC, medium reach on LH	Fingers opening and spreading out until stretched	Representing lotus flower
LH <i>pataka</i>	PU H		None	Representing leaf

Figure 25

Based on the form-based analysis there is a representing mode, of something with a round geometric shape being depicted with RH, placed in proximity and thus in outer contiguity relation with the LH, with a movement pattern that is opening and spreading. It was seen in Chapter 1 of Part I that the lotus flower has the intended meaning of depicting the round eyes of the cowherd maidens being referred to thus. Namely, their beauty. Given the discussion on how value is accorded to objects and their properties, given in a primordial way and how emotions have evolved, value is accorded to shapes in the nature. And by way of similarity or parallelism, is projected on to other objects. The perfect round shape of the flower is seen in the round shape of the eyes and is accorded the same value, of being beautiful. But what is happening in the movement?

There is only cue the student gets for this gesture to be depicted. While executing the gesture, she is asked to open her eyes, like she has lotus eyes. Analysing the movement that emerges forth, one see a slightly advancing chin, with lengthening in neck to right, the gaze is first in directed focus on to the hands, RH fingers closed, lips in a slight smile, but closed, and eyebrows slightly drawn in, which reflects a slight intensity in the gaze. This is the initiating momentary position that she takes with the face, as her fingers depict first the bud. In the second image, as the fingers spread out, lips start going apart, eyebrows move up as eyes start

widening, and her head position changes minimally as she looks up. In the final image on far right, the eyes are open wide, lips go apart, and one could define this expression as bright face. As the fingers spread out, the eyes open. There is a simultaneous progression towards that opening, as her hand/fingers connect to her eyes, which is evident in the slight neck movement that sets in. This minimal movement is effected in this subtle change, that is hardly visible in the image unless one gives it a proper scrutiny, at the atlanto-axial joint.

But here the student was not being guided through her anatomical landmarks. Nor was she given any kinetic cues. She was told to open her eyes like she had lotus eyes. This alone seemed to have guided her. The hand depicting the lotus flower with a spreading of fingers getting connected to the opening of her eyes, as she relates the round shape of the flower to her own eyes, at the level where deep connectivity patterns are operative, and where change occurs inner to outer. The notion of the flower's shape in her own eyes enabling movement at subtle levels to connect as reciprocal change in shape. That there was a felt quality must be assumed, given the subtlety of the movement. A felt quality, below conscious levels, attached to the kind of movement itself.

Taking the thought further, the shape of the flower lends itself as something valuable, here beautiful, because, one may say, of how it feels as a shape in the body, a structure that gets projected or reflected as movement in the body. The spreading of the lotus flower must generate the sense of spreading in our own primordial movement. And attached to pleasure rather than pain. A quality that the spreading activation, as related to the growing rather than shrinking aspect of a baseline change in the body's shape, entails. This is perhaps how we project felt qualities on to the outside world. By way of the *Sensing and Shaping* that is going on constantly as movement in the body. The reason why maps of objects get a felt quality, and meaning gets a felt value. Of a meaning that is occurring at levels below consciousness. It thus reflects the kind of embodied process of cognition, that Lakoff and Johnson (1999:9-12), define as the "cognitive unconscious". It is cognitive, because the ability to conceptualise and reason arise from the body, from aspects of the sensorimotor system. And it is cognitive unconscious, because cognitive operations are mostly unconscious. It thus stands for those mental operations such as meaning, inference and language that are unconscious. Johnson (2007) elucidates on this in discussing the notion of embodied immanent meaning, of which relevant aspects for this study were discussed in Part I, Chapter 2

A meaning re-lived in thus representing, or depicting by way of gesture and the corporeal, by way of which one gets to the very felt sensate basis from which values have developed. This is the relevance accorded to performing arts as defined in the NS; there is no art, science, craft or knowledge otherwise that is not entailed in it (Chapter 1:116). It offers solace to the sorrowful, educates, offers entertainment, enlightens the poor intellect, empowers the weak, gives incentives, and so forth. In the context of performance, gestures need to be executed with a felt quality that is attached to emotions, which we have seen from Damasio's explications, to be the very value given primordially to how we understand the world. And these evolved as incentives for better life management. As was evident in the gesture above, the notion of beauty is what enables the value accorded to the lotus flower to be depicted, and gets translated intrinsically into movement. Without a felt quality even the hand gesture is just a gesture with no more meaning than a structural one.

Finally, the lotus is the *vibhāva*, the object that carries an emotional connotation, because it has a felt value, making it meaningful. And the felt value is accorded to it, because of its shape, that is experienced as perfect and thus beautiful. If it is a flower that becomes meaningful, because of its smell the performer has means to depict smell, whereby just taking a gesture depicting a flower to the nose won't suffice. The natural bodily way of reacting to pleasant smell must accompany the gesture. Even here, a bodily way of showing it is often realised. So yes, emotions are a primary level of meaning, a primary level of making sense and dealing with the world, and also as evident, one's own body. And meaning is given in the appraisal, the salience, that objects gain, based on needs of the organism. Attention, the cognitive ability from the perspective of Cognitive Linguistics, was seen to be integral to the primordial value-based need objects are thus accorded based on needs. This is what must give attention the universal status amongst the cognitive abilities, and its ubiquitous relation to all construal operations of meaning, as discussed in Chapter 2 of Part I. As was noted in the discussion on cognitive construal operations, certain objects present themselves with certain aspect, other with other properties. The flower's would present itself meaningful by way of its shape, colour or smell, because perhaps these are the properties that made it useful. And is in this sense tied to feelings, or a felt sense.

Thus enabling the brain sophisticated life management, as Damasio states. Or enables human beings the incentives needed for life as NS states. And this is possible if produced by relevant corporeal expression in accordance to the kind of movement that is *primary, emergent, inner*

to outer in shape flow, and that such a value-laden *vibhāva* triggers, in turn finally enabling access to that movement and thus body state that underlies it. This is how the experience of the joys and sorrow, or pains and pleasures, is enabled, finally giving meaning as the *bhāva-rasa* loop of NS, the primordial-emotional feeling loop of Damasio, and what Johnson wants to formulate as immanent. The practical and theoretical knowledge provided in Indian performing arts placed in correspondence with Damasio's brain research on emotions, enabled arriving at this insight. A movement analytic approach as in LMA/BF, enabled access to it by giving the basis for analysis, observation and execution of the varied ways movement finally gets articulated.

4.6 Conclusion and implications

The aim in this study was to study the two-fold notion of meaning as understood in Indian performing arts, evident in the use of gestures and emotive expression. Given these two together reflect linguistic-conceptual, embodied-kinetic, and the emotive-kinetic notions of meaning, enabled an inroad to the bodily basis of meaning, the notion of embodied meaning and embodied experiences underlying meaning, as discussed in particular from a cognitive perspective on embodied cognition by Johnson (1987, 2007, Lakoff and Johnson, 1999, also Gibbs 2005a/b). In doing so the study integrated insights from several studies, beginning with Linguistic Gesture Studies (Kendon, 2004; McNeill, 1992, 2005, 2013; Mittelberg, 2008, 2010b, 2013; Mittelberg & Waugh, 2009; Müller, 1998, 2009, 2010a/b; Müller, 2013, Müller, Bressemer and Ladewig 2013). The explicit gestural meaning depiction revealed the mimetic/cognitive and cognitive conceptual processes discussed in Cognitive Linguistics and Cognitive Semantics (Croft & Cruse, 2004; Langacker, 1991). This exposed the structural nature of linguistic-conceptual meaning depicted in gestures as basic meaning, in turn unveiling a structuring of experience in a bodily way as enabled by image schemas. At the same time the kinetic conceptualisation evident in the explicit gestural meaning depiction shed light on the role of movement itself in enabling a bodily knowing in terms of embodied experiences. But an examination of the cognitive take on embodied meaning, based on the notion of sensorimotor experiences as discussed by Johnson (2007) or even Gibbs (2005a), while providing several insights, called for an in-depth examination of embodied experiences, discussed also from the perspective of movement and emotions, in terms of a movement-based approach, which looked at the primordially of movement itself, rather than defining it in terms of actions, for instance. Such an approach in a fundamental bodily way that would

be, to use Johnson's term, rock-bottom, deemed necessary given the kind of embodied or immanent meaning Johnson discusses as informed by both structural and felt qualities.

That emotions themselves are understood as establishing meaning as experience, that a reading of NS reveals, enabled approaching this from the perspective of both emotions and movement. In particular the correspondences that the explications of emotions, the feelings they generate and their bodily manifestations revealed to Damasio's (1999, 2003, 2010) brain research on emotions have been far-reaching at arriving at how emotive-kinetic processes are inherent to all experience and meaning. Finally, it was the very bodily manifestations of emotions, which in both the perspectives are defined as relevant for felt qualities and feelings, and described in detail in the NS, that led to an analysis of yet again what students of dance need to bring forth as emotive expression. Applying the movement analytic conventions of LMA/BF (Hackney, 1993, 1998, personal correspondence; Laban, 1966, 1975), enabled identifying the nature of movement at that emergent level, inner to outer in emotive expression, evidenced in the very emergent gestures at subtle levels, as practised in the performing arts. Such a movement, definable as *primary movement, emergent, inner to outer* was traced to what is defined in LMA/BF as Shape Flow Support and by Kestenberg (Amighi, et al., 1999) as shape flow in growing and shrinking. It is characterised by structural aspects, given shapes and spatial aspects relate therein. An examination of feedback on felt sensations experiences when executing such experiences underscored the understanding that felt aspects are also intrinsically integral to such movement. Also, just this movement in shape flow with structural *Shaping* and felt *Sensing* as inherently innate characteristics, operates at the level of innate structures that are the fasciae, the function of which is to give form and support to all body parts in their functioning. That a growing and shrinking in shape flow is the very movement that is there perpetually at the innermost neurological and cellular level of movement, is evident in Kestenberg's (Amighi et al. 1999) and Cohen's work (1993/20212, Hartley, 1989/1995), that also defines how it is where experiences as felt sensations arise. After thus substantiating the results of the analysis in Chapter 3 of Part II, the notion of meaning as experience in the NS was approached yet again.

It is the so identified movement, emergent, inner to outer, in emotive-kinetic processes revealing the factors of a baseline growing and shrinking, that informs the experiences, in particular as a *bhāva-rasa* continuum. An emotional experience enabled by the felt qualities emotional states provide when brought forth by way of corporeal expression, leads to an even

more profound experience called the *rasa* that pervades the body. At this level it corresponds to what Damasio calls primordial feeling, or “*protofeeling*” (2010:258, emphasis in original), feelings that Damasio calls pure experience provided by the very neural design that enable them. They arise as by-product of the inner state of the physiological body, where all feelings arise. Placed in correspondence to Damasio’s postulation of a two-fold level of feelings, underscores why the experiences enabled by *bhāva* have been given such a primordial relevance as instilling meaning that leads to *rasa* as relish in NS. While *bhāva* clearly reflects emotional experience or feeling, *rasa* itself points to an experience of the stable state of equilibrium where all feeling arise when change occurs in emotional processes. Meaning thus instilled is to be understood as rooted at the fundamental level of experience at the level of internal processes in the internal milieu of the body, where emotional processes accompanied by feeling are accorded a need-based value or meaning to objects, actions and events in the physical world. This study at the same time instantiates the understanding that such a body-brain process is specifically grounded in the body with movement itself primordially fundamental to it. Expressing emotional states with the kind of gestures as analysed in this study is essentially an accessing of this fundamental level where all meaning emerges primordially by way of the very movement that defines it, namely a growing and shrinking in shape flow that is perpetually there. *It is essentially a Sensing and Shaping into the emotive-kinetic grounding of meaning.*

Again this very nature of innate primordial movement, placed in the context of Damasio’s brain research in terms of the mapping function of the brain, enabled tracing the notion of embodied meaning that became evident when analysing gestural meaning from a linguistic and cognitive linguistic perspective in Part I of the study. If the brain maps everything in structural terms accompanied always by feelings, with this function operating in the setting of movement as Damasio postulates, then the innate movement, identified at the micro-levels of the body, at what can be understood as the “microworlds of form and function” in the “micro-nooks and micro-crannies” that Damasio(2010:263, emphasis added) postulates, must be the setting where this occurs. It is also observed in the context of feelings that these microworlds must be considered when taking into account where feelings arise that are relevant for the making of self, mind and consciousness. In other words, such movement, given its structural spatial aspects and shapes, as well as the felt quality it provides must provide both the structures the brain maps of the external world reveal, as well as the felt aspects that also get mapped. If image schemas are activated patterns of these neural structures, their bodily

grounding too need to be sought at the bodily level in this innate movement in the first place, which reveals just the shapes and spatial structures that formulate image schematic structures. This is also where not only the structuring of experience is grounded, but also where attention, similarity and contiguity relations and mimetic processes that guide conceptual processes from a linguistic perspective must operate, driven by the very need-based value accorded to concrete entities which defines the functioning of the brain. It is therein that the structural conceptualisation of reality in physical terms must be rooted, the form derived from these properties and presented by gestures a naturally given bodily loop perhaps? Of extracting form from the physical world to be re-presented in gestures as visual images, to apply Müller's definition to it. The study thus also reveals that a linguistic-conceptual notion of meaning is also a *Sensing and Shaping grounded in embodied emotive-kinetic processes, where innate movement itself is primary to the structural nature of such meaning.*

The study has implications at several levels. In integrating the insights from Linguistic Gesture Studies, it presents new analytic possibilities as well as insights, for taking forward the understanding of a primary role gestures play for meaning and embodiment. In particular, for the form-based analysis, it offers further analytic means and approaches for studying gestures, such as enabling an approach to studying the qualitative aspects gestures reveal. Also in looking into the emotive-kinetic grounding of meaning from the perspectives presented as discussed above, it has opened up discussion on what motivates gestural meaning, over and beyond the structural aspects. How, and in what further ways gestures can be understood as being the very embodiment of innate processes.

Also, given the insights provided by placing the correspondences the theory and practise of Indian performing arts reveals to Damasio's brain research on emotions, feeling and consciousness in the larger context of embodied meaning, the study in as much has contributed to Embodiment Studies, in terms of an understanding of the bodily basis of meaning, thought and cognition. In going to the bottom-line of embodied experiences, it presents ways of looking into the embodied grounding of meaning in movement terms, given movement is understood to be basic to it, as Johnson (1987, 2007) as well as Gibbs (2005a) discuss. The very nature of an emotive-kinetic grounding of embodied experiences in movement terms has been laid out. In doing so the study also contributes to the understanding of an embodied or immanent meaning that Johnson (2007) postulates, or the understanding of

the *cognitive unconscious* coined thereby (Johnson, 2007, Lakoff and Johnson, 1999), where meaningful structures such as image schemas are considered to arise.

The study also contributes to an integration of the findings in Cognitive Linguistic Research as postulated by Johnson and neurocognitive /neuroscientific research from Damasio's perspective. By drawing from insights provided by Johnson (2007) regarding the notion of an embodied or immanent meaning, and perspectives provided by Damasio's brain research on emotions, it also introduces possibilities on how a cognitive take and a fundamental body-brain take can be integrated to further the discussion on embodied meaning and cognition. In terms of cognition, if imagination is about how the bodily works its way up to meaning, reasoning and language, as Johnson (ibid) formulates it, this study discussed that basic bodily level, where it may begin to work its way up grounded in movement. And if at the root of feelings which build the substrate for thought, reasoning, mind and consciousness, are emotional feelings and below that primordial feelings as Damasio (ibid) discusses, the study looked into the movement dimension of the internal processes at the primordial homeostatic level, to unveil how this may be so. In this sense the study also has implications for neuroscience research.

As Johnson was cited in Chapter 2 of Part I of the study with regard to the relevance of movement, Johnson sees no "*radical separation of self from world*" (ibid, emphasis in original) in movement. In this sense there is "no movement without the space we move in, the things we move, and the qualities of movement, which are at the same time both the qualities of the world we experience and the qualities of ourselves as doers and experiencers" (ibid). All these pertain to the outer form of movement. But the qualities as doers are rooted much more deeper, at inner levels of movement. Emotive movement reveals one way of accessing it and needs to be considered while discussing movement, not only as manifestation in behaviour patterns and actions, but also where it emerges at subtle levels. Also as seen, it is not just apparent tensional qualities or tension flow, but other more subtle levels of experience that also matter in primary ways. The study here, thus offers ways of taking forward the discussion on embodiment in movement terms. Then the bodily dimension of enabling embodied experiences has been traced to the very movement that is inherent to the body at the micro-level of form and function, where it is emergent, in the interplay of the changes emotions trigger, and what is there as perpetual growing and shrinking. It is this inherent aspect of movement that is both structural and felt, that enables feelings in the first place,

giving a felt meaning finally to all objects, actions, situations and events that get structurally mapped in the brain. It is these movement-based experiences grounded in body-brain-world interactions that must be considered as primary for meaning. Damasio's research clearly indicates that sensory input is also given to the brain through the body. In this sense, sensory perceptions must also be operative in the setting of just this innate movement.

The study also unveils the potential of performing arts as a movement tradition, to enable insight into the relevance of movement. It has opened possibilities as to how dance can be a resource material for other fields of research, in particular when examining embodied cognition. The central outcome of the study is the identification of the nature of primary innate movement as stated above for these approaches. At the same time the study, in instantiating the notion of primary innate movement, calls for further study on the function of movement as indicated here, particularly in how inner movement would have an impact on the functioning of the brain in body-brain processes. A further research on movement from the perspectives enabled here in conjunction with ongoing current research on fasciae would be an immediate implication. This is the unique aspect that was touched in this study, but reveals much more potential, where a dialogue between dance, movement, fascia research and neuroscience research on emotions can bring further insights, with the theory and practise of Indian performing arts itself offering resource material, given the inroad to emotive expression the provide.

The study, thus not only have implications for understanding the relevance of performing arts in general, but Indian performing arts in particular. The theory and practise of Indian performing arts as dance and dance theatre has here been examined for the bodily empirical basis it provides for a study of meaning and experience, and thus is an invitation to look at it from perspectives that go beyond the cultural, social, or even religious relevance it also has. It has been approached purely from the actual practised movement tradition it is at its core. This study contributes as a triggering stimulus. It opens possibilities of dialogue between arts and science, as NS itself reflects. This treatise is a scholarly discourse in ancient setting, based on the questions and answers evident there. We read in the questions, and the kind of definitions and explanations Bharata gives, the attempts made to make something intangible such as emotions, the experiences they provide, or the bodily dimensions of these, tangible through the medium of language. This study contributes and opens up possibilities for such scrutiny and debate again.

Damasio's brain research on emotions placed the insights given in NS in a scientific light, given the parallels in understanding emotions, their physical attributes and their generation of feelings. While this body of research helps underscore the relevance given to performing arts in India, the insights that NS provides, were seen to contribute to the notion of feelings, in particular primordial feelings, and consciousness from a practised experiential movement perspective. Finally, there is more that looking into non-Western traditions, worldview and philosophical thought can give, given the implications this may have for the current discussion on mind and consciousness, that Johnson, Gibbs and Damasio also address. Damasio's explications on consciousness, not further discussed in this study, as it is beyond its scope, calls for looking into Indian notions of same, as brief references to Vatsyayan (1996), Kak (2004) and other Indian scholars point. There is more dialogue possible just between the neuro-scientific approaches Damasio offers and briefly cited in this study, and the philosophical thought Indian scriptures provide.

I have not gone into the Indian world view that underlies performing arts, taking rather a perspective on form and function. This is a vast field that is surely a subject of scrutiny as well. As Vatsyayan (1996) notes, the purpose of arts is to refine the senses. Quoting the ancient scriptures, the Upanishads, it is noted on this account that senses constitute both the inner and outer. And together with the mind they are understood as having the capacity 'to move inward and enlarge outward' (1996:54). This is what Damasio, based on brain research discusses. As mentioned above, in the refined body-mapping of both the interior and exterior, there is entailed, the inner opening the way to also know the outer.

Dance or performing arts themselves are often seen as culturally specific forms, being non-Western. We have seen how cultural specificity is not a matter of form, but content and context. The study has illustrated this by looking at the form and function this tradition has to offer. But furthermore, how meaning itself, given its understanding as value at a primordial level is not culturally specific. The inroad movement provides that is the basis of such meaning, cannot be emphasized enough. In particular, in tracing the parallels between insights provided by what may appear vintage and what is current, and what may appear culturally specific traditions, it takes away the cultural specificity attributed often to traditions as discussed in this study. For the understanding of Indian performing arts itself, here particularly dance theatre, the study provides several insights that will help practitioners to a

refined understanding of same, both for practise and teaching. The teaching session with European learners exposes its potential for practise at a global level. It, also exposes the potential it holds as resource material for other fields of research, and for both a cross-disciplinary and cross-cultural or trans-cultural dialogue. And in this regard, has implications for Cultural Studies as well as Dance Studies.

Finally, the study has implications for movement studies itself. In particular, in identifying a movement principle such as Shape Flow Support as Hackney coins it, or shape flow as Kestenberg defines it, as being relevant in a primordial way, it calls for looking beyond the emphasis laid on aspects such as Effort Elements and Shape Qualities, or even tension flow attributes for defining movement qualities and their emotive or expressive components. It invites to look rather below these, addressing deeper layers of movement itself at the Core. As workshops have revealed, it is an aspect that practised perspectives Indian dance vocabulary provides can illuminate.

The cross-disciplinary approach presented here thus has implications for Embodiment Studies, Gesture Studies, Cognitive Linguistics, Dance Studies, Movement Studies, Neuroscience Research and finally Cultural Studies, all of which can profit from insights into movement and its analysis, as presented in this study. In particular, it offers methodologies and possibilities for an embodied dialogue between art and science, also at a trans-cultural level.

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APPENDIX 1



Alapadma – all the fingers, including the thumb, are stretched out in the spatial aspects as illustrated, bringing a three-dimensional form to the hand.



Catura – while index, middle and ring fingers are held together and stretched, the little finger is stretched away from them. The tip of the thumb is placed at the bottom of the ring finger. The hand finally gets its form when the palm is curved in slightly, while keeping the fingers stretched.



Hamsāsya – the tips of stretched index finger and thumb are held together, while the other three fingers are stretched away as illustrated. Depending upon context of usage, they are held together or slightly apart.



Kaṭakāmukha – this as evident is a slight variation of the above *hasta*, with the middle finger joining the index finger.



Mukula – the tips of all the fingers are held together.



Patāka – while the thumb is held close to the hand, the other four fingers are held together and stretched out, palm flattened out as far as possible.



Tripatāka – keeping the hand in the *patāka hasta* as illustrated above, the ring finger is flexed as illustrated.

APPENDIX 2 *STHAYIBHĀVAS* –DOMINANT STATES

<i>Sthayibhāva</i> - Dominant states	<i>Vibhāvas</i> - determinants	<i>Anubhāvas</i> - consequents
<i>Rati</i> – love, pleasure is its basis – origin in attaining desired objects	Seasons, garlands, unguent (healing ointment), ornaments, near and dear ones, lofty abodes /enjoyment of superior residential houses, absence of antagonism (from others).	Because of gentle and delicate nature to be represented by sweet words and suitable movements of limbs like smiles, eyebrow movements – knitting, glances, etc.
<i>Hasa</i> – laughter	Mimicry/imitation of others’ actions, incoherent talk/ inconsistent utterances, obtrusiveness (annoyance), foolish actions, etc.	Smiles and the like – gentle smiles, broad laughter and boisterous outbursts.
<i>Soka</i> – sorrow/grief – origin in affliction.	Death of/seperation from beloved ones, destruction of assets/loss of wealth, murder, imprisonment/ captivity	Shedding tears, lamentation, bewailing, pallor of face/change of colour, change/loss of voice, sensation of looseness in limbs, falling on the ground, crying, writhing and squirming, deep breathing/deep sighs, sluggishness, madness/ insanity, loss of sense, death, and the like. Three types of crying: 1) Out of joy: blooming cheeks, words of recollection without concealing tears, horripilation. 2) Tears of affliction/distress: profuse loud shedding of tears, uneasiness in limbs, falling, rolling, lamenting. 3) Out of jealousy (cry of women): violent throbbing of lips/cheeks, shaking head, deep sighs, angry crooked eyebrows/glances. Superior and middling types of people are distinguished by sorrow accompanied by courage, inferior ones (including women) by weeping.
<i>Krodha</i> – anger	Insolence (disrespectful behaviour), abusive words, quarrel, dispute, adverse remarks, altercations (heated arguments)	Swelling of nostrils, haughty upturned eyes, biting of lips, throbbing of cheeks, etc. Five kinds of anger and their depiction: 1) Against enemies when open resistance: knitted eyebrows, ferocious face /fierce look, biting of lips, clasp hands, threatening with/touching arms, shoulders and chest. 2) Against venerable/ superior persons when controlled: Slightly downcast eyes and bowed head, wiping off slight perspiration, no violent activity.

		<p>3) Against beloved approaching with love: very slight movement of body/advancing, shedding tears, frequent sideways glances with throbbing lips and knitted eyebrows.</p> <p>4) Against servants/ attendants: threats, rebukes, opening eyes widely, casting angry looks in various ways.</p> <p>5) Feigned anger is when it is realised with its own/ ulterior motive and moves between two <i>rasas</i>. Betrays effort/ effort expressly made.</p>
<i>Utsaha</i> – energy, related to/has as basis alertness/ energetic enterprise, persons of superior types/ lofty nature	Power, courage/patience, heroism, readiness to sacrifice and absence of distress/sadness, etc. Arises from mental composure.	Fortitude/steadiness (perhaps steadfastness), munificence (generosity)/ astuteness (cleverness/ perceptiveness), boldness/readiness in an undertaking and acts of vigilance.
<i>Bhaya</i> – fear, relates to women and inferior types	Offensive acts/crimes against superiors/ preceptors, kings, wandering/roaming in forests, empty houses, seeing mountains/ elephant and snake, being rebuked, cloudy days, dark rainy night, hearing hooting/movement of owls and animals of night and the like. Seeing terrible objects and hearing awful things	Trembling of hands and feet, palpitation of heart, stupefaction/paralysis, dryness of/parched mouth, licking with tongue, perspiration, tremor, apprehension, seeking safety, flight/ running away, loud lamentation/crying and the like. Fear due to embarrassment/offending of superiors, seeing terrible objects and awful things to be represented by tremor of limbs, panic, dryness of mouth, agitation/hurried movement, widely opened eyes and such actions. Fear arising from terrifying objects/fright to be represented through slacking of limbs, suspended movement of eyes/twinkling
<i>Jugupsa</i> - disgust, related to / has as basis women and inferior types	Hearing and seeing unpleasant things and the like.	Contracting of limbs, spitting, twisting / narrowing down mouth, heartache, etc. Also covering of nose, uneasiness.
<i>Vismaya</i> – astonishment	Jugglery, magic, illusion, extraordinary feats of men/superhuman activity by extraordinary men, art-work in parchment/ artistic and craft excellence/excellence in painting.	Wide opening of eyes/ dilating, staring/looking without winking of eyes, distortion/movement of eyebrows, horripilation, perspiration/moving head to and fro, shouts of ,bravo/well-done’ . Astonishment due to extraordinary acts through tears of joy, fainting, etc.

APPENDIX 3 – *VYABHICĀRI-BHĀVAS* - TRANSIENT STATES

<i>vyabhicāri-bhāvas</i> Transient states	<i>vibhāvas</i> - determinants	<i>Anubhāvas</i> - consequents
<i>Nirveda</i> , dejectedness, despondency	Poverty, insult, verbal abuse, beating, separation from beloved persons, sickness, excess misery, seeing other's prosperity, acquiring ultimate knowledge (Yogin)	Meditative state, eyes flooded and miserable, face drooping, sighs deep and frequent. „Women and mean persons“ portray this by crying, sighs, deep breaths, fraudulence (deception).
<i>Glāni</i> , feebleness	Vomiting, dysentery, ailments, penance, fasting, mental anguish, excessive drinking, exercise or travel, hunger, thirst, lack of sleep, age.	Feeble utterances, lack lustre eyes and face, change of colour like pale cheeks, slow walk, absence of enthusiasm, thinness of form, distortion of eyes, pitiable movements, frequent slacking of limbs
<i>śaṅkā</i> , fearful suspicion/apprehension – basic feature doubt („with reference to women and persons of low status“)	Offending king, committing sinful deeds, stealing, etc. Arises from self or due to others.	Constant apprehensive looks in all directions, keeping face veiled, licking tongue due to parched mouth/lips or thick stuck-up tongue, pale face, trembling of limbs, loss of voice, gloomy facial appearance, etc. When state arises from self eye movement is used.
<i>asūyā</i> , jealousy	Various offences, hatred, other's wealth, prosperity, sportive display, learnedness or the like.	Proclaiming others faults or disapproving good qualities openly, speaking contemptuously, meaningful stares, distortions of eyebrows, ridiculing, arrogant face, turning away face in anger or envy, etc.
<i>Mada</i> , Inebriety	Intoxication of varying degrees	Depending upon personality: Excellent ones laugh, sing, smile sweetly, exhibit sweet passion, appear physically bold, falter in gait and words and display delicate charm. Medium nature ones roll eyes unsteadily, droop arms listlessly or throw them in agitation. Gait is crooked and unsteady. The man of low nature loses memory, has retarded movement, utters harsh words or cries and has disgusting behaviour in general – hiccups, coughs, vomiting, spitting.
<i>śrama</i> , exhaustion/fatigue/weariness	Long road journeys, physical exercise.	Massaging body, loud sighs and hissing sounds, twisting/contracting mouth, wrinkling face, yawning, slow steps, rolling/contracting eyes.
<i>ālasya</i> , lethargy/indolence	Natural inclination towards lethargy, sorrow, walking, pregnancy, physical or mental strain, sickness, (attributed to women and ‚mean‘ natured persons)	Aversion towards all forms of activities, lying down or sitting quietly, drowsiness or falling asleep, etc.
<i>Dainya</i> , wretchedness/depression	Pennilessness, mental distress, misery, excessive anxiety or also eagerness.	Lack of determination, headache, paralysis of body, mentally stunned state, lack of care for body hygiene.
<i>cintā</i> , anxiety	Loss of wealth, losing something dear, poverty, or an over eager heart.	Deep breath, sighs, distressed state/agony, absence of determination, contemplation, downcast face, pondering, voidness of

		heart, not cleaning oneself, etc.
<i>Moha</i> , delusion/distraction	Accidental mishaps, adversity, sickness, fear, agitation, recollection of previous enmity, occurrence of frightening things, not finding any solution.	Absence of movement, whirling of limbs, falling down, faltering, loss of all senses.
<i>smṛti</i> , recollection	When health is in utmost wretched state, when remembering everything from the past good or bad, happiness or misery, imagined or forgotten, whether seen or within oneself, disturbance of sleep at night, frequent practice of thinking of things similar, etc.	Nodding of head, looking down, raising eyebrows, excessive delight, etc.
<i>dhṛti</i> , fortitude	Heroism, perfect knowledge, acquiring vedic/spiritual knowledge, affluence, cleanliness, good habits, devotion to the preceptors, getting surplus funds, various sports, occurs when one enjoys the acquired like sound, touch, taste, beauty of form or fragrance, but not sad when not acquired.	Enjoying what is achieved, not regretting what is not yet acquired, lost or destroyed. To be produced by good people by omitting fear, grief, agony.
<i>vr̥dā</i> , bashfulness/shame	Basis is doing what should not have been done. Originates in disobedience or insult to elders, not keeping promise, denial or regret over deeds. When observed doing an improper action and therefore regretting it.	Hiding/concealing face, bending head down, thinking, pondering, drawing lines on ground, touching ring, clothes etc., biting nails, tearing something with nails.
<i>capalatā</i> , inconstancy	Produced by passion, hatred, rivalry, excessive anger, jealousy, lack of restraint. Doing things without proper decisions, thinking over it, and carries out activities such as killing, impropoing, etc.	Harshness of words, rebuke, thrashing, killing, imprisoning, beating, reminding etc.
<i>Harsha</i> , delight	Getting something inaccessible, union with beloved, mental satisfaction, divine favours, royal appreciation, preceptor’s affection, good food, obtaining and benefiting from wealth. Realise aims, get cherished desired fulfilled.	Bright face and eyes, sweet/loving speech, embracing, horripilation, tears of joy, sweet/gentle stroke, delicate movement of limbs, perspiration, etc.
<i>jaḍatā</i> , stupor, sluggishness, cessation/reluctance to resume all activities	When seeing both desirable and undesirable things, sickness, etc.	Prattling or not speaking at all, speaking indistinctly, starrng, utter helplessness, etc. Suggests postures.
<i>Garva</i> , arrogance	Excessive affluence, nobility of birth, handsomeness/beauty of form, youth, academic distinction, influence, sudden wealth, etc.	Contempt for others, teasing/vexing everyone, avoiding replying or conversing with others, glancing at shoulders, roaming around, derisive laughter, harsh words, disobedience to elders, slighting them, etc. Represented through movement of limbs.
<i>viṣāda</i> , dejection, despair	Inability to complete task at hand, fateful inability to get the desired, accidents, calamities, adverse fate, etc.	Differentiation between: 1) Superior, middling: Consideration of diverse means of remedy, seeking allies and collaborators, hindrance to enthusiasm, absent mindedness, deep sighs, etc. 2) Mean: Flight, down cast look, dryness

		of mouth, licking the sides of mouth, drowsiness, sighs, contemplation, etc.
<i>Autsukya</i> , impatience	Recollecting separation from beloved persons, seeing parks, etc.	Deep sighs, drooping face, deep reflection, sleep, lethargy, desire to be down, heaviness of limbs.
<i>nidrā</i> , sleep	Weakness, exhaustion, inebriety, lethargy, anxiety/excessive thinking, excessive intake of food, natural soporific tendency, overwork, keeping awake at night.	Gravity of face, rolling/stretching body, yawning, massaging body, deep sighs, noisy respiration, relaxed body, closing/rolling of eyes, fainting, bewilderment, sluggishness, etc.
<i>apasmāra</i> , epilepsy, loss of memory	Malignant possession of an evil deity, serpent, yaksha, rakshasa, pisaca, bhutas and others, or recollection of these, eating food left by others, frequenting empty chambers, going to vacant houses, unclear forests, being crossed, derangement of bodily humours ³⁸ , non-observance of proper timings, lack of cleanliness.	Throbbing, trembling, sighing, running, falling, perspiration, foaming in the mouth, hiccups, licking with the tongue, etc. Silent features of the state are falling down suddenly, shivering, foaming in the mouth, getting up during state of loss of sense, etc.
<i>svapna</i> , dreaming	Arises during sleep, interrupting it, enjoying objects of senses, infatuation, spreading bed on or dragging over ground, and the like.	Deep and long breathing, sighs, dullness of body, closing/partial closing of eyes, stupor /loss of all senses, talking while sleeping, absence of activity.
<i>prabodha</i> , waking up	Break of sleep, digestion of food, evil dreams, loud sounds, touch, etc.	Yawning, seeing the limbs and face, throwing down the hands, snapping of fingers, etc. leaving the bed, rubbing eyes.
<i>amarṣa</i> , anger, indignation	When person/energetic person rebuked or insulted by someone superior in learning, affluence, prosperity and strength.	Shaking head, perspiration, downcast face, reflecting, mental apprehension, meditation, looking for means of remedies, etc.
<i>Avahittha</i> , dissimulation	In the nature of concealment of appearance, produced by shame, fear, defeat, deceit, undue aggressiveness, etc.	Explaining away, looking elsewhere, pretending as though it has not been seen, breaking of talk, feigned patience, indifference and the like.
<i>ugratā</i> , ferocity, cruelty	Incarceration of the thieves, when thieves are caught and bound/ arrested, offence to the kings, speaking offensive words,	Slaying, arresting, beating, threatening, rebuking, binding, etc.
<i>Mati</i> , self-assurance, intellect	Thinking of the purport of scriptural texts, considering inferences/ conjectures, occurs when equipped with the mastery/well-versed in meaning of scriptures.	Imparting instructions to pupils, ascertaining meaning, clarification of doubts, etc.
<i>vyādhi</i> , ailment	Originates from the three humours vata (wind), pitta (bile), kapha (phlegm) and their cumulative effects, e.g. fever of two types – with cold and with burning sensation.	With cold – shivering, shaking of all limbs, squeezing and shrinking of limbs, shaking of jaws, distortion of nostrils, dryness of mouth, horripilation, tears, groaning with pain and the like. With burning sensation – throwing out garments, hands and feet, desire to roll on ground, eagerness for unguents (healing ointments) and cold things, lamentation, groaning, etc. Other types of ailments by

³⁸ Relating to the body constitution as defined in Ayurveda medicine.

		distortion of face, paralysis of the body, deep breaths, shrill cries, tremor, etc. To be performed by sensible persons through looseness of limbs, throwing out limbs, distortion of face and mouth, etc.
<i>unmāda</i> , insanity	Death of / separation from beloved ones, loss of wealth, accidental injury, upsetting/derangement of bodily humours in diverse ways. May result when struck suddenly or due cumulative effect of this.	Laughing, crying, lamenting, groaning, etc. without justification, irrelevant talk, lying down without reason, sitting, standing, running, dancing, singing, smearing the body with ashes and dust, wearing/taking grass, soiled clothes, rags, senseless acts like imitating others, etc.
<i>maraṇa</i> , death	Has various conditions. Due to ailments such as disturbance in intestines, liver, etc. colic pain, derangement of humours, tumours, boils, fever, cholera, etc. Or due to accidental or violent attacks caused by weapons, serpent bites, drinking poison, beasts of prey, vehicles drawn by elephants, horses, chariots and falling from these.	Sickness – looseness of body, immobility of limbs, closing of eyes, hiccups, deep breath, jumping, not eating or seeking help from attendants, speaking with indistinct voice, etc. Falling suddenly on ground for attacks or falling from vehicles. Gradual development of symptoms for snake bites or poison like thinness, tremor, burning sensation, hiccups, froth from mouth, acute pain in shoulders, sluggishness and death in that order.
<i>trāsa</i> , fright	Lightning, comet fall, thunderbolt, earth quake, clouds gathering ominously, seeing an unnatural being, cry of some wild animal, etc. Loud sound.	Contracting and shaking of limbs, shivering, paralysis, horriplilation, choking words, irrelevant talking, etc.
<i>Vitarka</i> , deliberation/ careful thought	Doubt, cogitation, belief, etc. Originates from discussions, basis is raising of doubts.	Diverse discussions, accepting/settling definitions/deliberation, etc. with movement of head, eyebrows, eyelashes.

Appendix 4 – Gestures of the face

Pupils	Eyelids	Eyebrows	Nostrils	Cheeks	Lips	Chin	Oral/mouth	Neck
<i>Bhramana</i> Circular. Heroic, anger	<i>Unmesa</i> Separating opening. Anger	<i>Uksepa</i> Raised. One only for anger, deliberation, heroic sportiveness and playfulness, hearing, looking. Both for wonder, delight, anger.	<i>Natā</i> Depressed, frequent clinging together. Mild crying with sighs.	<i>Ksāma</i> Lean/ depressed. Misery.	<i>Vivartana</i> Rolling/ Narrowed down. Envious jealousy, physical pain, contemptuous disgust, laughter, etc.	<i>Kuṭṭana</i> When teeth clatter. Afflicted by fright, chillness, old age, fever, chronic ailments.	<i>Vidhuta</i> Obliquely opened. Preventing some activity, saying not so, etc.	<i>Samā</i> Natural. Meditation, chanting prayers, natural posture.
<i>Valana</i> Turning. Fear.	<i>Nimesa</i> Closing. Anger	<i>Pātana</i> Lowered. Envy, disgust, smile, smelling.	<i>Mandā</i> Natural, resting lobes. Sorrow, despair, eagerness, anxiety.	<i>Phulla</i> Blown up/ expanded. Excessive joy.	<i>Kampana</i> Tremor/ throbbing Trembling, cold, fever, anger, victory, etc.	<i>Khaṇḍana</i> Frequent throbbing of lips. Chanting prayers, study/ recitation of scriptures, conversation and eating.	<i>Vinivṛta</i> Turning/ Spreading Feminine envy, jealousy, anger due to rivalry, contemptuous or playful behaviour.	<i>Natā</i> Face lowered. Wearing ornaments, placing arms round someone's neck.
<i>Patah</i> Letting down. Pathos	<i>Prasṛta</i> Spreading/ separating widely. Wonder, heroic, erotic.	<i>Bhṛrukuṭi</i> Knitting/raised from roots. Anger, dazzling light.	<i>Vikṛṣṭā</i> Lobes blown, extended. Strong smell, hearing sighs, anger, fear, distress.	<i>Purṇa</i> Full/raised up. Energetic enthusiasm, arrogant attitude.	<i>Visarga</i> Spreading out. Women's graceful coquetry, feigned anger against lover, painting lips.	<i>Chinna</i> Lips in close contact. Recitation, sickness, fear, chillness, physical exercise, in angry looks.	<i>Nirbhugna</i> Lowered down/ crooked. Majestic, serious survey.	<i>Umnatā</i> Face turned up. Looking up, ascending
<i>Calanam</i> Trembling. Heroic, anger	<i>Kuñcita</i> Contracting. Odious, smell, taste, touch.	<i>Caṭura</i> Pleasingly extended in gentle slow movement. Love, graceful sport, gentle touch, awakening.	<i>Sochvāsā</i> Lobes when air drawn in. Sweet mild smell, deep breath.	<i>Kampita</i> Throbbing. Anger, enthusiastic joy.	<i>Vinigāhana</i> Drawn in/concealed. Exertion.	<i>Cuksita</i> Widely separated lips. Yawning.	<i>Vyābhugna- bhugna</i> Slightly spread out. Ashamed, discouragement, impatience,	<i>Tryśīrā</i> When face turned sideways – triangular. Carrying weight on neck, sorrow.

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							anxiety, yearning, contemplation, taking counsel.	
<i>Sampravesanam</i> Withdrawal. Humorous, odious.	<i>Sama</i> Level Natural. Erotic.	<i>Kuñcita</i> Gently contracted. Affection, feigned anger, hilarious sportive behaviour.	<i>Vighrñitā</i> Contracted. Humour, disgust, envy.	<i>Kuñcita</i> Contracted/ narrowed down. Cold touch, horripilation fear, fever, etc.	<i>Sandaṣṭaka</i> Biting (with teeth). All activities of anger.	<i>Lehana</i> Licking lips with tongue. Licking.	<i>Vivṛta</i> Lips kept apart. Humour, grief, fear, etc.	<i>Recitā</i> Shaking or moving. Graceful charm, coquetry, dance, portraying churning.
<i>Nivartanam</i> Turning sideways. Erotic	<i>Vivartita</i> Turned up/raised. Anger	<i>Recita</i> Loosening. One raised in lovingly graceful manner. In dance.	<i>Svābhāvika</i> Level lobes. Natural as applicable.	<i>Sama</i> Level/natural. Other <i>bhāvas</i> .	<i>Samudgaka</i> Closed tight. Compassionate sympathy, pity, kissing, greeting.	<i>Sama</i> When lip movement very slight. Portrayal of natural state.	<i>Udvāhi</i> Turned up. Playful and proud behaviour, saying "is this the way" in anger – all pertaining to women.	<i>Kuñcita</i> When head bent back. Portraying pressure due to weight, protecting neck.
<i>Samudvṛttah</i> – Raising up. Heroic, anger	<i>Sphurita</i> Throbbing. Envy, sleeping, dreaming, swooning, troubled by rain, wind, hot air, smoke.	<i>Sahaja</i> Natural. In simple <i>bhāvas</i> .				<i>Daṣṭa</i> When teeth bite lower lip. In furious, anger activities.		<i>Añcita</i> When head turned and bent back. Portraying suicide by hanging, when being dragged by hair, looking up.
<i>Niskramah</i> Projecting forward. Heroic, anger, terrible, wonderment.	<i>Pihita</i> Closed. Resting.							<i>Velitā/ Vahitā</i> When face turned sideways. Turning away, looking behind.
<i>Prakṛtam</i> Natural. All other <i>bhāvas</i>	<i>Vitāḍita</i> Flapped. Accidental injury.							<i>nivṛtā</i> When face turned forward. Indicating going to one's abode.

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APPENDIX 5

Workshops – Reith b. Kitzbühl, Austria
26.- 30.12.2012

Day 1: Elements, Chakras and Movement

Space – Vishuddha chakra

- Started with movement initiated from the throat, subtle, not externalising yet, but getting a feel for the quality of space as it spreads out from the throat/neck
 - Then externalising – allowing movement to emerge towards the ears, but not using the ears to move.
 - Connecting to the atlas/axis joint, giving an image of the head resting on this joint like a ball that sways on its own from ear to ear
 - Instructed to feel the movement coming from the bottom of the head, rather than top of head, as if chin were swaying from side to side
- (Many seemed to get the neck movement with the subtleness needed for it – hardly saw any 'head' movement, except with one or two of them.)

Wind – Anahata chakra

- As the neck movement became more and more externalised participants were asked to notice how the chest was being integrated into the movement and to now locate the initiation in the chest, heart, allowing it to move into the shoulder blades
- Then out into the arms (arms started going out horizontally in some of them)
- Instructed to allow the arm movements to become bigger, sequencing into the hands, feeling the sway of the wind like a tree
- Go back and feel the movement of space again from the neck, which some participants were already doing intuitively
- Get sense of lightness into the movement.

(The sway to the sides from the chest was very evident and there was lightness in the movements)

Water – Manipura chakra

- Naturally going over to feeling the navel and letting the movement that was already there to get initiated there as well
- Allowing the movement from the navel to go out through shoulder blades to the arms – the same sway but more weighted as water is heavier than wind
- Feel the hollow in the navel area – easier to experience than in the chest, since not so bony
- Allow movement to flow out of the hollow and making it more circular by turning around to right and left back
- Then allowing the arms to get more flowy like water while turning, connecting hands with navel
- Asked to integrate the earlier elements once again

(Everyone was beginning to integrate the whole upper body while continuing to explore the qualities of each of the elements so far. Some of them were continuing to do the neck movement with closed eyes)

Fire – Swadisthana chakra

- The turning in the above movement was already integrating the pelvic area – natural transition to using the deep pelvic muscles
- Then stretch out from there upwards and into the arms (everyone started rising the arms up in an arch)

- Feel the stretch from the deep pelvic muscles to the hands while rising the arms like fire
- Start flexing the body to the sides while stretching up, feeling the rise of a dynamic movement
- Then go back to the sway of the wind

(Notice how everyone was getting the right feel for the movement)

Earth – Muladhara chakra

- With the onset of using the deep pelvic muscles, instructed to now move downward into the pelvic floor (some participants started swaying the hips)
- Rotate at hip joints and sit into the pelvic floor, so it opens and provides support
- Asked to anchor/ground the tailbone into the earth, while continuing to stretch up towards the head. (Some really deep-seated stances could be observed!)
- Then asked to sway like a tree that is firmly grounded into the earth

(The groundedness seemed to be well-understood by the participants. Also everyone was really exploring all the potential movements upwards into the former elements and chakras used)

In the second part of the workshop, we started crystallising the movements explored so far as an intro to how in dance these movements are given a shape and clarity. The beginning point here was now earth.

- Sama and get a feel for the head-heel connectivity
- Then ayata to get the square in the legs of groundedness for earth
- Alidham and pratyalidham alternate through a deep-seated square shape of legs – this to bring the sway of wind into the movement
- Then participants were asked to lift the feet and place them from ayata to alidham/pratyalidham to bring in the fire into the movement (There were some aha-effects)
- After this to get more flow into the movement, we did alidham-swastikam on same side a few times before changing sides. While lifting feet and being instructed to keep the fire, the flow of water was to be integrated. (some of them were spontaneously moving the hands to the sides in a sway)
- Now they were instructed to stay grounded in the pelvic floor, i.e. seated while lifting the feet (brought forth exclamations, but everyone really managed that as well)

Now resting the lower body, arm exercises.

- Opening from Anjali to natyarambha to show how the movement of the wind gets crystallised to a clear positioning of arms
- As they continue to open and bring hands back to anjali, participants asked to relax shoulders, not use the outer part of upper arms but to use the lower part and the sides of the chest while executing the movement.
- Then asked to become more specific in placing elbows in shoulder level and taking wrists out at the same level
- Then asked to become more specific in keeping the hands in pataka, opening palms, anchoring elbows and wrists in space – giving them the quality of earth

(Some really good natyarambhas could be observed and most of them managed to keep the shoulders up while executing movement – an important pre-requisite in BN)

- Then arms asked to be moved in a swaying movement like the wings of a bird, but getting earth quality into it by keeping the joints firm. Then asked to stop at different levels (–one could see a lot of bound clarity in this)

- Then asked to do these movements together with the deep-seated stance to get the tree grounded into the earth and swaying it – so no storm could make it fall

In the this section participants were asked to move on their own, exploring all the movements they had done so far, giving them instructions to integrate the movement of the elements. Some were really integrating all and moving with ease and flow. Others did isolated movements of arms or legs. Were asked to move with the flow of water, lift feet like fire, stay grounded and get the lightness of wind.

(Saw some really beautiful movements coming out and the use of space in the room)

Then the groups was divided into two. Each group getting a chance to explore the movements while the other group watched. Then they were asked what they observed.

Answers were

- Strength and lightness at the same time
- Groundedness
- Ocean, waves, flow

When asked if this was an observed or experienced movement/image, the answers were partly this way and partly that, however mostly observed rather than experienced.

So participants were asked to do the same movements again, but now with an inner impulse, intention and by observing the movement coming out of one's own body, using the visualisation that observation brought. If it got difficult, participants were given instructions to come back to locating the elements and their movements in the regions of the body practised earlier. (Everyone was moving with quite some ease. Some were dancing with a partner. When asked to follow what the partner was doing, saw them practising some of the structured leg and arm movements I made them do from BN in tandem. They really explored the full range of movement that they were given today!)

Finally they were asked to lay back in savasana, allow the movement of the elements to be recaptured and while doing so to see if they could locate the chakras and feel the quality of the movement of the elements in the process.

Day 2: Body Architecture – Space Architecture (Video of first part taken)

Warm up was a repetition of movement initiation from the chakras like as practised on Day 1, with the felt qualities of the elements in the movement. Free movement improvisation at the end with emphasis on locomotion and moving out into outer space.

During free improvisation transition into moving with more spatial intent

- To right and left, up and down, backward and forward based on own 3-dimensionality
- Or with orientation in the space provided by the room – square space, moving towards corners of room for e.g.
- Continued using of all qualities of elements

(There were some impressive and complex movements coming out of many. But focus on outer spatial intent slowed down the movement I thought, with participants trying to figure out in which direction to go.)

Then some theory about the 3-dimensionality of body, bony landmarks and their relation to outer space – in a rectangle, in a cube. Participants asked to try out these extensions while sitting and listening.

Then practical work with sthanakas again

- Alidham and pratyalidham performed yesterday repeated with emphasis now on greater trochanters moving to side-low.
- Then placing foot in different directions on heel and ball of foot as required
- Participants were instructed to sit into the pelvic floor and use the earth element while doing it
- Then practise of natyarambha with emphasis on horizontal dimension, of opening from chest/heart into elbows and wrists.
- Each was guided through the movement sequencing to keep elbows up
- Then participants asked to bring more earth element into wrists and elbows and less into muscles (here more space) and place them/anchor them while moving into Natyarambha. (Many were turning the hands when stretching out and this helped them to keep them straight, feel the use of the pataka hasta and opening of the palm – some noticed that it was a spiralling that was taking place while stretching out. Some got very impressive NR)
- Next KM-AP alternate exercise with corrections about not allowing elbow movement. (Some were lifting shoulders while executing the change in hasta.)
- Asked to shape the hands in such a way that fingers pointed in particular direction, especially when told that the little finger needed to be up for both gestures and therefore rotating around this as axis seemed to help.
- Then instructed to place AP hands in different points in space, side, forward low or high, side-low, side-high, back, diagonal, etc.
- Free improvisation of these spatial placements brought several combinations. When asked to make sure that the index finger stretches in the direction towards which the movement is intended seemed to bring some very BN-like aesthetics.
- Then they were shown how hands and feet could be combined.
- Free improvisation of these at the end of the class. Participants tried many variations – parts of Nattadavus were observed, without the participants being guided into these movements as adavus. Just the spatial intent of hands and feet seemed to suffice to get these movements.