Dissertation

INTERACTIVE DOCUMENTARY PRODUCTION AND SOCIETAL IMPACT:
THE CASE OF *FIELD TRIP*

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Artistic research project

The following is a research-creation dissertation submitted to the Film University Babelsberg *KONRAD WOLF* in partial fulfilment of the requirements for the degree of *Doctor philosophiae in artibus* (Dr. phil. in art.) in the Film and Television Production programme, Faculty I.

The artistic research project that comes together with this dissertation is called *Field Trip*. It is an interactive documentary. It can best be explored in its original form, accessible here: https://en.fieldtrip.berlin Duration: 92 minutes.

If needed, there is a short explanatory video introducing the artistic research project *Field Trip*, demonstrating the basic principles and interaction, accessible as a separate file (name: 'Field_Trip_Basics_03_02_21') on an attached flash memory drive. Duration: 9 minutes.

If further needed, there is a full screencast of the artistic research project *Field Trip* (for documentation and storage purposes) accessible as a separate file (name: 'Field_Trip_Screencast_03_02_21') on an attached flash memory drive. Duration: 97 minutes.

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Potsdam, September 2021

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This thesis was submitted to Film University Babelsberg KONRAD WOLF on 9 February 2021.
The thesis defence took place on 24 March 2021.

Subject: Media and communication studies

Research area: Film and TV production

Institution: Film University Babelsberg *KONRAD WOLF*

Abstract

Over the last two decades, storytellers have engaged in an effervescent period of experimentation and innovation in storytelling. In the realm of documentary, makers have adopted, combined and developed web technologies to reveal complex and multi-perspective stories. This doctoral dissertation explores how independent authors, designers and coders coalesce to make and circulate interactive documentary (i-doc). The thesis is based on a research-creation approach which includes an empirical case study of *Field Trip* (2019)—a 92-minute i-doc produced by a small team in Berlin, which includes the author. It is further informed by i-docs produced in the last decade in Canada and Germany, and builds upon two peer reviewed journal articles published in 2018 and 2020, and a book chapter to be published in 2021.

The thesis concentrates on i-doc making from a production studies perspective. It surfaces the common characteristics of interactive documentary and uses the analytic framework of *media innovations* (Dogruel, 2014) to contextualise the practice. The conceptual focus lies on the notion of *impact* of i-doc storytelling, which the thesis seeks to critically deconstruct, problematise, and discuss. Impact is a widely used term in digital storytelling practice and theory. It means different things to different stakeholders in the storytelling sector, thereby leading to an expectation gap. Using multi-method research, including *analytic autoethnography* (Anderson, 2006) and *constructivist grounded theory* (Charmaz, 1995), the dissertation identifies a number of types of impact. The findings point to the importance of balancing impact expectations related to the story, with those related to the production process. This is particularly relevant, the study finds, for securing a sustainable innovation culture in the digital storytelling sector.

By articulating a societal impact framework, the dissertation contributes to a better understanding of the cultural value of contemporary interactive storytelling practice.

Keywords

Interactive documentary, living documentary, media practice, digital media production, open cultural production, Field Trip, Tempelhof Field

Dedication

To Rebecca, with love.

In memory of Garip Özdem, who left us during the production of *Field Trip*.
Rest in peace, Garip.

Acknowledgements

To my supervisors Prof Dr Susanne Stürmer and Prof Björn Stockleben, for their solution-oriented approach, constructive accompaniment, reactiveness and competence.

My artisan colleagues Eva Stotz, Joscha Jäger, and Svenja Klüh, a very special thanks goes out to you.

To everyone who has participated in one way or another to the interactive documentary *Field Trip*.

For their initial support: Prof Dr Sandra Gaudenzi, Prof Stefan Schwietert, Prof Lena Thiele.

For their feedback on parts of this dissertation's narrative substance and structure: Prof Michael Baker, Katharzyna Boratyn, Prof Dr Jens Eder, Prof Dr Skadi Loist, Prof Dr Katarzyna Mąka-Malatyńska, Prof Gesa Marten, Prof Dr Stefania Milan, Prof Dr Florence Millerand, Dr Jessica Mulvogue, Prof Dr Hans-Joachim Neubauer, Dr Niamh Ní Bhroin and the anonymous reviewers.

To key Film University Babelsberg staff Katja Krause, Kirsten Otto, Sibylle Sorge, Yulia Yurtaeva-Martens, and peers Mumin Baris, Rand Beiruthy, Linda Brieda, Benjamin Cölle, Cristóvão dos Reis, Julia Dufek, Manuel Flurin Hendry, Kathi Käppel, Katharina Pethke, Michaela Pnacekova, Patrick Urs Riechert, Sharon Ryba-Kahn, Nicolas Rossi, Alisi Telengut, and Astra Zoldnere for helping me making it happen.

To all interviewees and conversation partners… for their respective insights and generous time.

To my dear family and friends for their love, affection and friendship. Grand merci!

Transparency statement

Some parts of this PhD thesis pertaining to the *Atterwasch* example and the feature of interactivity are updated versions of a previously published peer reviewed scholarly essay of mine with the title *Interactivity as a key feature redefining documentary reality*, in a special issue on 'Docufiction' of *Images. The International Journal of European Film, Performing Arts and Audiovisual Communication,* edited by Katarzyna Boratyn (*Łódź Film School*) and Katarzyna Mąka-Malatyńska (Adam Mickiewicz University Poznań), 2018.

Some parts of this PhD thesis pertaining to the *Field Trip* case study and the discussion on media innovation are updated versions of a previously published peer reviewed scholarly essay of mine with the title *Media innovation and social impact: The case of living documentaries*, in a special issue on 'Media innovation and social change' of *The Journal of Media Innovation*, edited by Niamh Ní Bhroin (University of Oslo) and Stefania Milan (University of Amsterdam), 2020. This paper was co-funded by the European Union through the ERASMUS+ programme under grant agreement 2018-1-DE01-KA203-004282.

Previous versions of some parts of this PhD thesis pertaining to interactive documentary *GDP* and the notion of impact will be published as a peer reviewed book chapter with the title *Notes on impact*, in The Interactive Documentary in Canada, a volume edited by Jessica Mulvogue (Albert-Ludwigs-Universität Freiburg) and Michael Baker (Sheridan College), 2021, McGill-Queen's University Press. This book chapter was co-funded by the European Union through the ERASMUS+ programme under grant agreement 2018-1-DE01-KA203-004282.

Scope of personal contribution

The dissertation that you are about to read is the result of a research-creation journey that I embarked on in 2017. I am the sole author of this dissertation.

The dissertation comes together with a hyperlink to the original interactive documentary *Field Trip*—my artistic research project, a screencast for documentation purposes and a short explanatory video (see Appendix). I describe the full scope of my personal contribution to the artistic project throughout this dissertation, including in chapter 3 (see Ethical considerations) and chapter 4 (see Organisational). Still, since *Field Trip* was a project with several participants, I here delineate my specific role and scope of contribution.

My official role in the *Field Trip* project was: co-author and interactive producer.

The scope of my contribution as a co-author was:

- developing an initial documentary concept with my co-author,
- developing an interface and user experience (UX) concept,
- writing static text (e.g. About, alt texts, etc.),
- researching themes and certain protagonists,
- crafting an interactive storyline (incl. making hypervideo links between episodes),
- representing the project in public (e.g., with partners, media and at events).

The scope of my contribution as an interactive producer was:

- writing key funding applications,
- initiating, negotiating and following up on certain partnerships (e.g., Der Tagesspiegel, Exberliner Magazine, Outriders, Tempelhof Airport visitor centre),
- being the switchboard among creative team members (e.g., between the animator and web-designer on one side, and the co-author and the film editor on the other),
- doing key in-reach communication work among team (via email and phone),
- coordinating key outreach activities (e.g., crowdfunding, people's award, social media, etc.),
- coordinating parts of post-production (e.g., translation and subtitling).

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List of abbreviations

APC – Association for progressive communications

AR – Augmented reality

BR – *Bayerische Rundfunk*, lit. 'Bavarian broadcasting'

CAAE – Collaborative and analytic autoethnography

CILECT – *Centre International de Liaison des Ecoles de Cinéma et de Télévision*, now International Association of Film and Television Schools

CMF – Canadian Media Fund

CNC – *Centre national de la cinématographie*, lit. 'National cinematopraphic centre', France

DCRC – Digital Cultures Research Centre, University of the West of England

FLOSS – Free/libre open source software

GAFA – Google, Apple, Facebook, Amazon

GDP – Interactive documentary of the National Film Board about the "The human side of the Canadian economic crisis"

GLAM – Galleries, Libraries, Archives and Museums

GPL – GNU General Public License

I-doc – Interactive documentary

IDFA – International Documentary Festival Amsterdam

IP – Intellectual property

IKF – *Institut für künstlerische Forschung*, lit. 'Institute for artistic research' (Film University Babelsberg KONRAD WOLF)

MDFF – Melbourne Documentary Film Festival

MIT – Massachusetts Institute for Technology Licence

NFB – National Film Board of Canada

NGO – Non-governmental organisation

PAR – Participatory action research

SBS – Special Broadcasting Service, Australia

STS – Science and technological studies

SXSW – South By Southwest, Multimedia Festival in Austin, Texas, USA

VPRO – *Vrijzinnig Protestantse Radio Omroep*, lit. 'Liberal Protestant Radio Broadcaster', Netherlands

VR – Virtual reality

ZhDK – *Zürcher Hochschule der Künste*, Zurich University of the Arts

CHAPTER 1 - Introduction

1.1 For starters

1.1.1 Historical context

In 1923, the editor-in-chief of *Gazette des sept arts*, Ricciotto Canudo, published a manifest called *Le manifeste des sept arts* (Canudo, 1923). There, Canudo pleads for the recognition of cinema as the seventh art form. He argues that since cinema integrates the five artistic elements (language, sound, image, movement, and interactivity) it necessarily needs to be recognised as the most evolved art form. I will leave film historians and film theorists to settle this age-old debate. I will instead take a hard look at one element that Canudo mentions: interactivity. Hundred years after the publication of his manifest, I reflect upon my own journey as a filmmaker… or rather: as a documentary filmmaker… or wait: as an interactive documentary maker[1].

In my reading of film history, documentary has been a 'happy camper', more often than not experimenting with all artistic elements, playing the role of an innovator in film. Media innovation brought about by documentary makers has seen many forms, and more recently, the rise and fall of interactive web documentaries. It is for this reason that I will be adopting a media innovation centric, rather than a use- or user-centric approach (Bergvall-Kareborn & Stahlbrost, 2009) to interactive documentary production. In chapter 2, I will thereby introduce *media innovation* so as to offer a conceptual backdrop for situating interactive documentaries. This will help understanding key intrinsic and context-related dimensions of this form of digital practice.

Interactive documentary (i-doc) is a niche category within documentary media practice. In i-docs, makers generally create, assemble and present documentary material in a form that is native to web technologies. Interactive documentary productions are media works that typically include one or more point(s)-of-view, an interactive interface, a delinearised narrative, and at times, participatory features meant to involve citizens in the storytelling. Over the decade spanning 2007 to 2017, i-doc makers have produced and distributed their works with the help of higher education institutions, public service media, the public interest press, film and media funds, as well as film festivals.

There have been many lively semantic debates on how to best call i-docs, where some argue in favour of *web-documentaries*—combining the characteristics of web technologies with those of author-driven, and therefore subjective, storytelling (Paci, 2020). Others have opted for the term *multimedia*

[1] I am purposefully using the term *maker* to include authors, designers, creative technologists, art directors, audience designers and producers.

documentary, or coined that of *living documentary* (Gaudenzi, 2013). I will be touching upon the semantics of this form of documentary more specifically in chapter 2.

After more than a decade of intense production activity, during which some estimated 1,000 i-doc[2] works—including experimental docs that did not enjoy a wide distribution—were released, i-docs have quickly been losing ground to newer or trendier forms of documentary, including virtual reality documentaries and web series. I myself started to get involved with i-docs in the year 2008, when the National Film Board of Canada—where I was working at the time—was looking for a web-coordinator on one of its first i-doc productions (*GDP*, 2008-2009). After this initial spark, I was hooked and got ever more involved in the sector, sequentially wearing the hat of author, producer, and practice-led researcher.

1.1.2 The unfavourable equation

Even though i-docs are still presented in public service media, online newspapers or on specialised platforms, their expansion has been halted and we are currently seeing a decline in the number of i-docs produced and/or distributed. There are several reasons for this recent shift. For one, over the last decade, consumer habits have changed massively. Demographics show a clear migration from desktop to mobile usage, where 2013 marked a progressive switch from one to the other in terms of time spent (Comscore, 2014). Large platforms for linear content (e.g., YouTube, Facebook) have all but replaced (or been integrated in) first-mover and incumbent online platforms that used to develop their own online video players and/or be open to more experimental offerings (Arte.TV, NFB.ca, etc.). But beyond these external factors, one key reason is rooted in a not so new realisation: the *unfavourable equation* of user uptake vs. production time and effort.

Producing an i-doc is a complex undertaking, where interdisciplinary teams are put together to more or less create an object from scratch. This involves serious investment in research and development for information, programming, design and distribution purposes. Each i-doc is different in style and user experience, thereby requiring the production team to each time come up with a new story, redefine the screen, and navigation. Once produced, an i-doc only takes off with a cleverly segmented distribution strategy, media partnerships and appeal to specific communities. All these production steps cost much time and also financial resources, when done in a professional fashion.

[2] The figure is an estimate by the author. It is based on a non-scientific count on 28 August 2020 of works published using the Korsakow software (450), those published by leading producers Arte (37) and the NFB (70), as well as those featured by premier venues such as IDFA Doclab (272) and the MIT Docubase (116)—and which are not from Korsakow, Arte or the NFB. I added another estimated 150 works that have either been removed (not updated) from the above-mentioned platforms, or were published elsewhere.

The *unfavourable equation*, therefore, as an intrinsic reason, has condemned i-docs to an artisanal niche. Over the years, many makers could live with this fact, as long as some form of funding was available and a true buzz was accompanying each release (especially in the 'window of opportunity' years, that I locate around 2009-2014). Today though, as many creators have moved on (or moved back) to more linear forms of storytelling, all parties to the production and distribution process of i-docs need to question the larger value of this form of storytelling. In order to pinpoint the "larger value", I am conceptualising the notion of *cultural value* in chapter 2. This is key for understanding what cultural value entails and where i-docs can be positioned on that value continuum.

1.2 Hypothesis

My hypothesis is that in order to shed light on the cultural value of i-docs, research needs to defy and complement the unidimensional view brought about by quantitative metrics and most reception studies. The intrinsic value of an i-doc is a good place to start, and I will do that in chapter 4, where I provide a case study of i-doc *Field Trip* (2019)—the documentary project I co-authored and co-produced as part of this doctoral research. This said, what in my view is key, is to redefine the notion of *impact*, or rather, it "requires a new way of thinking about impact and new methods for evaluating the various types of impact," as articulated by Holmberg et al. (2019, p. 3).

Thus, pre-empting chapter 2: I will first lay the conceptualising foundation of *cultural value*, establish how an *i-doc* can be defined, conceptualise *media innovation*, and only then come to a detailed discussion of the notion of *impact*. This notion, as we will come to understand, is a central feature within cultural value.

My hypothesis therefore, is that by specifically looking at impact of i-docs from a producer's perspective, we might overcome some of the most baring instrumental and institutional limitations and thereby get one step closer to identifying the cultural value of i-docs. Deconstructing the term *impact* is important, so as to call into question this catch-all term. Yet, redefining impact on all of its aspects is outside the scope of this research. My research project limits itself to investigating those actors that are behind-the-scenes: the makers of i-docs. By focusing on the maker's expectations of impact, and the i-doc community-of-practice's vision of impact, I hope to contribute fresh and under researched knowledge related to the non-quantifiable aspects of impact.

Before coming to the research question, I will here provide context on the field of practice and the field of research, so as to best situate the reader *vis-à-vis* the object of study.

1.3 Defining the field of practice

1.3.1 Documentary

In order to describe what interactive documentary is, as a phenomenon, I first look back at what, more generally, documentary practice is.

In 1933, John Grierson defined documentary as "the creative treatment of actuality" (Grierson, 1933, p. 8). Although Grierson's focus lied in the question of the truth or rather, the constructed truth portrayed in a documentary, this well-known phrase suggests that documentaries imply a creative process, which can be more or less artistic. Grierson, like many pioneers of the documentary genre before and after him (e.g., Michel Brault, Frances and Robert Flaherty, Esfir Shub, Dziga Vertov, to name just a few) attest to how innovative the documentary practice has been over time[3].

Although documentaries come in many stripes and colours, from TV documentaries to interactive or immersive ones, they all share two characteristics that make them into something singular. Documentaries are:
a) subjective in their point of view, and
b) attempt at offering a *creative treatment of actuality* (Grierson, 1979).
There are many associated forms, such as mockumentaries, long-form journalism features or pure and simple factual storytelling.

Documentary, unlike news journalism, is a form of journalism that documentary filmmaker Laura Poitras once bluntly referred to as *journalism plus* (cited in Das, 2015). "Documentary filmmaking is journalism (fact finding) plus storytelling that reveals something more about the human condition," journalist Angelica Das quotes Poitras as saying (Das, 2015). The timeframe within which the documentary genre works is outside the daily journalistic beat. It rather attempts at offering an in-depth exploration of people, places or phenomena and, contrary to reportage, it is not at the service of a reporting assignment. It is not there to report *on* something, but rather to document from a particular point-of view. This implicit or explicit subjective point-of-view in documenting, interpreting and constructing reality, allows for much artistic freedom. It can talk to senses and emotions in a manner that is generally not in the arsenal of breaking news or data-driven journalism.

[3] For a discussion of the history of innovation in documentary production, see *New Documentary*, by Stella Bruzzi (2006).

As mentioned, documentary has a long tradition of innovation, or like Kate Nash and colleagues (2014) would formulate it: "Documentary has always had an experimental dimension with first filmmakers and now digital documentary makers adopting and adapting emerging technologies and generating new documentary forms" (Nash, Hight, & Summerhayes, 2014, p. 1). From first black and white still films such as 1895's *Workers Leaving the Lumière Factory* ("*La Sortie de l'Usine Lumière à Lyon*", (Lumière & Lumière, 1895) to the 1950s new cinematic realism films of the *direct cinema* school (*"cinéma vérité"*), and all the way to *immersive* virtual reality documentaries of the late 2010s, over time, documentary practice has been marked by a series of innovation milestones.

I identify i-docs as drivers of one of these milestones, meaning that the conditions under which they were produced, were of rapid change in technology and shifts in media consumption—but not of disruptive innovation, where technologies and players disappear to the benefit of new entrants (Bower & Christensen, 1995).

1.3.2 Interactive documentary

Digital forms of documentary including long-form multimedia features, documentary games (Charles et al., 2017), interactive documentary (O'Flynn, 2012), and more recently non-fiction virtual reality (Rose, 2016), have all contributed to expanding our understanding of what—to take the expression of late documentary filmmaker Peter Wintonick—*docmedia* is (Wintonick, 2012).

By embracing web technologies, many visual creative pioneers, including photographers and graphic novel artists, but also traditional documentary makers, authors and journalists, suddenly started exploring unconventional narrative structures, non-linear storytelling possibilities, user-generated content, participatory stories and co-creation (Rose, 2017) options. This sub-genre or niche within documentary practice has further rallied programmers, designers and media entrepreneurs around this idea that film ought to be broken up, re-assembled, made experiential and interactive.

As a practitioner of interactive media and interactive documentary in particular (*Field Trip*, 2019; *Atterwasch*, 2014; *Fort McMoney*, 2014; *The Hole Story Interactive*, 2012; *GDP – The human side of the Canadian economic crisis*, 2010), I have engaged extensively with this (relatively) new form of narration and storytelling.

Documentary making has always had this creative and mixed-media tradition, as indicated in the last section, including in the area of animation and documentary film (or animadoc, as some like to call it).

Here, the defining feature of i-docs, as I argued elsewhere (Dubois, 2018), is interactivity[4]. Although my thesis limits itself to web-based interactive documentaries, I will continue referring to them throughout this thesis simply as interactive documentaries (i-docs), the term most in use with practitioners.

1.3.3 The i-doc scene

Web studios (e.g., Upian, Urbania, Akufen, Dpt., Miiqo), were rapidly joined by traditional film production companies (e.g., EyeSteelFilm, Honkytonk, Gebrüder Beetz Filmproduktion) and independent multimedia artists (e.g., Dries Depoorter, Alexandra Sophia Handal, Vincent Morrisset) in knocking on the doors of higher education institutions (e.g., Concordia University Intermedia, i-Docs in Bristol, MIT Open Documentary Lab), public service media (e.g., Arte in Europe, Bayerischer Rundfunk (BR) in Germany, the National Film Board (NFB) in Canada, the Special Broadcasting Service (SBS) in Australia, VPRO in the Netherlands, PBS in the US), public interest media (e.g., Le Monde, National Geographic, Süddeutsche Zeitung, The Guardian), as well as film-related events (e.g., IDFA DocLab, Dok Leipzig Net Lab/Neuland, Tribeca Film Festival). Interactive documentary, as new development, has been funded by film and media funds, most of them public (e.g., CNC in France, CMF in Canada). This list of actors in the field is by no means exhaustive. It is rather meant as a selection of significant actors that illustrate the i-doc niche.

Among the pioneers of web-based interactive documentary, German artist Florian Thalhofer (*Money and the Greeks*, 2013) invented a non-linear software in the late 1990s called Korsakow. This has helped popularise i-docs in colleges, universities and artistic circles. Adopting a multiplatform approach, Gebrüder Beetz Filmproduktion (*Farewell comrades!*, 2012) and Filmtank/Interactive Media Foundation (*Netwars - Out of Ctrl*[5], 2015) from Berlin, both collaborated with story architect Lena Thiele on the first more ambitious i-doc projects made in Germany. The results were ambitious i-docs spanning several media practices: web making, book publishing, podcating, TV-feature producing.

Canada—where I am from—has had a prominent, if not leading position in i-doc production. Katerina Cizek was one of the first storytellers to embrace participatory and interactive documentary, among other with a "*multi-year*, many-media, collaborative documentary experiment" called *HIGHRISE*[6] (2009-2015). Canada is also known for its public National Film Board, and its interactive studios in

[4] The term *interactivity* merits a PhD thesis of its own, and I will touch upon some of its specific affordances in chapter 2, but it is outside the scope of this thesis to explore interactivity's deeper waters.
[5] *Netwars - Out of Ctrl* is explored specifically as a case study in chapter 4.
[6] *Highrise* is explored specifically as a case study in chapter 4.

Vancouver, Toronto and Montréal, where creatives (e.g., The Goggles, Jeremy Mendes, Vali Fugulin and many more) could develop outstanding interactive productions[7].

In France, early adopters like David Dufresne and Philippe Brault (*Prison Valley*, 2009; *Fort McMoney*, 2013) have brought the genre to new heights—including with a distinctive cinematographic language, and game elements—thanks to fruitful collaborations with, among other, pioneer narrative web studio Upian, out of Paris.

In the Netherlands, Submarine Channel has also helped advance the genre in proposing blends of graphic novel and fiction within documentary storytelling (*Collapsus*, 2010; *The Last Hijack*, 2014).

The main actors funding i-docs over the years have been the National Film Board and the Canadian Media Fund, CNC in France, Arte, regional film funds, and a flurry of journalistic or thematic foundations. Only very few interactive documentaries have found ways to monetise their content or the access to its content, even though the licencing and re-licencing model has had some minor but non-negligible successes for some projects (e.g., distribution license for *Fort McMoney* with Süddeutsche Zeitung, The Globe and Mail, and Le Monde; *Field Trip* licensed with Der Tagesspiegel and re-licensed with the Tempelhof Airport visitor centre).

Film festivals such as DOK Leipzig, IDFA, Tribeca, and Sundance, or hybrid festivals such as South by Southwest (SXSW) have played a major role not only in featuring interactive documentaries, but also actively promoting them with the help of workshops, hackathons, master classes and industry meetings. Educational and training fora such as East Doc Platform (Prague), i dw (Visions du Réel, Nyon), or !F Lab have all contributed in training several cohorts of creatives in interactive or digital storytelling.

Festivals, but also other institutions have created award categories specific to new forms of storytelling, as could be observed with the Grimme Online Awards, the IDFA Doclab Awards, the Webby Awards (and their European sister the Lovie Awards), and the World Press Photo Multimedia Award, just to name a few.

1.3.4 The rise and fall of i-docs

In a paper on the evolution of interactive documentary, Vázquez Herrero et al. offer a brief historical account of how interactive documentary practice developed, segmenting 40 years in four phases:

1) emergence (1980-1990),

[7] For a list of web experiences of the National Film Board of Canada, visit: https://www.nfb.ca/interactive/

2) experimentation (1990-2000),
3) constitution (2000-2010) and,
4) consolidation (2010-today). (Vázquez Herrero et al., 2019, p. 130)

They further indicate that at the time of writing, we might be on the brink of a fifth phase, where i-docs are getting institutionalised as part of the documentary genre (Vázquez Herrero et al., 2019, p. 130). During the constitution phase though—and I would say around 2005 more specifically—there has been a revival in interactive documentary making along web-technological lines, its "predominant base format" (Vázquez Herrero et al., 2019). By 2010, digital and web-based documentaries had turned into a trend, which would last another five years. By 2015, the trend was slowing down, and the niche that i-docs occupied started making room for what was to become the next hype: immersive storytelling, with virtual reality at its core. Since then, and particularly during the consolidation phase, i-docs have branched out to other formats and technologies such as augmented reality apps, or machine learning generated stories. By 2021, only a handful of die-hard i-doc makers continue producing browser-based i-docs, including myself.

1.4 Positioning the field of research

1.4.1 Research on documentary

The origins of the field of documentary research, as a more or less recognised research territory, grew out of literature departments in the 1970s. This has meant a predominance of narration and dramaturgy studies, explains media scholar Patricia Aufderheide in *Documentary Film: A Very Short Introduction* (2007). It is only with the advent of cultural studies, "the study of the formation of culture, with particular attention to conditions of production and reception," (Aufderheide, 2007, p. 131) that the field opened up to include the analysis of filmic traditions, production and audience related questions.

Among the first to discuss and define the documentary genre were John Grierson and Paul Rotha in Rotha's early book *Documentary Film* (1939). Other significant works were Erik Barnouw's *Documentary – A history of the non-fiction film* (1993 / 1974), or Alexander Kluge's (1983) *Bestandsaufnahme, Utopie Film: Utopie Film*—both offering historical accounts on documentary vs fiction film. Then came the more conceptual and analytical work by Brian Winston's 1995 *Claiming the real: The documentary film revisited*. In the plethora of works on documentary, there have been plenty of competing categorisations of sub-genres, including along technological lines (Marin Carrillo, 2019). Bill Nichols, in 1991, came up with four, and subsequently (2011) six modes of documentary "art":

poetic, expository, observational, participatory[8], reflexive, and performative. All of these modes can of course overlap, but Nichols' categorisation was helpful in mapping the types of relationship documentary authors privilege in constructing reality, and what understanding of audience they possess. This typology paved the way for those researchers working on specific sub-genres.

In the more historical writings, I can mention *Dokumentarfilm, 1892–2003* by Klaus Kreimeier (2004), who flips back into time to go after the changing definition of the documentary genre. Going back even further, Charles Musser recently challenged previous historical accounts of documentary practice, arguing that it is based on a 300-year-old tradition (Musser, 2020).

Looking into contemporary practice, and the multiplication of forms of documentary, Stella Bruzzi (2006) provides a good overview. She's joined by the likes of Kate Nash (2012), focusing on interactive documentary, and Mia Lindgren & Siobhan McHugh (2013) on radio documentary. Even though this overview is not meant to be exhaustive, it speaks to the fact that documentary research has been male-dominated. But it seems that the tide is turning, as literature on i-doc and more contemporary forms suggest.

Documentary research was only rarely done by documentary makers themselves, although some notable exceptions exist: author and filmmaker Harun Farocki (2015) for instance, was someone reflecting critically on his practice, on documentary making, and the power of images. In times where research-creation is emerging as a legitimate research approach, it can be expected that documentary makers will increasingly engage in scholarly work.

1.4.2 I-doc research

As we will see in chapter 2 of this dissertation, there is a relatively lively research field on interactive documentary. But in the latter, there is little in the way of research looking at how production processes relate to the notion of impact.

More recently, scholars have been theorising and engaging in research in this sub-genre of documentary, with the likes of Sandra Gaudenzi, Mandy Rose and Judith Aston at the University of the West of England (i-Docs project), Kate Nash at the University of Leeds, William Uricchio and his team at the MIT Open Documentary Lab, Matt Soar and Elizabeth L. Miller at Concordia University, or Arnau Gifreu at the University of Girona, Carles Sora and Carlos Scolari in Barcelona, to name just a few. In

[8] Interestingly, in his first version of 1991, he called this category *interactive*.

a first period, these leading researchers and their colleagues have discussed questions of taxonomies and mapped the field.

Discussions on the 'digital turn' have mainly focused on how authorship evolves to embrace multi-vocal approaches (Aufderheide, 2014), how linear storytelling is being joined by fragmented narrative structures (Nogueira, 2016) and how audiences are increasingly being assigned a role in a story (Dubois, 2018). Research has now left this space to aspects that are more specific: the evolution of interactivity in web-based versus virtual reality documentaries (Marin Carrillo, 2019), the i-doc format as a social intervention and political engagement tool (Watson, 2017), and the meaning of quality in interactive storytelling (Pavlik & Pavlik, 2017).

1.4.3 Production studies

"Production studies," Mayer, Banks, & Caldwell tell us "gather empirical data about production: the complexity of routines and rituals, the routines of seemingly complex processes, the economic and political forces that shape roles, technologies, and the distribution of resources according to cultural and demographic differences." (2009, p. 4).

The study of the practices of makers of interactive documentary is a relatively new strand in media, journalism and communications research. Science and technological studies (STS) have done substantial inroads in explaining the material objects and actors in internet and technological developments (see Epstein, Katzenbach, & Musiani, 2016). The study of the makers themselves, their expectations and the changing fabric of creative production culture, has also picked up some speed in the 2000s with the advent of publications such as the Journal for Peer-Production and the Media Industries Journal (see e.g., Loist & Prommer (2019) on gender inequality in the film sector; Noonan (2018) on producers in public service media).

When it comes to inquiries into the practices of digital film producers in the past, there is an overabundance of studies in the realm of large commercial news settings. When John T. Caldwell researched the working conditions in Hollywood's creative and film sector via more than ten years of field work, he could not have foreseen that his book *Production Culture: Industrial Reflexivity and Critical Practice in Film and Television* (2007) would become a reference in production studies. The ground-breaking publication looking at the practices and production processes in Hollywood paved the way for a decade of self-reflexive studies on media industries.

In screen production studies, often called production studies of media, or in media innovation studies (Storsul & Krumsvik, 2013), the lines of investigation are generally around operations management,

innovation cycles, design of flexible teams and units, and how collaboration can happen between departments within an institution such as a newsroom (e.g. Paulussen, 2016). In other words, most research takes a look at how to better build media products in formal institutional settings.

Already an interdisciplinary field to begin with, media and communications has seen a diversification and specialisation in smaller and more niche-oriented fields of study. Among them, the relatively young *media innovation* subfield is a promising scholarship, as it binds-in different disciplines from media history to media management, media economics to sociology, onto techno-sociological studies (e.g., open innovation). This subfield has increasingly incorporated production considerations, process-oriented findings and included the particular point of view of media makers. Paquin and Béland (2015) more specifically refer to research-creation in the realm of media for social innovation.

There are indeed lively research strands that can broadly be associated to production studies unfolding in parallel. Game development, which is not foreign to i-doc development in many respects, including when it comes to makers being involved in both segments, has been at the forefront of production studies (e.g., Nieborg et al. (2008) on non-market game developers (modders); Kerr (2017) on game production and circulation culture; Chia et al. (2020) on how platformisation changes game development). Many of these studies have included game developers in the research. Researchers increasingly have a foot in game production, or, like Phelps and University Consalvo (2020) say, many try using game development itself as a research-creation method.

Production studies can also draw on a long tradition in fields such as computer science where maker-related literature around open source technologies and hackerspaces, are plenty. This is a vast field with ethnographic research about the social techies behind the technology, such as Raymond (1999) on identity of open source culture, Braybrooke and Jordan (2017) on the diversity of production practices, including in the Global South, or Velkova and Jakobsson (2015) on open source production culture.

In the last decade, research-creation production studies have emerged around creative media in the arts, journalism, game studies and film. This relatively new research direction is starting to bring different disciplines together in journals such as *The International Journal of Creative Media Research*, or university settings (e.g., The Milieux Institute for Arts, Culture and Technology at Concordia University). Research-creation around technology is also underway, as exemplified by Khoury's doctoral thesis (2017) looking at music software production.

Although these are promising lines of enquiry, they more often than not remain disparate, operating in silos, and at the margin of the field of media and communications. Added to that, the field of media and communications has been quite focused on algorithm and data-driven communications over the last

years, in response to a decade in which the internet has been dominated by large technology platforms. The agency of actors making media innovation on a micro level has thereby either been sidelined, overshadowed or integrated.

With the study of self-initiated i-doc productions, I endeavour to fill a gap that is of particular relevance to those documentary makers and journalists who work pursuing public interest related goals. This does by no way exclude makers working in commercial contexts, but rather focuses on those individuals and teams working first and foremost in innovating in documentary, rather than seeking a business model or chasing after top-down assignments.

Media production as experienced in collectives and small agile groups or teams, such as autonomous actors navigating the media sector, is generally left for the margins. This is even more surprising as in documentary production, most makers are micro-entrepreneurs or part of small entities responsible for the bulk of artistic innovation. This discrepancy between the field of media production and the amount of academic research done on where media innovation is actually unfolding, is highly problematic. It reinforces the less innovative sectors to the detriment of the most innovative ones. There are systemic reasons for this, including low or non-existent research funding for production studies outside the quantitative norm. But there is also a field reality that makes big production workflows much easier to study in a systematic fashion. They are generally well resourced, explicit in their decision-making, thereby making it easier for researchers to gain access, and draw on existing documents.

Doing inquiries in a diversity of production cultures at the local, national and regional levels can only enrich the field of production studies and ultimately, the production landscape. It is in this stream of thought that I purport to make an empirical contribution to production studies, such as defined by Mayer, Banks and Caldwell (2009). My study is of particular interest to production studies since it uses a research-creation approach — detailed in chapter 3 — which permits to explicit and discuss the role of the researcher as both a researcher and producer *vis-à-vis* classic production studies. The priviledged access to "gather empirical data about production" (Mayer, Banks, & Caldwell, 2009, p. 4) that I enjoy as a producer is a research position that is today still underdeveloped in the larger field of production studies. Articulating this research-creation precisely is a contribution to the field.

In what follows, I engage with individual authors from the fields of media industries and production studies, including some who are regulars at the Media Industries Journal (e.g., Philipp M. Napoli (media impact and evaluation); Aphra Kerr (games studies)), but it is a fact that the main anchorage of this study with production studies is at a methodological and empirical level (see previous point on research-creation), as well as on the framing itself, where I share the foundational notion of production studies that sees *production as culture* (Mayer, Banks, & Caldwell, 2009)

I could have chosen to engage more strongly with the cultural studies tradition, a subset of the field of media and communications, and a close friend to production studies. Cultural studies is a particularly rich field in which I could for example have explored the "circuit of culture" theory (du Gay, 1997), which suggests that when you study a cultural artifact you must look at five aspects: its representation, identity, production, consumption and regulation. Yet, since my doctoral study limits itself purposedly to exploring the production-related aspects in depth, as opposed to different logics of reception—like successfully argued in cultural studies—I have opted for not framing it as part of this otherwise fertile tradition. Yet, the reception and policy levels cannot be ignored, especially when one seeks to offer an all-encompassing study of impact. In many regards, the next chapters touch upon reception (see ch. 4 and 5) and policy (see ch. 5 and 6), as I do not seek to exclude these aspects from my view, but I do not engage with them systematically like in classic cultural studies. This has to do with the nature of the study, which relies on a maker's perspective during the production and only the beginning of distribution of an i-doc. I recognise this as limitation of my thesis and at the same time stress the need to focus and deepen the aspect of production specifically.

1.5 Why i-doc practice and why impact?

My focus lies on the specific form of interactive web documentaries, although the findings of this thesis are exportable to other interactive media such as serious games, factual augmented reality, narrative virtual reality and other forms of digital storytelling.

It is in this context that I propose to bring some of the challenges from my decade-long involvement as a practitioner together with the current state of research. Put in more specific terms, I propose to delve into one aspect of interactive documentary making that just a handful of scholars is tackling: the question of the *societal impact* of interactive media, and interactive documentary more specifically. In the field of research on science, Holmberg et al. (2019) position *societal impact* as an "umbrella term to cover all types and forms of impact that research can have at different levels and areas of the society" (p. 3). I am adapting this general definition to the field of media production and referring to it for the remainder of this thesis: *societal impact refers to all types and forms of impact that digital media production has at different levels and areas of society*. This definition, leaning on Holmberg et al.'s one, implies that the societal impact of i-docs is a form of compass that draws us in and invites us to look at more detailed types and forms of impact. At the risk of sounding too vague to some, this definition has the advantage of being inclusive, i.e. an open invitation to avoid a quantitative shortcut and to embrace a diversity of indicators.

On the practitioner side, it is true that grant committees within public funding agencies, public broadcasters or foundations, as well as juries within the interactive documentary festival circuit have in many cases developed criteria for evaluating digital storytelling productions. But never have they looked exclusively at the larger societal impact, nor have they published an index or set of criteria encompassing impact measurement. In 2014, the Open Documentary Lab at the MIT ran a first workshop on *How to measure the impact of interactive documentary*[9]. The Tribeca Film Institute went as far as to create a working group[10] around that very question, again composed of practitioners. Since then, very little literature has been generated and very few advances have been registered. This is specifically where I see room for this thesis.

The community-of-practice has most often been struggling with this question of measurement. Certain interactive documentary makers and media outlets are eager to successfully publish their works in maximising the number of eyeballs flocking to desktop, tablet and smartphone screens. But this is only one aspect. **It is my thesis that the most important impact of an interactive documentary resides not in the quantitative but the qualitative results**. In that idea, I am asking what the qualitative aspects are, that these actors are looking out for. Leading from that, I am interested in finding out the granularity of the main qualitative indicators.

The reason why impact is such a central notion is because it reflects the ethics, culture and values that can be drawn from the production of digital documentary processes. Further, impact can best be extracted from a critical analysis of the changing *impact expectations* that makers explicit during the production process. Impact expectations enable creators to make a claim. It says something about their behaviour, while also establishing the normative aspects, meaning the value that creators see in certain criteria over others. The evolution of the larger aims and goals of producers over the production lifespan, in accordance with the ever-changing constraints and opportunities inherent to any production, provide valuable information on the motivation and intent with which the makers create media.

The other reason why this doctoral dissertation takes up the challenge to disassemble the notion of impact, is because both in media practice, as in conceptual work, media impact is often referred to out of context. Some use it rhetorically to sound serious, others use it in a quantitative manner only, without any consideration for the qualitative aspects. Others again consider the psychological impact rather than a psycho-social impact or the impact on democracy. By better contextualising and detailing the notion of impact with the help of applied knowledge, I will offer a reference point: a typology of impact rooted in experience and critical of conventional media measurement. This typology (chapter 5) might help

[9] For a short account of the workshop, please visit: http://opendoclab.mit.edu/measure-impact-interactive-documentaries-david-dufresne
[10] See http://sandbox.tribecafilminstitute.org/impact

funders, media entities and other parties to the production process develop sensitivity towards a diversity of production cultures.

Criteria for assessing the value and impact of an interactive documentary specifically only exist in fragments (see for example the statutes of the Grimme Online Award[11]). Yet, claims and decisions on what has impact are continuously being made by external judges, with decisive consequences for the production or distribution of web-based offerings. Also, I have personally experienced, like many i-doc makers and other creatives before me, the difficulty of getting clear answers on why a project was funded, selected or decorated, while others weren't. By clearing the skies over the notion of impact, I hope to raise awareness and induce transparency around the *life-and-death* decisions that affect i-doc producers.

1.6 Aims and research questions

Beyond aiming at reviewing and, to a certain extent, preserving the cultural practice of i-docs in general, and *Field Trip* in particular, this thesis sheds light onto an existential aspect of i-docs: their relevance in terms of cultural practice, as accounted for by their societal impact.

The larger research question I am pursuing is: **how to account for the societal impact of interactive documentary**, as much from a theoretical reflection as from a maker's understanding?

My research investigation will hopefully contribute to the cultural production landscape in the arts, in film, and in journalism, by proposing a framing for evaluating interactive documentary productions going beyond technological deterministic impact measures. This is also an attempt to complement common impact criteria largely defined by the dominant vision of one group of actors (funders, media, festivals and award-giving institutions), with that of makers of i-docs.
By identifying the main blindspots in impact studies and current impact models (chapter 2), my aim is to build on previous scholarship in order to propose a complementary (as opposed to comprehensive) impact framework in chapter 5. This expanded model is to be understood as an addition to existing models by offering a fresh take on digital documentary and putting more emphasis on the production process as such.

[11] Statutes are in German only: https://www.grimme-online-award.de/ueber-den-preis/statut/

1.7 Contribution

With this research-creation doctoral dissertation, I attempt to make three contributions to research and practice.

First, I hope to **enrich the i-doc research field**, which after ten years in a definition and typology phase, has matured over the last four years into a field where more precise questions are being asked, including on the impact of storytelling. On the production of interactive documentary, there are quite a few new subfields to be developed. I hope to contribute by enlarging our understanding of impact and ultimately, of cultural value.

Second, I hope to contribute to **media innovation research** by providing pointers on how media innovation with societal impact can best be sustained moving forward.

Third, I hope to contribute to **production studies** and the film, video game and journalism production landscapes by proposing a reframing of the way in which interactive productions are evaluated. Media evaluation is increasingly being debated in journalism, with initiatives trying to defeat the simplistic measure of *reach* that stories might have and moving towards indicators of how to "build relationships with the publics who care about our stories" (Ford, 2016). In not too distant sectors such as the video game sector, quite a few organisations such as Games for Change or Game Analytics are delving into fine-grained metrics that help game designers integrate what they call impact measurement to their initial game design. As these parallel discussions are taking place, I believe that my doctoral thesis will be of use not only for the field of film, but also online journalism and the video games sector.

Summing up, by accounting for the views of all parties to the production and distribution process—rooted in a real-life production with currency, I aim to contribute to i-doc research, media innovation research, as well as production studies and practice.

This, I hope, will help bridge impact expectation discrepancies between actors in the field and thereby contribute to enhancing innovation in future productions. In the long-term, I hope that this thesis will make the case for a change in cultural policy when it comes to interactive storytelling, so that it be recognised—at par with video games—as a cultural good.

1.8 Form and structure of the dissertation

This dissertation is organised in six chapters.

Chapter 1 introduces interactive documentary as the object of study, including the cultural production context in which it is embedded. It permits me to establish hypotheses, that I pursue in the subsequent chapters.

Chapter 2 in the conceptual chapter. This is where I present the sequence of my doctoral journey, followed by a literature review of interactive documentary, the key concept of media innovation, and the notion of impact. I end chapter 2 by identifying a blind spot in literature around impact expectations of i-doc producers.

Chapter 3 is the methodological chapter. In that chapter, I detail my specific research-creation strategy, and the methods employed to collect data and to analyse my findings.

Chapter 4 is the fieldwork chapter. This is where I revisit interactive documentary *Field Trip* with a thick description, including interview results with three team members. In the second part of the chapter, I complement the main case study with three perspectives by makers involved in three different i-docs, thereby offering three secondary case studies.

Chapter 5 is the chapter in which I present my findings and discuss them on the basis of my hypotheses, research questions and conceptual elements from chapters 1 and 2. The discussion permits me to establish a societal framework of impact, meant to inform theory and practice.

Chapter 6, as the concluding chapter, is where I go back to answering the larger questions raised in chapter 1, including on the cultural value of digital storytelling. I also situate the contribution of my thesis for production studies and the field of media and communication.

CHAPTER 2 - Theoretical perspective & conceptual framework

2.1 Theoretical perspective

2.1.1 Research-creation point-of-view

My lens is twofold: that of a practitioner and that of a researcher, or rather: a practitioner-researcher. This twofold lens is precisely what this research-creation doctorate purports to accomplish: to treat a research question in both scholarly and artistic fashion, and to relate the two approaches, so that they cross-pollinate.

In a film camera, every lens needs to be calibrated so that it renders a clean image. In research-creation, there is a risk of inaccurate focus and subsequent "blurry images". It is therefore important to understand that the academic performance on the one hand, and the artistic one on the other, needed to be brought into play at different moments, representing different phases of this doctorate.

My research journey started with a doctoral exposé—a ten-page document detailing my object of study, and my main research question. Initially, the research question was based on my practitioner's experience as an interactive documentary maker. It was subsequently transformed in response to initial literature research, including more precise terminology. Thus, the impulse behind this work was driven by practice, but the research focus was developed according to conceptual work done by media and communication scholars (see subsection 2.2 for more detail).

By the time I entered the research-creation doctoral programme at Film University Babelsberg *KONRAD WOLF* in April 2017, I had started my art work. Using the camera analogy, one could say that I calibrating the practice lens first. With an independent team of makers, I engaged in the production of interactive documentary *Field Trip* in the capacity of co-author and interactive producer, as mirrored by a thick description of *Field Trip* (see chapter 4). This effort was mainly informed by my then ten-year practice as an i-doc maker. Even though the creative practice was most prominent during the i-doc production phase (April 2017 to May 2019), the interlocking of theory and practice was becoming more intense as I started engaging with literature. This was particularly the case with academic papers I wrote, and scholarly events I participated in (see Table 1.1).

Table 2.1 Research output

Title	Type of activity	Context	Date (of publication) & URL
Interactivity as a key feature redefining documentary reality	Paper (peer reviewed)	Special issue: Docufiction *Images. The International Journal of European Film, Performing Arts and Audiovisual Communication*	30.03.2017 https://pressto.amu.edu.pl/index.php/i/article/view/12574
Measuring impact: methodologies	Panel participation	Panel: Unpacking Impact *i-Docs Symposium 2018*	23.03.2018 https://idocs2018.dcrc.org.uk/sessions/unpacking-impact/
Docmedia	Workshop curation	Workshop: *Docmedia - Exploring docmedia production through the lens of web-based and virtual reality technology* Film University Babelsberg KONRAD WOLF	21-22.06.2019 http://docmedia.projekte-filmuni.de/workshop/
Notes on impact	Book chapter (peer reviewed)	Book: *Interactive Documentary in Canada* McGill-Queen's University Press	Forthcoming, expected 2021 No URL yet
Media innovation and social change	Workshop participation	*Department of Media and Communication* University of Oslo	18-19.01.2019 https://www.hf.uio.no/imk/english/research/center/media-innovations/events/2019/Media%20Innovation%20Worshop_JOMI_2019.html
Media innovation and social impact: the case of living documentaries	Paper (peer reviewed)	*The Journal of Media Innovations* University of Oslo	06.03.2020 https://journals.uio.no/TJMI/article/view/7831

Table 2.1 Research output listed in chronological order, according to the activity's delivery date. Source: by the author.

Apart from these significant research outputs, I shall mention early presentations of my research project, when I was still testing the very idea behind this thesis. These included case study in a session called 'Measuring Interactive Docs' on 26 October 2017 at CILECT, the annual congress of the International Association of Film and Television Schools (ZHdK, Zurich). On 30 October 2018 I took part in the panel "DR. KUNST!" together with other PhD researchers at the 23rd Transdisciplinary Colloquium of the *Institut für künstlerische Forschung* (IKF), Film University Babelsberg *KONRAD WOLF*. My talk was entitled 'The Impact Factor. How to Measure the Societal Impact of Interactive Documentary'.

During each of these formative steps, I was able to gather and test theoretical frames and concepts about interactive documentary, impact and media innovation. Academic peers and reviewers were instrumental in confronting my ideas, questioning pre-conceptions and pointing me towards new literature. During this two-year period, my main focus remained on the creative practice, as it required me to invest time in ensuring that as a team, we professionally produce the i-doc *Field Trip*. Although my researcher lens might not have been not fully calibrated during that production phase, I was able to translate some of my research findings, including on long-term and societal impact, to my practice. This reflexive action, also called *theory-in-practice* (Norris, 2012) was for instance present when designing interview questionnaires, interviewing colleague-practitioners and informally discussing media *impact expectations* with funders, partners and other stakeholders to the production process.

May 2019 marked the closing-off of the intense production and post-production phase of the i-doc *Field Trip*. This is when *Field Trip* was released as part of a media partnership with daily newspaper *Der Tagesspiegel* (13 May 2019). In production terms, this moment marked a clear shift from production to distribution. In research terms, they meant dedicated focus on document and desktop research, allowing for a distance *vis-à-vis* my object of study.

The act of writing (see chapter 3) was key to progressively pushing *Field Trip* aside. *Field Trip* took the shape of a case to study, while up until then, I perceived it mainly as a production. The autoethnographic approach (again, see chapter 3) that informs my research point-of-view, requires that one switches between modes of practice and theory and protects the researcher so that he/she can gain a healthy distance from practitioner-colleagues, and the advocacy tendencies of a producer fighting for "his production".

In sum, my point-of-view changed over the course of this research. By and large, I performed the artistic and the research efforts in different moments. Coming back to the camera analogy: both lenses were there at every moment, but only one was in absolute focus at every given time. During the intense phase of production, my researcher point-of-view would cling on to key workshops, papers and panels to sharpen the analytic eye and complete the literature review. During the intense phase of research, my

practitioner's eye would focus on low key distribution, including social media "maintenance work", partnerships crafting, film festival and award submissions, and screening outreach. These clearly demarcated moments have provided the "swift dialectical shifts between theory and practice," that Aston, Gaudenzi, and Rose are referring to in the context of i-docs (2017, p. 3). These constant shifts were essential for stricking the research-creation balance needed to write this thesis.

As we will see in more detail in subsequent chapters, what distinguishes *Field Trip* from a third-party case study—beyond the fact that I am a much better-informed researcher—is that as a researcher I was able to experience by doing media, meaning that in this i-doc, I was one of the creative leads experimenting and pushing the boundaries of the *impact through openness* motive (see chanpter 4) that as a team, we were pursuing. This first-hand experiential knowledge is what my research-creation point-of-view enabled.

Within the disciplinary confines listed below, my perspective is more specifically a problem-solving one, adhering to the precepts of the subfield of film production, which are interested not only in the larger implications of media, or the media product itself, but the process of production. Unlike most production studies in the realm of media industries research, my own perspective is locating my research outside the media industry paradigm and closer to theories of cultural value. This is due to the fact that I see my object of study as positioned outside the straightjacket of industry, and rather in a hybrid cultural production space described in this chapter.

2.1.2 Disciplinary background

In terms of my disciplinary research background, I am looking at the i-doc phenomenon from a communications' scholar perspective. In communications, the researcher looks at how humans communicate and how this process or act of communicating influences the world. Over the last fourty years, the discipline has progressively taken on critical theory to tackle the question of how communication creates social change. Starting with my Master's thesis on alternative media and the Internet (Dubois, 2005), I progressively included a critical and feminist perspective, largely influenced by researchers such as Nancy Fraser, with her notion of counterpublics (Fraser, 1990).

My approach within the field of communications is further informed by my early background in management studies. While doing my Bachelor of commerce in the late 1990s, I acquired knowledge on the principles and practices of basic administration (accounting, finance, marketing, governance, group and institutional organisation, project management). This period has particularly taught me skills and techniques that would be decisive in media production, and tie-in directly to production studies. At that time of rapid development of information and communication technologies (ICTs), all of these

subfields where being pressured to adapt to the digital shift. The Internet and even more so the World Wide Web where of particular preoccupation. This is reflected in my Master's thesis, where the question of how community media adapt to the Internet, is central.

Interestingly, although I did not formally study Internet science, I would still argue that my disciplinary background is modelled and influenced—particularly when it comes to research methods—by Internet research. Having worked for four years for an international NGO specialised on Internet rights,[12] publishing grey literature on Internet access, Internet privacy and human rights and the Internet, has further sharpened my understanding of that technology from a critical point of view. This was further reinforced (and continues to be) by my role as managing editor of *Internet Policy Review*[13], an interdisciplinary scholarly journal on internet regulation. Now in my tenth year in that capacity, I sophisticated and perfectioned the previously self-schooled Internet research and writing skills, among other by editing more than 300 peer reviewed academic papers at the time of writing.

While the home of my disciplinary background is firmly anchored in the discipline of communications and media studies, the influences from the fields of management, critical studies, and internet science are everywhere to be found. It is thereby no accident that this doctoral thesis on web-based i-docs is being developed in the context of production studies. While film studies in general is less concerned with advancing proficiency in film production than it is with exploring the narrative, artistic, cultural, economic, and political implications of cinema (Dyer, 2000), production studies do both. They critically explore wider implications of film—like here on the cultural value of i-docs—but by the same token offer very concrete ways in how to ameliorate production practice.

Moreover, "political and economic sciences often focus on the macro level of society, politics and economy or on specific organisations by analyzing, for instance, issues of governance or the management of innovation," as expressed by Hutter et al. (2018, p. 14). In communications, media and Internet studies, it is much more common to enrich the macro level "by the specific micro level of creative and innovative action" (Hutter et al., 2018, p. 14). Then, like today, my background commends to critically assess, so as to make sense of media practice. My research-creation approach, thus, combined with my interdisciplinary background directly echo the affordances of production studies.

[12] Association for progressive communications (APC): https://apc.org
[13] *Internet Policy Review*, published by the Humboldt Institute for Internet and Society, is available in open access: https://policyreview.info

2.2 Conceptual framework

Now that I have described my specific point-on-view in the first part of this chapter, the conceptual framework will be the part in which I introduce the key concepts and notions for analysing i-doc production practice.

2.2.1 Cultural value

The value I am referring to here is not the *production value*. In Hollywood talk, the production value refers to the quality (more often than not the technical quality) of a motion picture as compared to similar productions. In this view, a high production value would in theory be induced by high investment in the method, material, or stagecraft skill of that production (Miller, 1994).

I am also not hinting at the monetary value. The latter would imply a business model where a financial return-on-investment can be secured. The interactive documentary niche is here quite similar to documentary production, or the arts and journalism in general, where there is close to no established market-driven model. Or in more blunt terms, the arts are a case of "market failure", as was first posited by Baumol and Bowen (1966), explained by Peacock (1997), and further developed by economists Throsby and Withers (1979). Throsby and Whithers went as far as to try to put a price tag on the less tangible values: "We argued that art has its price: for those producing it, for those consuming it for their private enjoyment, for those making voluntary donations to support it, and for those required to contribute to it by way of compulsory taxation" (Throsby, 2003, p. 276). In the case of i-docs, the *monetary value* as expressed above, is low. There is a price for those producing it (and I will get back to this below), for those donating to support it or for the citizens being compulsorily taxed. This is absolutely correct and it is useful to see economists representing this price so as to close-in on expressing the value of an i-doc. But the monetary value refers to the sole material value, falling short of engaging with something broader: *cultural value* (Holden, 2004, 2006).

In a 2004 report by the think tank Demos, entitled *Capturing Cultural Value*, John Holden (2004) builds on scholarship by cultural economists of the likes of David Throsby to point at the discrepancies between UK politicians and cultural workers in how to attribute value to culture. Just a year prior to the Holden report, Throsby had written:

> *Although there are aspects of cultural value that cannot be expressed in monetary terms, this does not imply that the implicit cultural value assigned to a cultural good in an economic study is zero. Rather it is to say that we are talking about different metrics, and although there is likely to be a broad correlation between them across a range of cultural goods, it is quite possible in specific cases for low economic value to be associated with high cultural value and vice versa.* (Throsby, 2003, p. 280)

This raises the question if i-docs are such *specific cases of low economic value, associated with high cultural value*. My research-creation journey is trying to identify different criteria for approaching this question of larger value of i-docs. By getting to the bone of the cultural value of i-docs, I argue that we can establish whether they have a role to play as cultural artefacts, and more importantly from a production perspective, a role to play moving forward.

Holden's model lists three types of values that are created by culture: intrinsic, instrumental and institutional. The *intrinsic value*, he argues, "is located in the encounter or interaction between individuals (who will have all sorts of pre-existing attitudes, beliefs and levels of knowledge) on the one hand, and an object or experience on the other" (Holden, 2006, p. 15). Holden draws on Throsby's characteristics of cultural goods. These include "their aesthetic properties, their spiritual significance, their role as purveyors of symbolic meaning, their historic importance, their significance in influencing artistic trends, their authenticity, their integrity, their uniqueness, and so on" (Throsby, 2003, p. 280). These are "a good starting point, because they break down a nebulous concept into more manageable terms expressed in everyday language" (Holden, 2006, p. 16).

The *instrumental value* relates to the "ancillary effects of culture, where culture is used to achieve a social or economic purpose. This kind of value tends to be captured in *output*, *outcome* and *impact* studies that document the economic and social significance of investing in the arts" (Holden, 2006, p. 16). Holden does emphasise that "the problems of *capturing* these outcomes are well documented" and goes on by listing four main limitations:

- *Establishing a causal link between culture and a beneficial economic or social outcome is difficult because of temporal remoteness, complexity of the interaction, the context in which it takes place, and the multiplicity of other factors impacting on the result.*
- *There is little in the way of longitudinal evidence to support correlation between culture and its effects because cultural practice, the context in which it takes place and policy goals are constantly shifting.*
- *'Evidence' is often confused with advocacy.*
- *It is virtually impossible to prove that, even if a cultural intervention works, it is the most direct and cost-effective way of achieving a particular social or economic aim*. (Holden, 2006, pp. 16-17)

Finally, Holden mentions that the third type of value, the *institutional* one, is "akin to the idea of *public value*. Here, Holden builds on previous research by Mark H. Moore (1995), later expanded on by Timo Meynhardt (2009), where emphasis is put on how an institution or production entity contributes to or impacts the common good. In this regard, makers and distributors of i-docs are seen as "creators of value in their own right" (Holden, 2006, p. 18). But just how institutions add value is what still remains largely unspecified. "Institutional value is evidenced in feedback from the public, partners and people working closely with the cultural institution" (Holden, 2006, p. 18).

Holden's framing of cultural value is useful to this study since it provides the context in which the notion of impact is embedded, i.e. impact and impact expectations are part of the instrumental values of culture. In other words, Holden helps me delineate the contribution of impact within larger cultural value. The other significance of Holden's work is that it labels characteristics of cultural goods on which I draw in the subsequent section reviewing literature on interactive documentaries (see Table 2.1 specifically, for which Holden's points have been used), as well as when zooming out of the strict impact discussion and broadening to the larger cultural context. Thus, cultural value is the umbrella concept to which I hope to contribute. I will mainly get back to this larger framing in the analysis of my findings (chapter 5) and more so in chapter 6.

Within the realm of cultural production, there are different *regimes of value*, as Appadurai (1986. p. 4) would call them. Some regimes are market-driven, others commons-driven, and most are in-between. As Velkova and Jakobsson argue, products and producers move between Appadurai's regimes of value "and what, in other literature, has been discussed as 'systems of belief' (Bolin, 2009; Bolin, 2011; Bourdieu, 1993)" (Velkova & Jakobsson, 2015).

When assessing the impact of a cultural production on society, a community, or an individual, it is useful to acknowledge the general type of cultural production by identifying the regime of value behind it. But regimes of value only provide a rough orientation, which does not go far enough. We need more reliable or at least reproducible criteria. I will come to expand on these criteria later in this chapter (see section on impact). Before doing so, I would like to offer a conceptual definition of interactive documentary, including some of its common characteristics.

2.2.2 Interactive documentary

In chapter 1, I have provided the context around i-doc practice, insisting on the fact that I am specifically looking at web-based interactive documentaries in the fifteen-year period spanning 2005 to 2020. I have further mapped the field of research *around* i-docs, and am now zooming-in *on* this micro-field. This will permit me to highlight how scholarship defines i-docs and ensuing from this, what the main characteristics of i-docs are.

Scholarship on interactive documentary, while limited in scope, has been relatively dynamic during and immediately following the heyday of the genre, i.e., from 2009 to 2014. This can be best observed by the rally of academics working on digital and interactive storytelling around the I-Docs Symposium in

Bristol, UK—at the intersection of practice and theory (I-Docs, 2018). The number of delegates doubled between the opener in 2011 (120 delegates) and the last edition in 2018 (240 delegates).[14]

In the realm of documentary, interactive documentary is still a recent—albeit a currently declining—opportunity for documentary makers and online journalists to tell their stories and publish their findings (Mundhenke, 2017). Topics covered in interactive documentaries are often of high social relevance and great complexity.[15] But where they differ from their "classic" counterparts, is on their modalities. "I-docs are often designed as databases of content fragments, often on the web, though not always, wherein unique interfaces structure the modes of interaction that allow audiences to play with documentary content," states Siobhan O'Flynn (2012, p. 143). "The story or stories are encountered as changeable non-linear experiences, the narrative or storyline is often designed as open, evolving and processual, sometimes including audience created content" (O'Flynn, 2012, p. 143).

Stefano Odorico specifies that "interactive documentaries are characterised by the presence of distinctive recurring elements, including intuitive menus, maps, timelines, video clips, hyperlinks, forums, and direct connections to social networks" (Odorico, 2016, p. 215). But the glue among these interface elements is interactivity. "What we refer to as 'interactive' are audiovisual texts being presented in a variety of digital formats designed to offer active participation and emotionally immersive experiences (see Murray, 1997). Many of these projects demand exploration, participation and interaction while being « watched »." (Odorico, 2016, p. 215). This interactivity can be called "old dad's or grandad's interactivity", like documentary maker Frédéric Gonseth would say, when referring to binary branched narratives (F. Gonseth, personal communication, September 11, 2020), and more sophisticated forms using advanced technology, including machine-learning.

In an early attempt to capture the types of i-docs that exist, Dayna Galloway, Kenneth McAlpine, and Paul Harris wrote a paper called *From Michael Moore to JFK Reloaded: Towards a working model of interactive documentary*. There, they developed four categories of interactivity in i-docs: *passive*—where a user's decisions are treated in the background and determine the *parcours* in a story; *active*—where the user consciously chooses between options in a story; *immersive*—where the user experiences the documentary environment first hand; and *expansive*—where a collaborative environment places the user in a mass experience (Galloway, McAlpine, & Harris, 2007, p. 325). In their respective PhD theses, Sandra Gaudenzi (2013) and Arnau Gifreu Castells (2013) come up with competing categories. These

[14] The 2020 edition was cancelled due to the Covid-19 pandemic. All figures mentioned were provided via e-mail on 21 and 28 August 2019 by the Digital Cultures Research Centre (DCRC) at the University of the West of England.
[15] For more on evolving practices of interactive documentary, see *I-docs* edited by Aston, Gaudenzi, and Rose (2017).

were in turn operationalised and discussed by Vázquez-Herrero, Negreira-Rey, and Pereira-Fariña using ten prominent i-doc examples in a paper published in 2017 (Vázquez-Herrero, Negreira-Rey, & Pereira-Fariña, 2017).

One of the leading researchers on i-docs, Sandra Gaudenzi, has coined the term *living documentary*, which she defines as "an assemblage composed by heterogeneous elements that are linked through modalities of interaction" (Gaudenzi, 2013a, p. 26). This notion of "living" places the emphasis on the relational nature of i-docs. Gaudenzi further speaks of living documentaries "as dynamic entities that co-emerge while they live through the interactions with the Internet, their users, subject, producers, or any acting entity" (2013, p. 26). A few years later, in a book capturing many different practices of interactive documentary making, Gaudenzi and colleagues deliberately advance a more open-ended definition. "We embrace any project that starts with the intention to engage with the real, and that uses digital interactive technology to realise this intention" (Aston, Gaudenzi, & Rose, 2017, p. 1).

The genre has since been defined in many different shades and colours as technology progressed and artistic directions evolved. Although this discussion on how to best designate these forms of documentary would merit an in-depth exploration, I consider this to have been largely done in i-doc scholarship (see O'Flynn, 2012; Gaudenzi, 2013; Gifreu Castells, 2015; Wiehl et al., 2016; Figl, 2019). I adhere to Gaudenzi's notion of *living documentary*, but will continue using the more generally accepted term from praxis, interactive documentary (or i-doc), for the remainder of this thesis.

Based on the definitions and characteristics mentioned in i-doc literature above, and practice-based elements from chapter 1, I am moving beyond the exemplary, by identifying what i-docs have in common. By looking at these analytical categories, it is important to keep in mind that there is no clear-cut recipe for designing an i-doc in the dynamic and advanced media sector that we are in. I am thus proposing a set of baseline characteristics that are most often, but not always, present in interactive documentary. These represent only a common denominator and should serve as the first contribution of this thesis. Table 2.2 is separated along a product and process split in recognition of the fact that i-docs are not solely a product, but a processual (see O'Flynn, 2012) media creation. This processual side is further underlined in media innovation literature (see 2.2.3.2 below).

Table 2.2 Common characteristics of interactive documentaries

I-doc as object	I-doc as process
Author point-of-view	Interdisciplinary team
Unique interactive interface	Audience design from the start
Browser-based	Iterative workflow between 'cinematographic' and 'interactive' makers
Collage of heterogeneous fragments	Experimental/innovative production setting
Delinearised and modular narrative	User as co-documentor
Participatory functions	Unconventional partnerships
Interconnectedness (hypertextuality)	Recursive testing

Table 1.2 Common characteristics of interactive documentaries. Source: the author, on the basis of literature and practice.

2.2.3 Interactive documentary production as media innovation

In chapter 1, I was able to offer an introduction to interactive documentary and situate this practice as part of documentary's track record on innovation. Here I attempt to go more in depth on the notion of *media innovation* and offer a granular understanding of dimensions of media innovation that apply to i-docs. This media innovation discussion is important to understand the context in which i-docs are produced and with what challenges and opportunities makers are faced.

2.2.3.1 Profit-oriented bias in media innovation

Discussions about media innovation in the media sector are generally market-driven. The general assumption is that "the media" is an industry with underlying profit-oriented imperatives. This has to do with the fact that many technological innovations need startup and investor money. They tend to "speak louder" than their nonprofit, public interest or social entrepreneur counterparts—where documentary resides.

Following from the above, it would be easy to affirm that the profit-oriented bias in the media sector is what conditions scholarly literature on media innovation—where such a bias exists as well. But in my reading, the bias goes back to the origin of innovation research, which developed as part of the field of economics and "the advent in the theoretical work of Schumpeter (1934)" (Dogruel, 2014, p. 52). Even though in economics, a market can be for-profit, as much as non-profit or barter, the language employed in media innovation literature is more often than not that of profit-oriented commerce.

Krumsvik et al. for example almost entirely limit their analysis to commercial discourse: *disruption* and *radical innovation* (2019, pp. 194, 197)—when talking about long-term change brought about by media innovation. They do include the notion of social innovation (2019, p. 196) and discuss the importance of accounting for socio-cultural factors and power relations (2019, p. 201), but they stop short of developing a more differentiated market paradigm, as if the study of innovation was the sole domain of commerce.

A trace of this bias, to take just another example, can be found in Hawkins and Davis' writing (2012). These authors make a true contribution to innovation studies by exploring so-called *experience goods* (and services). In their understanding of an experience good—for which most media goods qualify—the duo posits that their "value is determined largely or entirely by subjective and non-rational factors that are difficult to accommodate in the established framework of innovation theory" (2012, p. 1). This view is corroborated by Ángel Arrese Reca, who argues that media are both economic and cultural goods with multiple socio-cultural impacts (Reca, 2006, pp. 184-186).

Hawkins and Davis offer a broader understanding of the *value* that is created by innovation and they do so by distinguishing between *hard* and *soft factors* of innovation. Although I distance myself from this reference to soft vs hard—making one factor appear less solid or grounded than the other—I welcome the intent to distinguish between factors to begin with. Further drawing on Gallarza et al. (2011, p. 179), they state that "the challenge has been to unpack hedonic value in order to yield a multidimensional set of value constructs that would encompass utilitarian as well as other kinds of perceived value" (Hawkins & Davis, 2012, p. 249). The authors clearly expand Schumpeter's innovation typology, specifically by hinting at "subjective and non-rational factors", but limit themselves to unpacking the so-called *hard factors*. They stay within their neoclassic economic compound.

When looking at media innovation in the public and nonprofit sectors, and particularly at innovative long-form journalism, film and games, some academics like to refer to an *open-source* and/or a *commons-based* production logic (Velkova & Jakobsson, 2015). As demonstrated in the Velkova and Jakobsson article however, the 'market vs. commons production lens' does not really stick with the reality of open digital production (2015, p. 16). This was already recognised by Gabriella Coleman who in 2013 wrote: "By focusing on dichotomous relationships at the macro-level, previous studies have often ignored the organizational sociologies of free and open-source software and thus failed to understand the often mixed and conflicted ethics, politics and economics of open production" (Coleman, 2013, p. 207). In the realm of documentary, innovations are often non-commercial by nature, but as already pointed out by Velkova and Jakobsson (2015, p. 16) above, products and producers "move between 'regimes of value'" (Appadurai, 1986, p. 4). I thus propose to leave behind the false and binary

opposition of a commercial vs non-profit production to better concentrate on the search for Hawkins & Davis' *hedonic value*.

The tantamount question is not whether media innovations are for-profit or not. I have argued above that they can be of non-profit, public or commercial nature. Here, I need to specify that the value of public goods is what called into being public service media such as public broadcasters and platforms, as well as public funding of media productions. This is granted, especially in the German context, where "the annual revenue from licence fees is approximately €7.6bn, with an additional €500m raised from commercials, giving Germany one of the largest public broadcasting budgets in the world" (Guardian staff, 2015). But the mere existence of a large public broadcasting service does in no way guarantee in practice that i-docs as public goods will get their fair share of recognition and be nurtured by this public media service. In fact, I am arguing that quite the contrary is happening and that there is a discrepancy between the mandate of public funding agencies and public service broadcasters and what is percolating on the ground, especially for independent productions.
The question is therefore whether public funding mechanisms are adequate to trigger media innovations that possess cultural value and qualify as public goods. By answering this question, it should be possible to establish whether cultural and economic value are aligned, when it comes to i-docs.

In this subsection, I did three things:
1) I acknowledged the existence of a commercial bias in media innovation literature,
2) I introduced the fact that the value inscribed in media production is multidimensional and that this has implications for understanding the context in which interactive documentary comes about,
3) I have deducted that what matters is that funding mechanisms are in place for non-profit media innovations to sustain themselves.

My goal, in the next section, is to accurately situate interactive documentary production within media innovation literature.

2.2.3.2 Dimensions of media innovation

In a paper published in January 2020 media scholars Arne H. Krumsvik, Stefania Milan, Niamh Ní Bhroin and Tanja Storsul state that "a key to understanding innovation is that existing knowledge is implemented in new contexts and that this opens up new possibilities" (Krumsvik et al., 2019, p. 194). Further, when applied to their field of study, they specify that "media innovation can include change in several aspects of the media landscape – from the development of new media platforms, to new business models, to ways of producing media texts or genres" (Krumsvik et al., 2019, p. 195).

Interactive documentaries do not *per se* carry newness. Indeed, one would be well-advised not to make a false adequacy between digital and new. Carolyn R. Miller (2016) distinguishes between the notions of *emergence* and *evolution*, where emergence is closer to a genuine innovation and where evolution is the incremental sequence within a given genre. She consequently speaks of *genre innovation*. In the field of documentary film, classic linear documentaries that are put online are in my understanding clearly an evolution in how documentary film is distributed. Yet, they in no way present a media innovation. When we look at interactive documentaries, as compared to the former, I argue, based on Miller, that they are an *emergence* that innovates the way in which documentary material is not only consumed, but also produced. They are thus part of a genre innovation.

Further, interactive documentaries, taken together, are close to the concept of media innovation as defined by Dogruel when she writes: "a concept of media innovation needs to distinguish media innovations from routinely produced media products such as a new film, a new book or another episode of a TV show, and focus on those new products and services that include considerable changes with respect to design, functions and use modes" (Dogruel, 2014, p. 55). When the i-doc niche started to come about, radical changes were indeed observable in terms of form and function, from split screen designs to Adobe Flash worlds mixing-in with user generated videos and audio files. Subsequent forms of i-docs could propose ever new ways for users to interact with the documentary material over time. These changes and new assemblages were not just cosmetic, but got makers tapping into ideals of participatory media (Langlois, 2013) or co-creative media (Spurgeon et al., 2009), demanding users to try 'to get their heads around' these emerging forms of documentary.

Interactive documentaries, in their Gaudenzian expression (Gaudenzi, 2013b), have a proper fabric that only comes alive when put in interaction with the different parties to the media ecosystem (i.e., producer, consumer, distributor, multiplier). This characteristic of *emergence* does not mean in turn, that all single interactive documentaries are media innovations in and of themselves. They are part of a *genre innovation* (Miller, 2016) as argued above, when compared to their linear-set-in-stone documentary counterparts.

Beyond the genre itself, Dogruel makes the point that media innovations "are characterized by a close interaction between intangible (creative) and "humdrum inputs" namely technological or organizational aspects of innovation (Caves, 2000, p. 4; Handke, 2008)" (Dogruel, 2014, p. 56). Media innovations are further "multidimentional and risky products and highlight the importance of approaching media innovations development as interactive, long-term processes" (Dogruel, 2014, p. 52). The separation of product and process that she makes, permits us to appreciate i-docs not so much as picture-locked films, but works-in-progress, positioning themselves firmly on the newness spectrum. Also, by bringing three disciplines into play in her analysis of media innovations (media economics, media management, as

well as media history), Dogruel recognises the risk factor that is engrained in most interactive documentaries. “Their development and production often require large financial investments, but bear the risk of sunk costs in the case of failure,” she writes (Dogruel, 2014, p. 56), bouncing off Lobigs & Siegert (2008) and Reca (2006).

It is important here to note that i-docs are not standalone art works. The distinction is important, since standalone art works could well possess similar characteristics to i-docs, in terms of their experimental or exploratory nature. But unlike art works, i-docs such as defined here, are proper media productions. They are closer to complex crafts productions, than free art. They can be largely independent from financial pressure and operate in some non-profit zone, but they generally possess this high-risk characteristic, which art works don’t necessarily. The relatively high investment in time and money and uncertain return on that investment make i-docs take on the clothes of media, and not artistic (taken in a strict sense), innovations.

Unlike art works too, i-docs only start breathing thanks to their interactive nature, or as described earlier by Gaudenzi, they come alive through the relational dimension of interaction and manipulation by users. “The acceptance of media innovations mostly relies on social appropriation processes and user-sided development of use contexts,” Dogruel explains (2014, p. 56). This uncertain encounter with its audience, its users, or *produsers* (Bruns, 2007), is precisely what points to the high-risk production situation in which makers of i-docs are operating in.

Summing up the last paragraphs, I have argued that i-docs are:

- part of a *genre innovation*,
- potentially *media innovations*,
- media productions *operating under conditions of high-risk and uncertainty*.

This offers key elements of context informing the next section on impact.

Now, before moving to the next section, I deduct dimensions of media innovation that will be useful in structuring the case studies (chapter 4).

Multidimensionality of media (McQuail, 2010) is definitely core to i-docs. Dogruel (2014) identifies four—*technological*, *organisational*, *content/design-oriented*, and *functional*—that she calls dimensions of change. This categorisation by Dogruel will be used to structure the description of the *Field Trip* case study, as well as the secondary cases (chapter 4). The four dimensions of change will help me in systematically discovering how the process of producing an i-doc and the ‘final product’ is the result of an interplay of innovative moments, feedback loops and iterative frictions. They will also be structuring dimensions of the societal impact framework that I develop in chapter 5. But to illustrate

what the dimensions of change by Dogruel mean, in the i-doc context, I will here provide a few examples.

2.2.3.3 Content/design dimension

The *content/design* dimension is a change in, for instance, the interface of a documentary. A visually striking example of this is the split-screen interface of *Gaza/Sderot* (2008), a web-based documentary peeking into daily life in times of the Palestine/Israel conflict. The design of the screen itself marks the separation between people in Israel and in Palestine, who apart from being on different sides of the fence, have more in common than some might think. The design here serves to highlight the content of the documentary, while offering an entirely new viewing experience.

2.2.3.4 Technological dimension

A change in *technology* means for instance, in the case of an i-doc, that instead of working within the limitations of a Vimeo player, makers will develop a player of their own, and tweak it so as to allow different viewing speeds. There is a change in the way technology is used or adapted.

2.2.3.5 Organisational dimension

The *organisational* dimension refers to, for example, innovating in workflow. Instead of adopting the classic film production flow of pre-production—production—post-production—distribution, an i-doc team might choose to communicate with its audiences via social media accounts from the start. This way, the team might encounter new protagonists to include in a documentary while getting early input on how a proto-audience reacts to the contents put online. In classic film, one would say that distribution is pulled into pre-production. There is a change in organisational workflow.

2.2.3.6 Functional dimension

While the changes in content/design, technology and organization are almost self-explanatory, the *functional* dimension is more complex. The user experience is precisely where the functional dimension comes into play: how users and audiences change their consumption habits as a result of the media innovation. In the case of i-doc *Do Not Track* (2015), users need to provide written answers to simple question fields popping up during the viewing experience, so as to continue watching. This form of interaction shifts the experience from a lean-back to a lean-forward, more active way of consuming media. The change in storytelling consumption describes the functional dimension best.

To further situate i-docs in media innovation theory, I call upon Kline & Rosenberg's *chain-linked model* of innovation, which precisely qualifies the development of innovation as a non-linear, interactive and long-term knowledge process (Kline & Rosenberg, 1986). In this view, Dogruel's dimensions of change are not to be understood as sequential, happening one after the other, but in a highly interdependent and iterative fashion, over time.

The lifespan of media innovations is variable, but researchers in management studies generally agree to four phases of development of a product, which is birth, growth, maturity and decline. In other disciplines, a fifth stage is added: that of adaptation—where the innovation adapts to what Lehmann-Wilzig and Cohen-Avigdor call *changing environments* (2014). If we look at i-docs as a media innovation phenomenon over the last decade (see chapter 1), we can draw a parallel between the *institutionalisation* phase mentioned by Herrero et al. (2017) and that of *adaptation* (Lehmann-Wilzig & Cohen-Avigdor, 2014). In 2021, i-docs adapt to the changing usage environment and start migrating from their open distribution via laptops and tablets to more institutional (e.g., museums) or specialised and normed settings (e.g., web-expanded and -enhanced stories on public service media platforms).

In this section, I have argued that interactive documentaries are potentially media innovations, and that they are produced under risky circumstances, as explained by Dogruel (2014). From there, media innovation scholars seem to indicate that these media innovation processes and products have socio-cultural impacts (Reca, 2006). Dogruel even connects the dots between the discussion on the cultural *value*—from which we derived our research question—to that of *impact*. "Besides their economic value, media innovations mainly impact a society's, an organization's, as well as an individual's communication capacities" (Dogruel, 2014, p. 61).

From the previous section, the question remains whether i-docs, as potential media innovations with supposed high cultural value are being considered and recognised as such by public funds. I will return to this question in chapter 5.

Now that the context of innovation in which i-docs production takes place has been set, I will fade-in the core of my conceptual framework: the impact of media and storytelling.

2.2.4 Impact studies and evaluation

> *Impact has become a buzzword in documentary with the push to entrepreneurialize the documentarian* – Patricia Aufderheide (2015, p. 1)

The term *impact* is increasingly being in use in documentary practice. It is important to deconstruct it fort wo reasons: 1) it currently means too many different things to too many different people, leading to misunderstandings and gaps in expectations, and 2) it is currently undertheorised in the maker community, thereby not leading makers to explicit their impact expectatiosn properly. For doing so, I am first providing background on conventional impact studies literature. Then, I am explaining what other evaluation dimensions there are. Third, I am arguing for the need for practitioner perspectives to complement conventional understandings of impact.

2.2.4.1 Approaching media impact

Impacts, as effects *on* and transformation *of* a society at large is multi-factorial, dynamic, ongoing and more often than not, ephemeral. This said, there have been many attempts at evaluating the impacts that media might have. Particularly, there is a long tradition and important body of literature in media studies, marketing and social psychology looking at mass media's effect on individuals (Roberts & Maccoby, 1985) and on society (McGuire, 1986; Hearold, 1986; McQuail, 2010). There is an almost equivalently long list of academic pieces arguing against the very idea that documentary effects can be fully measured (Notley et al., 2015) or that media can be made predominantly responsible for societal changes (Prior, 2013).

Most of the quantitative studies media effects literature looks into, is of the likes of studies on public service announcements in newspapers, the effect of television programming on viewer demographics, or the effects of news consumption on voting behaviour. They look at "impacts on the public's thoughts, feelings, and actions," which William McGuire, a reference scholar on media impact, is quick to dismiss as being limited (McGuire, 1986, p. 174). But before following the alarm bells by McGuire, I revisit some of the most common media impact criteria, such as found in conventional media reception studies.

In writings about mainstream media effects, one needs to differentiate between intended and unintended ones, McGuire (1986) tells us. In the first category, McGuire observes the following effects, as retrieved from Elizabeth M. Perse's book *Media effects and society* (2001, pp. 1-2):

- *Impact of advertisement on purchasing behaviour*
- *Impact of political campaigns on voting behaviour*
- *Impact of public service announcements on personal behaviour and social improvement*

- *Effects of propaganda on ideology*
- *Effects of media rituals on social control*

As unintended effects, McGuire (1986) sees:
- *The effect of media violence on aggressive behaviour*
- *The effect of media images on the social construction of reality*
- *The effects of media bias on stereotyping*
- *The effects of erotic and sexual material on attitudes and objectionable behaviour*
- *How media forms affect cognitive activity and style* (Perse, 2001, pp. 1-2).

Further, Perse (2001, pp. 1-2) draws on McQuail (1994), to add four effects to that initial list:
- *Knowledge gain and distribution throughout society*
- *Diffusion of innovations*
- *Socialisation to societal norms*
- *Institution and cultural adaptations and changes*

These forms of effects (on individuals) and impacts (on society) only tangentially apply to documentary and interactive documentary in particular. For one, as presented earlier in this chapter, interactive documentary productions are not in the same category as for-profit media industries. For example, in most interactive documentaries, there are no advertisements, thereby discarding some of the layers looked at as part of media effects. A second reason is that mainstream media's impact is measured in a relatively established and set audience environment, unlike i-docs which operate in a volatile media innovation setting (as argued above). Third, media impact generally looks at TV programming, radio formats, newspaper bias, or social media disinformation over a range of media works. In the case of i-docs, we are considering single stand-alone works, sometimes distributed outside of mainstream media.

2.2.4.3 Media metrics

In more recent reception studies literature (Christakis & Fowler, 2009; Medina Serrano, 2020), one can find a flurry of studies accompanying the newer forms of online media, such as social networking sites floated mainly by large platforms (i.e., Facebook, Netflix, Instagram, TikTok). Here, empirical studies analyse the number of visits—a proxy for the reach that a piece of media might have, fine-grained indicators of user behaviour or communicative influence on a platform (sharing, conversations, transitions, bounce rates, etc.), and more importantly, *user engagement* rates.

In an era of 'Big Data', an increasing group of stakeholders base their judgement on quantitative measurement alone, where data analytics play a salient role (Lewis & Westlund, 2015). "With the

affordances of an always-connected, user-centric media universe, the conversation about impact is also a new one. We are all generating data all the time, after all, and it's all feedback for somebody," writes Patricia Aufderheide (2015, p. 1). The field of specialisation of web analytics and web metrics reads fluctuations and trends in short term user behaviour and generalises these findings to an abstract group or societal level. But can the traces that users leave behind when navigating websites such as interactive documentaries provide us with the *intelligence* to infer what impact an i-doc might have on culture, on society?

In the short term, quantitative indicators possibly add a form of understanding. They are useful, especially to inform how users appropriate media, what parts of a doc they use most, when they skip content and where they decide to leave a comment. All of these measures are useful in the prototype-phase of a web-based documentary. They are *at first useful*. But once one looks beyond the immediate and the sum of individual user journeys, there might be one part of the equation missing. "Big data makes connections, but it doesn't create cultural / social meaning," author and i-doc maker David Dufresne puts it (D. Dufresne, personal communication, November 6, 2017), In other words, a browser-based documentary in which a group of users are very engaged might not tell us much about the rest of the users, or, this engagement with the design of a website might not translate to a larger engagement with the topic of a web-documentary. But there are qualitative elements to gather still, as Dufresne suggests:

> *For me it's simple, the 'internaute' is at the centre. I measure impact at the level of engagement. There are many levels of engagement: clicks, shares, forum participation (the latter being what I like most—as it is much about the quality of contributions)* […] *Apart for the GAFA*[16]*, quantity no longer has any value today. Everything becomes a niche*. (D. Dufresne, personal communication, November 6, 2017)

Notley et al. (2015) argue that "emphasising the need for thick data when assessing impact might help to ensure that outreach analytics and metrics are not completely disembodied from their social context in a way that may give a misleading or completely false impression of success" (p.12). With thick data, these authors refer to a notion coined by Tricia Wang (2013, para 6)—with a *clin d'oeil* to anthropologist Clifford Geertz (who argued in favour of interpretative methodologies such as *thick descriptions* (Geertz, 1973)). Wang defines thick data as "ethnographic approaches that uncover the meaning behind Big Data visualization and analysis" (Wang, 2013, n.p.).

In this subsection, I have pointed at the coming of age of granular media measurement:

- User behaviour metrics have become omnipresent
- Engagement rates are held up by researchers and practitioners as an important impact metric

[16] GAFA stands for (G oogle, A pple, F acebook, A mazon)—the four most powerful tech companies in the US.

- Some call for a qualitative interpretation of these metrics (quality of contributions, thick data)

In what follows, I will be able to close-in on impact measurement of public interest media, and subsequently, storytelling more specifically.

2.2.4.4 Impact vs outcome

Here is a good place to introduce a further distinction, before we proceed to the discussion of impact of i-docs specifically: the difference between impact and outcomes.

> *From an assessment standpoint, outcomes are typically defined in terms of the shorter-term effects that a public interest media project can have (such as reaching, informing, engaging, and mobilising target audiences), whereas impacts can be seen as the longer-term, more far-reaching changes (such as changes in individuals' behaviors, or changes in public policy) [see Knight Foundation, 2011]*. (Napoli, 2014, p. 9)

This distinction is key to inform the reason why, moving forward, I will not be drawing on social media metrics as indicators of impact, but rather leave that to the domain of *outcomes*. In other words, data-driven feedback is important for guiding UX decisions, or for observing whether, like Dufresne says, *internautes* have something to add to a story, but I will not treat outcomes at par with the larger media impacts mentioned earlier.

After visiting some common mainstream and social media evaluation criteria, I am now zooming-in on my object of study by taking stock of discussions around the evaluation of public interest[17] digital media impact.

"Most of the social impacts attributed to public interest media - whether raising awareness, stimulating discourse or inspiring action - rely on connecting their work with audiences, typically on a national or international scale," Sean Flynn reveals (2015, p. 143). In this regard, a "*social value* perspective" (Napoli, 2014, p. 4) is needed. "Evaluation only makes sense, when it comes with a social perspective," echoes Jenny Svensson (2016, p.10), in her book on the evaluation of theater and culture.

> *Social value in this context refers to analytical approaches that extend beyond financial measures of success to take into account criteria such as improving the well-being of individuals and communities across a wide range of dimensions that are central goals of most public interest media initiatives* (Napoli, 2014, p. 4).

[17] We are conscious that there is much conflicting literature around the notion of public interest. Political scientist Douglass (1980) for instance, differentiates *public interest* and the *common good* and explains why, by tracing back the origin and the development of these notions epistemologically. For the purpose of this thesis, though, the notions are used interchangeably.

The publication of Philipp M. Napoli's *Measuring Media Impact* report (Napoli, 2014) provides a good basis to understand the notion of impact on audiences, how it can be planned, evaluated and sophisticated. Three main observations can be drawn from his report to inform our discussion related to documentary:

1) "Different projects require different methodological approaches to impact assessment" (Napoli, 2014, p. 26). This is how one can "reflect the different spheres of potential impact", Napoli adds (idem). I share this point, and this is precisely why I see the usefulness of discussing impact specifically as adapted from i-doc to i-doc.

2) There is "an almost overwhelming variety of performance metrics" (idem), meaning that "most aspects of the dynamics of content consumption, along with many aspects of how audiences can respond to content, are easily capturable and quantifiable" (idem). While it is certainly true that there is a wealth of metrics tools and ways to capture feedback, I do not see this *availability of means* as a determining factor in capturing an audience's response to i-docs adequately. There is a limit to tracking user behaviour, particularly in the European context (see data protection regulation GDPR). Also, audience response to content is not limited to web metrics, but flows through a variety of channels (e.g., public viewing, collective i-doc consumption, use of i-docs in an educational setting, etc).

3) A third observation from Napoli's report is:

> *The concept of 'engagement' often serves as a central mechanism via which media impact is assessed, and can be utilized to serve in a variety of capacities in relation to the broader notion of media impact; for instance, as an intervening variable, as a* ***proxy for impact****, or as a form of impact in its own right*. (p. 26, emphasis added)

This certainly applies to the i-docs impact discussion and I will come back to the notion of engagement frequently in what follows.

2.2.4.5 Impact of storytelling

There are plenty of practical impact guides that help one think through and act upon the question of short- and middle-term impact of a story. From a practitioner's point of view, many are useful to plan strategically and prioritise on short- and middle-range impact objectives. The Social Impact Navigator by nonprofit foundation Phineo is introductory and easy to use, with a clear focus on making a difference in local communities. It is not oriented exclusively towards storytelling projects, but rather social entrepreneuship projects in general (see Figure 2.1). Here, *output*, *outcome* and *impact* are differentiated, with output being first level results that can be documented and verified empirically either by looking at short term campaign activities that were generated or target audiences reached. Impact, as a concept, is in this model solely reserved to high-level observable society-wide change, while small-scale changes

at the target group level are what constitute outcomes. Moreover, the impact model developed by Phineo is results-oriented and meant to be used for planning and measurement at the end of a project. In this model, the measurement needs to be based on measurable indicators only (Phineo, 2013, p. 13). In other words, it does not make a case in point to include process-oriented evaluation criteria and is not aiming at providing dynamic evaluation and adjustment along the way.

Figure 2.1 'Results staircase'

Figure 2.1 'Results staircase'. Social impact navigator (Phineo), Kurz and Kubek, 2017, p. 5

The Europeana Impact Playbook (Verwayen et al., 2017) can best account for impact in open cultural projects and is oriented towards such things as remixes and open licences for historical artefacts. It includes specifics on storytelling, but the brunt of this model is on how to collaboratively develop impact pathways (e.g. scenarios) in the increasingly digitised museum, library, archive and gallery contexts. In that sense, Europeana's guide is closer to digital production and modern processes than Phineo's rather on-site model. Similar to Phineo's Impact Navigator though, this is a 'how to' meant to support team members coming together and agreeing to a common impact strategy. The playbook provides basic definitions and a step by step guide to render the complex topic of impact more amenable in the open and digital culture realms of *memory institutions* (Verwayen et al., 2017, p. 3).

The Europeana guide's understanding of impact is to be sourced back directly to the work of academic Simon Tanner. The latter came up with a *Balanced Value Impact Model* (Tanner, 2012) aimed at the digital humanities. In that model – which draws on disparate impact assessment models from the sectors of environment, social and health – Tanner defines impact as "The measurable outcomes arising from the existence of a digital resource that demonstrate a change in the life or life opportunities of the community for which the resource is intended" (Tanner, 2012, p. 4). Tanner is conscious of the fact that this definition is a pragmatic one, not meant to be comprehensive, but rather

operational. The great contribution of Tanner with the Balanced Value Impact Model is that he offers a synthesis of different impact assessment strategies and addresses what up until 2012 was largely missing: the digital aspect of cultural production.

The eye-opening, detailed and continuously updated *Impact field guide* (BRITDOC, 2015) by Doc Society (formerly known as BRITDOC) speaks the language of documentary filmmakers and provides quite a few case studies from which interactive documentary makers can learn. One of the case studies (pp. 300-301) is even about an interactive documentary, *The Quipu Project*, shedding a light on this specific documentary practice, including by revisiting its impact objective and planning process. This field guide a companion text for teams thinking strategically about what they want to achieve with their film and how they can learn through the evaluation process. What this guide, like the previous ones, does not do, is to frame the production process as such as an impact driver.

Additionally, there are many more reports funded mainly by foundations such as the Bill and Melinda Gates Foundation (Learning for Action, 2013), the Skoll Foundation, or Ford Foundation's JustFilms division, to name just a few. These are more often than not referenced in the guides mentioned previously.

The Learning for action report defines impact in this holistic way:

> *We define impact as change that happens to individuals, groups, organizations, systems, and social or physical conditions. Typically, long-term and affected by many variables, impact represents the ultimate purpose of community-focused media efforts—it's how the world is different as a result of our work*. (Learning for action, 2013, p. 1)

Story Matters' *Documentary Impact: Social Change Through Storytelling* (Finneran, 2014) provides an even deeper look at impact levels, again useful for documentary filmmakers. Finneran's report for instance defines *creative media dimensions of impact* as follows.

Figure 2.2 Creative Media Dimensions of Impact

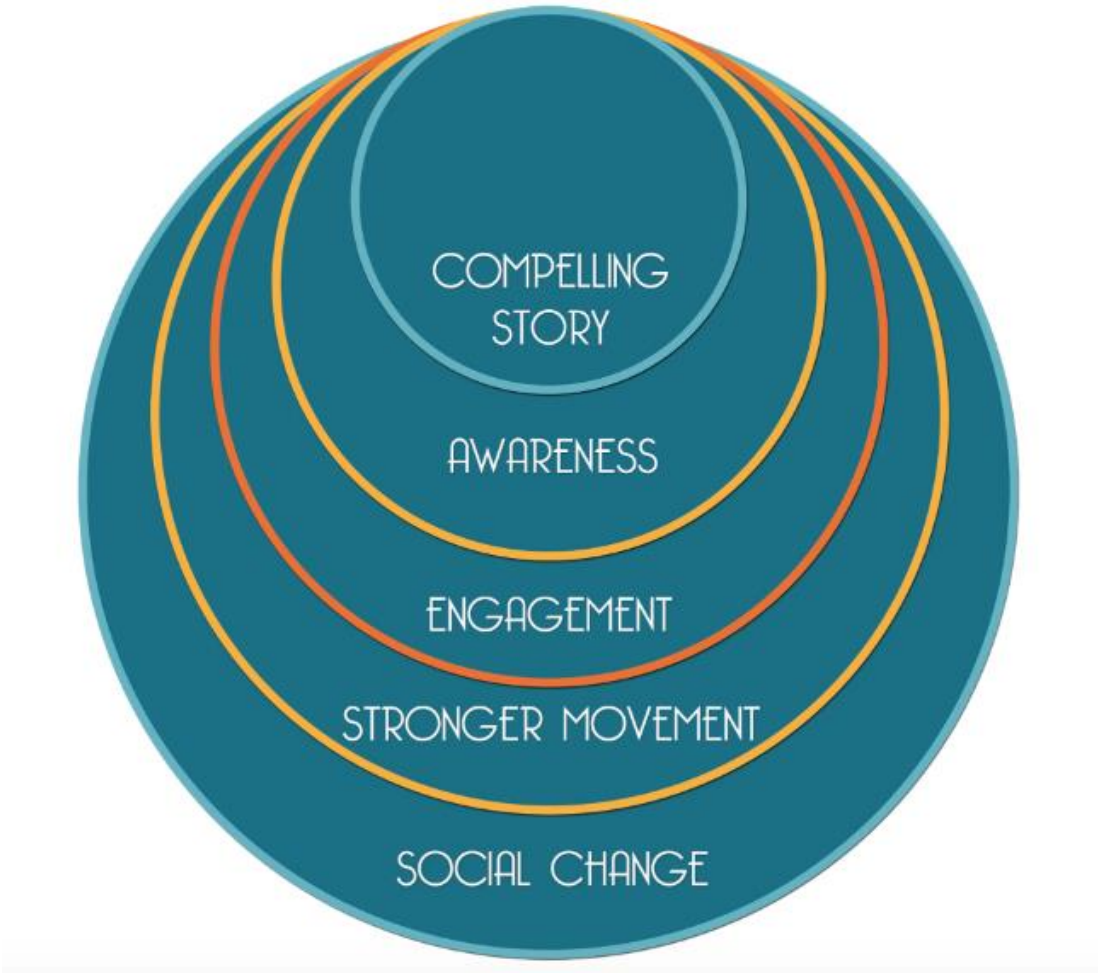

Figure 2.2 Creative Media Dimensions of Impact. Finneran, 2014, p. 15.

This simple representation starts with the need for a compelling story, lists awareness-raising as a second impact objective, engagement of audiences with the story third, contributing to a stronger movement fourth, and to larger social change last. The mere language used hints at the fact that this model is designed to serve as an impact blueprint for stories meant to mobilise, or campaign.

While Kate Nash and John Corner (2016) have made a case in point of debunking the neoliberal bias that often comes along with impact assessments (and discuss the political context within which the Doc Society's guide is embedded specifically), the guides mentioned above remain useful tools and I recommend their use in addition to other methods including case studies, research literature, and peer-to-peer collaboration.

Nash and Corner's paper is interesting in another regard. They identify a new type of documentary that they call "strategic impact documentary" (Nash & Corner, 2016, p. 228). This type can be associated to the field of strategic communication.

> *Over the past decade, it is possible to trace the growth and professionalization of what we call here the strategic impact documentary sector (other terms used are 'social issue' documentary and 'campaign documentary') […] The sector includes a range of organizations: foundations; not-for-profits; corporations and brands, as well as documentary producers, makers and distributors. Its size and scope suggests a parallel 'industry' that intersects with established structures but which has its own sources of funding, its own methods of production and distribution and its own organizational ecology*". (Nash & Corner, 2016, p. 228)

Even though my thesis is not looking at "strategic impact documentary" in particular—meaning those documentaries that are designed with the goal of achieving one specific mission (e.g., documentaries trying to mobilise people for making donations to a humanitarian cause) the accelerated development of this documentary type goes to show two things:

1) the term *impact* is increasingly being used in combination with that of *documentary* and
2) documentary does not equal documentary.

The main fault line between documentary types is based on the intent of the author(s). Strategic impact documentaries "are on a mission". They have campaign goals that can be more or less measured against outcomes and impacts. They are produced with clear impact expectations, thereby lining up all aspects of documentary production perfectly: from esthetics to storyline, length to distribution channels, target publics and influencer tactics. They are (or should) all be streamlined to accomplish the overarching goal(s) of a campaign.

In that very segment of strategic impact documentaries (also called issues-focused documentaries), Chattoo & Das (2014) from the Center for Media & Social Impact at American University provide:

> *[…] an overview of research methods that are able to capture a spectrum of "impact" in issues-focused documentaries – from individual to public interest to institutional* […]*:*
> - *Digital & Media Coverage Metrics*
> - *Audience Impact*
> - *Content & Cultural Impact*
> - *Institutional Impact*. (Chattoo & Das, 2014, n.p.)

The first two categories include tools that measure social media analytics, through web dashboards, audience surveys and experiments at "point of reception". These have been discussed in previous sections already. The *content and cultural impact* category contains tools that harvest or infer from media coverage. They are all about network mapping (actors who engage in a discussion around an issue) and content analysis of the discourse by these main actors. All of these methods relate to the literature on impact mentioned so far. These are classic or common outcome and impact criteria. Now, the last category called *institutional impact* is the piece of the puzzle that was missing from the discussion until now.

As can be seen in Figure 2.3, institutional impact tries to capture "the ways in which particular publics or individuals have responded to a film and campaign, and how they have used it in their work" (Chattoo & Das, 2014, p. 16), or how the "film has changed the way in which a film affected a changing or changed institution, such as a company's practices or a new law" (idem). More to the point of my own research question, Chattoo and Das say that institutional impact can also be shown by examining "the use or incorporation of a film's practices or topics into a subculture or group; may include participatory media work" (2014, p. 16). This can best be captured by in-depth interviews and focus groups, case studies and ethnography—the very qualitative multi-methods (Hesse-Biber & Johnson, 2015) that I employ in for this thesis (see chapter 3).

Figure 2.3 Institutional impact

INSTITUTIONAL IMPACT				
RESEARCH METHODS	**RESEARCH QUESTIONS**	**ASSESSMENT FOCUS**	**AVAILABLE TOOL**	**ORGANIZATIONS**
In-Depth Interviews & Focus Groups	Qualitatively examine and capture the ways in which particular key publics or individuals have responded to a film and campaign, and how they have used it in their work.	Key Individuals & Organizations (related to the strategic objectives of the film and campaign)	N/A (Customized Research)	DIY and/or academic institutions, strategists, consultants
Case Studies	Qualitatively examine and capture the ways in which a film affected a changing or changed institution, such as a company's practices or a new law—or how the film was used in institutional or political settings.	Key Organizations (related to strategic objectives of the film and campaign)	N/A (Customized Research)	DIY and/or academic institutions, strategists, consultants
Ethnography	Qualitatively examine the use or incorporation of a film's practices or topics into a subculture or group; may include participatory media work.	Key Subgroups (related to strategic objectives of the film and campaign)	N/A (Customized Research)	DIY and/or academic institutions, strategists, consultants

Figure 2.3 Institutional impact. Source: Chattoo & Das, 2014, n.p.

They further recommend that "layering research methods may be the ideal scenario for most projects in order to capture a full story of impact" (Chattoo & Das, 2014, p. 12). This last point seems evident: by using a multitude of methods to capture impact, we get a richer, more layered understanding of how a documentary has fared. But what is striking about this last quote, are the last four words "full story of impact". Indeed, I here posit that what most strategic communicators (but also many researchers) are nearing in their writing on impact, is less how to capture a definitive or scientifically sound impact, but rather—like Napoli (2014) mentioned (see my third observation of Napoli's report above)—a proxy for

impact. This proxy can help formulate a full story of impact, which the makers can then use to position their documentary production strategically.

> *Strategic communications experts and funders have done thoughtful work worth looking at, in the vast space between the binary of 'assign a number' and 'art cannot be measured.' Most of it is in the tactical space of articulating how to identify and find proxies to measure one's ambitions*. (Aufderheide, 2015, p. 3)

Here too, a leading researcher on documentary impact specifies that what matters most to strategic communicators is "to identify and find proxies" for telling that story of impact. This is an important finding from literature which might help clarify the existence of biases in impact assessment.

If strategic communication experts have pushed the discussion on impact forward, as among other Aufderheide suggests, including by narrowing down the analysis to useful and measurable indicators, this has been done at the cost of documentary makers and a wider understanding of impact.

> *The impact challenge […] forces documentarians to articulate a goal and demonstrate whether it was reached. It pushes them—if Wendy Levy*[18] *is right—in the direction of being more like organizers and convenors than artists.* (Aufderheide, 2015, p. 9).

Articulating an impact goal or expectation is not a problem in and of itself. To the contrary, I argue that it is healthy for i-doc makers to be as conscious and informed as possible about what they would like to achieve with their creation. The irritant comes rather from being forced into it, like that would be the case in the strategic documentary segment. It can potentially be quite constraining, even disempowering[19] to be expected to invest much time demonstrating how a goal was reached. A new impact model would need to provide for artistic freedom and value non-strategic impacts. Again, I am not taking a skeptical stance towards impact measurement. I am rather adopting a critical stance that enables me to engage with further impact critieria, not directly associated with measurement, but with evaluation.

In this subsection, I presented:

- key impact frameworks and guides developed by storytelling organisations
- the contribution of strategic communications to the advancement of storytelling impact
- first limitations of storytelling impact measurement, including the fixation on hunting down a "story of impact".

This subsection calls for a broader understanding of impact and impact measurement in storytelling.

[18] *Wendy Levy to Documentary, May 21, 2015, http://www.documentary.org/blog/furor-over-paris-burning-raises-burning-questions.*, as quoted in (Aufderheide, 2015, p. 9).
[19] For a larger exploration of disempowerment related to impact measurement, see the Doc Society's Impact guide: https://impactguide.org/measuring-impact

2.2.4.6 Expanded impact criteria

The main deficiencies that researchers have identified when examining impact discussions, are, paraphrasing Aufderheide (2014, pp. 6-7): impact is often defined too narrowly (e.g. too short term, or too unifactorial); impact assessment can be a new code excluding those not mastering it; evaluation methods are quantitatively biased, implying e.g. that ethnographic methods are frowned upon; awards and recognitions "prematurely crystallize what is meant by social impact"; typologies of impact are fragmented based on a documentary's topic or interface / game mechanics. The latter point means that researchers working on impact in their area have limited exchange with others and this silo effect is also there between researchers and practitioners, as Aufderheide argues (2014, pp. 6-7).

David Whiteman (2002, n.p.) reinforces:

> *Social scientists often look too narrowly at the political impact of a documentary film, assessing the impact of a finished film within the dominant public discourse and on individual citizens. Unfortunately, such a focus may look mainly at the circumstances where film would least likely have an impact.*

Working thus against what could be termed as an individualistic view, Whiteman adds:

> *To assess impact adequately, we must evaluate the entire 'filmmaking' process, including both production and distribution, and not simply the finished product. A film's development, production, and distribution create extensive opportunities for interaction among producers, participants, activists, decision makers, and citizens, and thus all the stages of a film can affect its impact*. (Whitman, 2002, n.p.)

When writing this, Whiteman is explicitly referring to political documentary films. He sees room for including a story's potential effects on its producers, participants that partake in the production, activist groups that might input on the story or use it, and on elites.

Up until here, Whiteman's take resonates with Chattoo & Das' *institutional impact*. In what he coined a *Coalition Model of Production and Distribution*, Whiteman argues in favour of:

- evaluating not only the *product* but also the *process* of making documentary,
- looking at the *impact on all parties* to the production.

But he does not leave it at that:

> *a committed documentary's impact is most likely to be on* ***discourses outside the mainstream****, since social movements often strive to create and sustain alternative spheres of public discourse. Many political documentaries may never achieve widespread distribution and do not enter mainstream public discourse but still have an impact in certain subcultures, educating and mobilizing activists working to create social change.* (Whiteman, 2002, n.p., emphasis added)

Whiteman's original contribution to the documentary impact discussion is to widen it, and then distance it from the sole impact on mainstream discourse, and bringing it closer to the *impact arenas* at the community level ("activist organisations and social movements") and the elite level ("decision makers and the political elite") (Whiteman, 2014, p. 54).

His flagging of *subcultures* as important sources informing the impact of less mainstream, and maybe less strategic documentaries, combined with his reframing on the *process* of making a documentary as a source informing impact, is an important intercalation. Flynn (2015) picks an example from recent history, to illustrate this point made by Whiteman.

> *Video activists in the Challenge for Change generation approached new technology like the Portapak camera in this way. While their work did not reach mass audiences and create impact in the Griersonian tradition of public education, it did create tactical, observable (but harder to quantify) impacts by activating local communities and creating new channels of communication between citizens and their government*. (Flynn, 2015, p. 155)

Researcher Tanya Notley, together with media activists Sam Gregory (non-profit WITNESS) and Andrew Lowenthal (non-profit EngageMedia), in 2015 first came up with an 'Impact Pathways framework' based on the practice of the Video for Change network (see Figure 2.4 below). This framework designed for linear video very much fits Whiteman's ample coalition model, and uses similar language: "We believe what is missing from the current impact models and toolkits that have been created for documentary-makers is an approach that considers the entire video-making process and seeks out points of impact along that pathway" (Notley et al., 2015, p. 13). But contrasting with Whiteman, their pathway model is meant to support and promote "an ongoing approach to monitoring and evaluating impact (rather than a 'one-off' assessment at the end)," (idem). The Impact Pathways framework aims at assisting video-makers in understanding "what is and is not working in their activities so they can respond in an agile way" (idem).

Moreover, the model seems to be in tune with a bottom-up approach, *inviting* filmmakers to *design for impact* focusing on "smaller, more incremental forms of change" (idem), rather than imposing an impact evaluation model upon them—like we could observe in the discussion about strategic impact documentaries. The authors' self-declared aim, here, is on "effective" and "ethical" social change. While effective change, including in the process of making media, is also on Whiteman's mind (2002, 2004), the ethical dimension by Notley et al. (2015), which can be clearly viewed at the top of their pathway model (shown in Figure 2.4), means that they are much more sensitive to impact that works for vulnerable communities, the Global South and minorities. This in turn means that they are fundamentally questioning the very outreach-only approach of other impact models mentioned above. They are for instance asking whether large-scale outreach can also bear risks for protagonists, disenfranchise or disempower audiences, etc. This discussion on ethical concerns and shared values

among stakeholders to the storytelling is an important one, and one that many community and social documentary makers rightly take at heart (and also partly already apply to their practice).

> Notley et al.'s model seeks to bring makers into asking themselves hard questions before starting the *design for impact*, and revisiting them as the production comes along. Finally, they conclude by saying:
>
> *[..] we believe that an Impact Pathways framework is also more congruent with the nature of Video for Change initiatives that engage collaborative, networked, or crowd-sourced production and distribution processes that are participatory and multiauthorial, since these kinds of processes require more iterative responses to design and measurement*. (Notley et al., 2017, pp. 240-241)

Figure 2.4 Impact Pathways framework

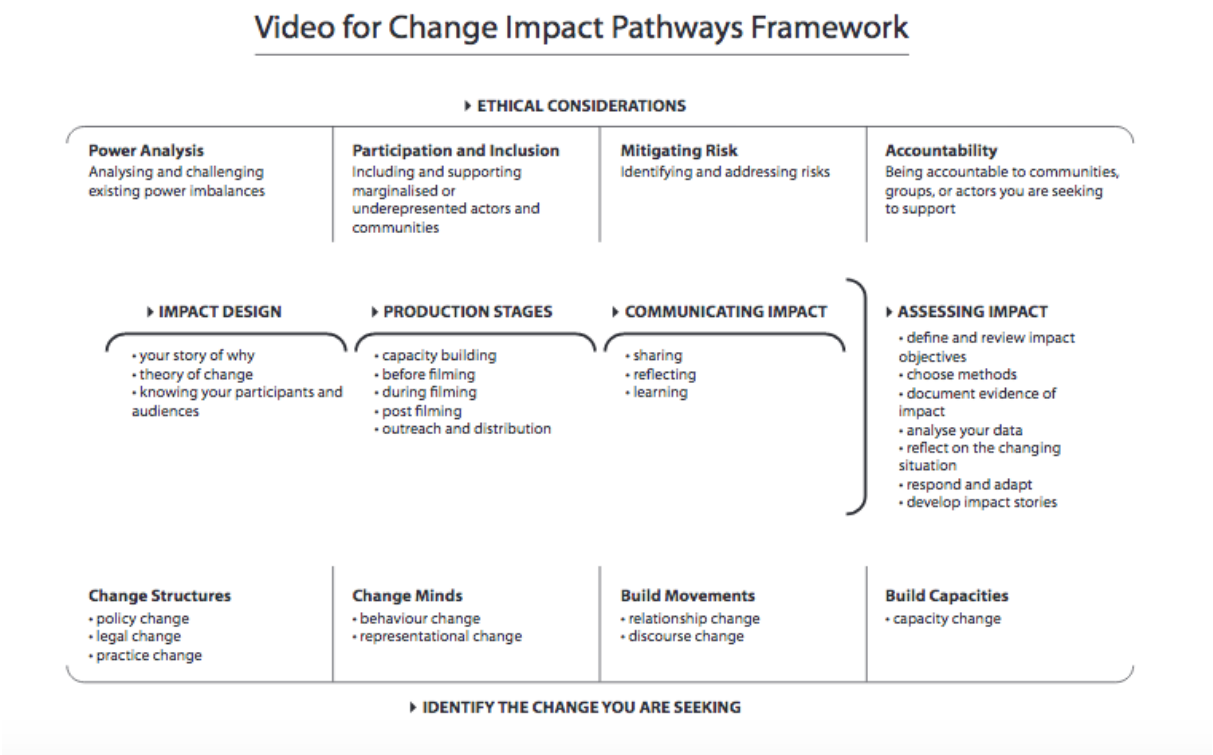

Figure 2.4 Impact Pathways framework. Source: Notley et al., 2015, p. 14.

Beyond the normative contribution, the pathways model is in-tune with "the nature of collaborative, networked, or crowd-sourced production and distribution processes" (Notley et al., 2017, pp. 240-241), such as those constitutive of the i-doc production and distribution culture. This said, since the i-docs I am looking at do not explicitly *design for impact*, the impact expectations might be more implicit and engrained in the production process. Still, the last step in Notley's framework specifies the need for assessing impact by listing the following actions, makers should plan for:

- *define and review impact objectives*
- *choose methods*

- document evidence of impact
- analyze your data
- reflect on changing situation
- respond and adapt
- develop impact stories. (Notley et al., 2017, pp. 240-241)

I shall refer back to these points in chapter 5, when discussing the case-specific results.

Based on the expanded impact criteria mentioned here, I can summarise the main impact models there are. These are based on academic and grey literature mentioned in this chapter. This synthesis is not meant to be operational, but rather to situate approaches that are at odds. This summary will permit me to identify what is still missing in the storytelling impact discussion.

2.2.4.7 Overview of media impact models

Wrapping up the impact discussion, I identify three different strands of impact literature that seem to emerge. These strands can also be referred to as impact models.

- The broadcast model
- The campaign model
- The expanded model

The broadcast model is very much oriented towards finding out what the effects of media content are on individuals and larger audiences consuming a mainstream film. This model is product-focussed, more often than not interested in short term outcome and reception measurement. What follows from this, is that it has a *faible* for quantitative measurement methods. Literature has been adapted and expanded in recent years, but classic literature on media effects continues to bloom until today.

The campaign model, as I like to call it, is looking at more variables than the broadcast model, including how audiences engage with content. It offers much more fine-grained analytics data and sees the value in measuring quantitatively what the psychological and social user behaviour is as a reaction to a story. It is social media savvy, so to speak, and committed to telling a story of impact bouncing off campaign goals.

The expanded model is a more normatively-motivated (political/ethical) model in which an attempt is made to look not only at a story vs its audiences, but also other stakeholders, including producers themselves. It is social movement focused, processual, and tries to tease out qualitative and relational

assessments of impact. The model is also comprehensive and multisided, where impact is found in both product and process.

What then is missing, would be a fourth model, which we might be able to define in chapter 5, after having gone through a thick description of *Field Trip* (chapter 4) and discussed maker perspectives external to the main case. That fourth model, I would hypothesise, would be an updated pathway model, in which interactive media affordances are considered, and where more detail is provided on the key stakeholder group of makers. Chapter 5 will hopefully permit us to confirm a fourth model.

Before diving into the next chapters, I will conclude this one by teasing out some hard to quantify impacts and make the point that impact expectations of makers and producers need to be included in storytelling impact measurement.

2.2.4.8 Harder to quantify impacts

As much Flynn, Whiteman, and Notley et al. seem to come together on the idea that quantifiable effects on individual viewers are just one part of impact evaluation, but that the most interesting components reside in the *harder to quantify impacts*. The hard to capture impacts can be discussed by adopting the long view. In a paper on participatory photography and participatory arts and media more broadly, Fairey argues:

> *[…] in recent decades, participatory arts and media initiatives are increasingly agency - rather than community-led, their value assessed using linear evaluative models and framed in terms of short-term, measurable, results. It is argued that these tendencies impede the potential critical contribution of participatory photography to social change processes and fail to capture important aspects of the psychosocial, political and subjective impact of projects.* (Fairey, 2017)

Fairy's way of capturing important aspects of impact of projects is by revisiting Paulo Freire's concept of *critical consciousness* (1973). Freire speaks of the goal of any impact endeavour as that of creating critical consciousness, Fairy reminds us, where critical cosnsciousness is defined as engendering a critical way of looking at the world (Fairey, 2017, p. 9). In her work, Fairy investigates a community-based photo project that existed in the timeframe of 1986 – 1998.

Although assessing critical consciousness would ideally need to be factored into a larger consideration of societal impact of i-docs, I will limit myself to acknowledging Fairey's far-sighted contribution on long-term impact, and concentrate on the middle-term impact of interactive media projects.

Other impacts that are hard to evaluate in a holistic fashion, are those generated by several stakeholder groups. Even though I agree with Whiteman, for instance, that a comprehensive analysis of impacts is

needed in order to get a clear picture of the larger societal impact of a work, this holistic endeavour—in which a multiplicity of stakeholders is analysed, including users, funders or media partners, and long-term impact is discussed—is outside the scope of this thesis. I am here able to acknowledge several stakeholder groups in the literature review above, but I am not in a position to offer a systematic analysis of all stakeholders in the subsequent more practical chapters. This is a limitation of my thesis to which I will come back in chapter 6.

2.2.5 The need for maker-generated impact markers

What this thesis attempts to do, is to provide qualitative evidence of the impact of an i-doc from the perspective of producers during the production and distribution of i-docs. This thesis can contribute to highlighting intended and unintended mid-term societal impact wills. It involves looking at how producers see the impact of their work, not solely on themselves as individuals, but also their networks, communities.

"Most people in practitioner listserv conversations, one-to-one conversations and festival/conference panels are neither blind believers in empiricism or woolly-headed dogooders. They are trying to answer a reasonable question—does what I do matter? And if so for whom?" (Aufderheide, 2015, p. 4). This maker perspective, which in practice is consciously or unconsciously ignored by many stakeholder groups, is of utmost importance to shed light on the societal impact of an i-doc. The stakeholder group of makers is a determining one for the entire media innovation process. It is the one implicitly negotiating expectations of impact most intensely. There is therefore something to learn here, that I hope will inform media impact literature, while helping storytellers in reflecting their practice.

On a more philosophical level, "value is produced relationally," Bolin argues (2011, p. 4). "Irrespective of whether it is the result of work or of negotiation, value is the result of social activity, acted out in a social relationship" (Bolin, 2011, p. 11). It is precisely because of this relational aspect underlying the notion of value production, that I emphasise the need for societal impact to be informed by producers' impact expectations. "The generation of value is most often the result of irrational processes, of unforeseen circumstances, and of relations between various wills in social practice," Bolin continues (2011, p. 11). "This is not least so when it comes to media production, as much media production today is quite complicated — technologically, organizationally, socially and economically." (2011, p. 4). In this complexity, I am here attempting to single out some of the main impact "wills" that makers have. This, in turn, helps us get a more just picture of the potential societal impact interactive documentaries may have.

CHAPTER 3 - Research strategy, methods & material

3.1 Research strategy

Since I am interested in elucidating the purpose with which, and the context within which makers of interactive documentary plan, make decisions, and negotiate impact expectations, I broadly situate my research as part of the inductive approach. "Instead of designing research to test preconceived hypotheses, inductive researchers take empirical social phenomena as their starting point and seek through the process of research and analysis to generate broader theories about social life" (Hodkinson, 2016, p. 99).

My approach is in line with the promise of production studies, as expressed by Banks, Conor, and Mayer (2015, p. xi): *"The collection and analysis of cultural texts, from stray posts on the Internet to formal interview responses, and from ethnographic field notes to other lay forms of narration, should paint a picture of a production culture: its common languages, practices, and frameworks for understanding"*. It is with this idea of painting the picture of the i-doc production culture, that I approach my object of study. Previously, Mayer, Banks, and Caldwell (2009, p. 4) had already established that "[…] production studies privilege but also interrogate research methodologies that place the researcher in dialogue with the subjects usually charged with representing us. This dialectic leads production studies toward grounded and inductive, even if partial, conclusions".

More to the point, I use a qualitative-interpretive research design, as conceptualised by Franke and Roos (2013). The meaning that makers ascribe to their practices, as well as the meaning they read into other, similar practices, is precisely what qualitative-interpretive research promises to reveal. This meaning-making is what generates qualitative knowledge. I therefore chose to limit myself to a qualitative research strategy and not to use quantitative methods.

The approach I have, has also been called by some *practice-led research* (e.g., Smith, 2009). In recent years scholars have found more specific terminology to define the approach when applied to the disciplines in art (including film), journalism and media. More than ten years ago, Chapman and Sawchuk have coined the term research-creation[20], for research that is particularly adapted for looking at emerging and experimental practices (Chapman & Sawchuk, 2008). By looking at documentary practices produced under conditions of media innovation, the real-life "tried and tested" work confronts me—the maker, along with my own understanding and expectations of impact—to internal production realities (e.g., the impact expectation of others) and external market conditions (e.g., the limited access

[20] For a deeper understanding of my specific research-creation journey, please see chapter 2.

to financial resources). This permits me to gather and process first-hand empirical data, and draw knowledge from the production and distribution process.

This said, my qualitative research-creation is built upon a research perspective that Anderson defines as *analytic autoethnography* (Anderson, 2006), meaning that I, as a researcher, am "(1) a full member in the research group or setting, (2) visible as such a member in published texts, and (3) committed to developing theoretical understandings of broader social phenomena" (Anderson, 2006, p. 373). This perspective points at my embeddedness as research-creator and goes to show that my research is not *action research* (the purpose of which is to improve practice only, not theory).

In terms of research design, I revert to multi-method research (Hesse-Biber & Johnson, 2015; Tashakkori & Teddlie, 2010), i.e. no one conceptual method suffices to circle-in the knowledge generated from both practice and theory. Out of the 46 qualitive research methods identified by Tesch (1990, p. 58), I use five: Case study methodology, participant observation, expert interviews, document analysis, and desktop research. I will develop each method in the second part of this chapter. These multiple methods nurture each other in an iterative process and some are interdependent. Participant observation, for instance, is closely related, if not at times integrated in the case study method, but I will describe them separately for the sake of clarity. Before doing that, I will point at the research phases, and the importance of the act of writing in my process of generating knowledge.

3.1.1 Research phases

For structuring my research in time—and only for that purpose—I borrowed from the framework of collaborative and analytic autoethnography (CAAE) (see Acosta et al., 2015). Although CAAE is an enquiry framework that is quite specific in its orientation[21], I draw on CAAE with the unique aim of organising my research phases.

If the affordances and limited scope of CAAE only partly apply to my research-creation strategy, I have found its framework particularly useful for structuring research in phases along an inductive-deductive iteration. According to Acosta et al. (2015), CAAE's four stages are:

- inductive stage
- pre-deductive stage
- deductive stage

[21] CAAE implies more than one researcher (therefore the 'collaborative') and is solely oriented towards improving the quality of practice, as Acosta and colleagues specify, which in my case is one of many goals (i.e., I also attempt to contribute conceptual theory around the notion of impact in digital storytelling).

- synthesis stage (pp. 7-12).

I was able to structure my research and fieldwork as follows:

- The inductive and pre-deductive phases were achieved during the active production of i-doc *Field Trip* (2017-2019).

- The last two phases in CAAE, the deductive and synthesis stages, were performed during the post-production and distribution of *Field Trip* (2019-2021).

In the first stage, my research-creation journey started with my practice, i.e. as a practitioner doing "reflection-in-action" (Schön, 1984), I start, just like in grounded theory (Glaser & Strauss, 1967), to work from my observations and interviews up to the conceptual level in order to generate theory on the i-doc phenomenon and the notion of impact. But while doing so, and more in line with 'constructivist grounded theory' (Charmaz, 1995)[22] this time, in stage two of CAAE I started moving iteratively between concepts found in literature, back to the field, and back again to scholarly texts. Both inductive and deductive thinking were then fully at play, as I was inducting from what I observed in the field, and then again deducting from what impact literature had to offer. Stage two was instrumental for generating a few pieces of scholarly writing (see next section).

Now, even though the iterative process was central to knowledge creation—as I will make even clearer in the next section on the act of writing—the bulk of the deduction effectively took place in stage three, once I was able to gain a critical distance *vis-à-vis* my main object of study, the main case of *Field Trip*.

Synthesising my research thoughts, the last stage in CAAE happened once I went into the intense thesis writing stage, in 2020. This is when my data collection writings from stage two, observation notes, coded interview transcripts, literature and feedback from peers converged into a synthesised form, with the aim of generating knowledge that is conceptually waterproof, since tried-and-tested through real life observation, action and interviews.

3.1.2 The act of writing

The research-creation journey laid out in chapter 2, is punctuated by both practice and theory. My experience as i-doc practitioner was there first, permitting me to formulate first hunches at what the research themes and research question should be. But soon after, I started with a literature review of the

[22] I discuss *grounded theory* and *constructivist grounded theory* in more detail in the section on expert interviews below.

object of inquiry: interactive documentary. The more I researched this interdisciplinary field, the more I worked my way through sociological, media and communications, interface design and finally, production studies research traditions. Marketing and management studies were also part of the more theoretical findings around the particular notion of impact. Now, what permitted me to progress in my thinking and reasoning, and this might be particular to the practitioner-researcher that I am, is the self-imposed imperative of scholarly publication.

The very act of writing was the first step in how I could capture and make sense of practice and theory, as they dialogue with one another. During the first two years of the four-year doctorate, I wrote two papers and one book chapter. This enabled me to gather early peer perspectives on my work, thus inviting an academic corrective to my undertaking and forcing me to look at theoretical dimensions that I might not have explored in depth otherwise. This was particularly true for the research I have pursued in the subfield of *media innovation*. Precisely, participating in a special issue on 'media innovation and social change' was an opportunity to engage and confront my creative practice and preconceptions to a small but important school of thought. The other reason why I used this pragmatic writing approach of augmenting my literature review, was opportunistic: being a managing editor of an academic journal 'in my other life', I value the act of writing, and the product at the end: compact and academically sound papers. Scholarly papers are one way for researchers to have a voice in larger academic discourse, exposing one's findings to outside criticism, while legitimising the approach and findings as the research progresses. The act of writing is one of the most confrontative ways of doing research, but it can also be part of the most rewarding ones. In my case, the two scholarly essays and the book chapter were constructive. They helped me structure my thoughts, test categories of analysis, complete my in-depth literature review around well-defined topics and validate my qualitative methodology.

The first peer-reviewed essay I wrote in the course of the doctorate dug into the notion of *interactivity*, which is one of the core features for defining interactive documentary (Dubois, 2018). I illustrated the notion by referring back to two creative productions: i-doc *Atterwasch* (2014) and early VR documentary *The Unknown Photographer* (2015). In terms of methodology, this made me revisit my own practice as the co-author of *Atterwasch*, thereby testing my autoethnographic writing.

The second text explored the notion of *impact* in general and revisited the i-doc *GDP* (2009) in particular, for a book called *The Interactive Documentary in Canada*, set to be published in 2021 with publisher McGill-Queen's (Dubois, forthcoming). This was my first foray using media impact as a conceptual element, and methodologically made me look back 10 years at an interactive documentary in which I was involved as the web-coordinator. It is in the context of this paper that I prepared my interview questionnaire and ran my first expert in-depth interview.

The third publication focused on *media innovation* and *societal impact*, and this is where I could deepen my research and tighten my findings on the notion of media impact and the impact of storytelling while testing the concrete case of *Field Trip* (2019) for the first time (Dubois, 2020). I ran a series of expert in-depth interviews that informed this paper.

As can be drawn from the three scholarly publications mentioned above, they requested me to make use of very concrete examples and case studies to bring the conceptual work to life. On methods, this meant, engaging in ethnographic observation and performing semi-structured qualitative interviews with producers of these works.

Apart from my own literature constructs, the scholarly literature I referred to was partly suggested reading by the editors and other peers in special issues where my contributions were published. These conceptual reviews were complemented by primary document research that I did using film and culture impact guides (see chapter 2), as well as online, print and current affairs articles serving to triangulate observations.

It is in this context of academic writing, that I engaged in informal conversations across a range of professional and academic contexts. Professional and academic encounters included the i-Docs symposium[23] in Bristol, in March 2018, where I, among other, presented on a panel about impact; the international Docmedia workshop[24] at Film University *KONRAD WOLF* in Potsdam-Babelsberg, in June 2018—hosting 34 documentary researchers and practitioners; a workshop on Media innovation and social change[25] at the University of Oslo, January 2019; and ongoing discussions at the Film University Babelsberg *KONRAD WOLF* with my doctoral supervisors, professors Susanne Stürmer and Björn Stockleben, a doctoral production studies colloquium involving professors Björn Stockleben and Skadi Loist, and a research-creation doctoral colloquium coordinated by professor Hans-Joachim Neubauer.

3.2 Methods

The individual methods in the multi-method research (Hesse-Biber & Johnson, 2015) design are described as follows. See Table 3.2 for an overview of how the methodology is operationalised.

3.2.1 Case study methodology

[23] I-Docs Symposium 2018 https://idocs2018.dcrc.org.uk/
[24] Docmedia workshop 2018 http://docmedia.projekte-filmuni.de/workshop/
[25] Workshop: Media Innovation and Social Change 2019 https://www.hf.uio.no/imk/english/research/center/media-innovations/events/2019/Media%20Innovation%20Worshop_JOMI_2019.html

If we zero in on what, methodologically speaking, is unique to my research-creation journey, it is the centrality of a main case. The main case is the point of departure from which I deduct categories of analysis. In the context of this thesis, I used a critical case approach (Patton, 2002) by focusing on the main *Field Trip* case (detailed in chapter 4), while at the same time employing a critical case sampling method that would allow for control case studies. The control case studies are there to mirror or test findings and results from the main case, or, as expressed in ethnographic and sociological terms, "to compare and contrast between settings in which similar activities occur" (Fielding, 2016, p. 321). In other words, drawing on the above-mentioned research-creation practice, I offer a *thick description* (Geertz, 1973) of the interactive media production *Field Trip*[26]—an interactive documentary about the Tempelhof Field, in Berlin—in which I was myself involved as an author and interactive producer over the time span of three years (2017-2020).

> *Thick description is not simply a matter of amassing relevant detail. Rather to thickly describe social action is actually to begin to interpret it be recording the circumstances, meanings, intentions, strategies, motivations, and so on that characterize a particular episode. It is this interpretive characteristic of description rather than detail per se that makes it thick.* (Schwandt, 2001, p. 255)

Psychologist Ponterotto (2006), who has spent time summarising the origins, evolution and meaning of thick description defines the concept and its main characteristics as follows:

> *Thick description refers to the researcher's task of both describing and* ***interpreting observed social action (or behavior) within its particular context****. The context can be within a smaller unit (such as a couple, a family, a work environment) or within a larger unit (such as one's village, a community, or general culture). Thick description accurately describes observed social actions and* ***assigns purpose and intentionality*** *to these actions, by way of the researcher's understanding and clear description of the context under which the social actions took place. Thick description* ***captures the thoughts and feelings of participants*** *as well as the often complex web of relationships among them. Thick description leads to thick interpretation, which in turns leads to thick meaning of the research findings for the researchers and participants themselves, and for the report's intended readership. Thick meaning of findings leads readers to* ***a sense of versimilitude****, wherein they can cognitively and emotively* ***"place" themselves within the research context****.* (p. 543, emphasis added)

Versimilitude means 'the appearance of truthfulness' and like Chris Drew explains in a blog entry (Drew, n.d.) about *thick description*, it means that "by providing the finer details, your account gains credibility".

I further extract most of the concepts and categories of analysis in my research from that main specific case study, which possesses universal qualities. This research design is justified based on two components:

[26] The original version of *Field Trip* with English subtitles can be openly accessed at: http://en.fieldtrip.berlin
My position in *Field Trip* is that of co-author and interactive producer.

1) Mirroring is enabled by what anthropologists call *emic* field research, where the subject is part of the observed group. My field practice experience over the past 12 years, bundled together with the emic *Field Trip* research over the last three years, bring about a substantial basis of knowledge and historical depth.

2) By including three other interactive documentary cases, I provide counter-points and complementary perspectives that triangulate findings of the *Field Trip* thick description, and particularly help the discussion progress beyond the main case. In other words, these secondary additional i-doc case studies are a diversity check put on the main case.

The data collection process for reconstructing the main case study of *Field Trip* happened based on data collected through the four mentioned methods explained below (participant observation, expert interviews, document analysis, desktop research). The data collection process for the three control case studies was mainly done through expert interviews and desktop research).

3.2.1.1 Choice of cases

Beyond my own i-docs, carried over to this research with the help of "reflection-in-action" (Schön, 1984), I have used the technique of *purposeful sampling* for identifying and selecting the i-docs to draw from. Purposeful sampling is a form of non-probability sampling. It is based on my subjective selection of i-docs within the larger i-doc *population* and is not necessarily meant to be statistically representative, although my findings are qualitatively generalisable. The technique I employed was that of critical case sampling—where by investigating a case, I expected to find evidence to inform many other cases in the larger i-doc population.

The choice of *Field Trip* as a main case assumed that the project would be produced in a genuine manner, without abnormal interference by the research project. Since the goal is to find out in detail what impact expectations makers of social interactive documentary have, the choice of this i-doc represented an opportunity related to the privileged access to the object of study. More importantly, at the time of settling on the case, the first concept of *Field Trip* had already been written, and from that first reading, it appeared as if this would turn into a typical i-doc, i.e. within the parameters of common i-doc characteristics (see chapter 2). The findings I would gather, so my thinking upon deciding on the case, would certainly be of use to the larger i-doc production, where projects more or less possess the same dimensions, incidents, and themes.

The choice of secondary i-doc case studies followed the same pattern, although there, the choice of interview partners played a role. I picked three interview partners who are complementary, as much from their job profile, as well as from the i-doc that they have worked on: story architect Lena Thiele, with *Netwars/out of CTRL*; Carolyn Braun, author and journalist with *Die #kunstjagd*; and creative technologist Mike Robbins, with *Highrise*;

Each i-doc case study has a different project design and is information-rich, thereby allowing me to surface critical findings that inform i-docs in general. As mentioned, the interviews with these three i-doc makers are further used to triangulate the findings stemming from the literature review and the main case. The carefully selected participants offered answers that were not yet or only partly found in the analytic autoethnography of *Field Trip*.

3.2.2 Participant observation

My *modus operandi* as a reflective practitioner (Schön, 1984) goes back in time from the different roles I played in interactive documentary productions: web planner, *Die #kunstjagd* (2015); co-author and producer, *atterwasch* (2014); game master, *Fort McMoney* (2013); author, *The Hole Story Interactive* (2011); web-coordinator, *GDP – The human side of the Canadian economic crisis* (2009); and finally, author and interactive producer, *Field Trip* (2019). Although my point of view was at each time slightly different, based on the exact role I played, it remained that of a practitioner playing an active role with more or less authorship, involvement and responsibility (see Figure 3.1).

Figure 3.1 Reflective practitioner in six i-docs

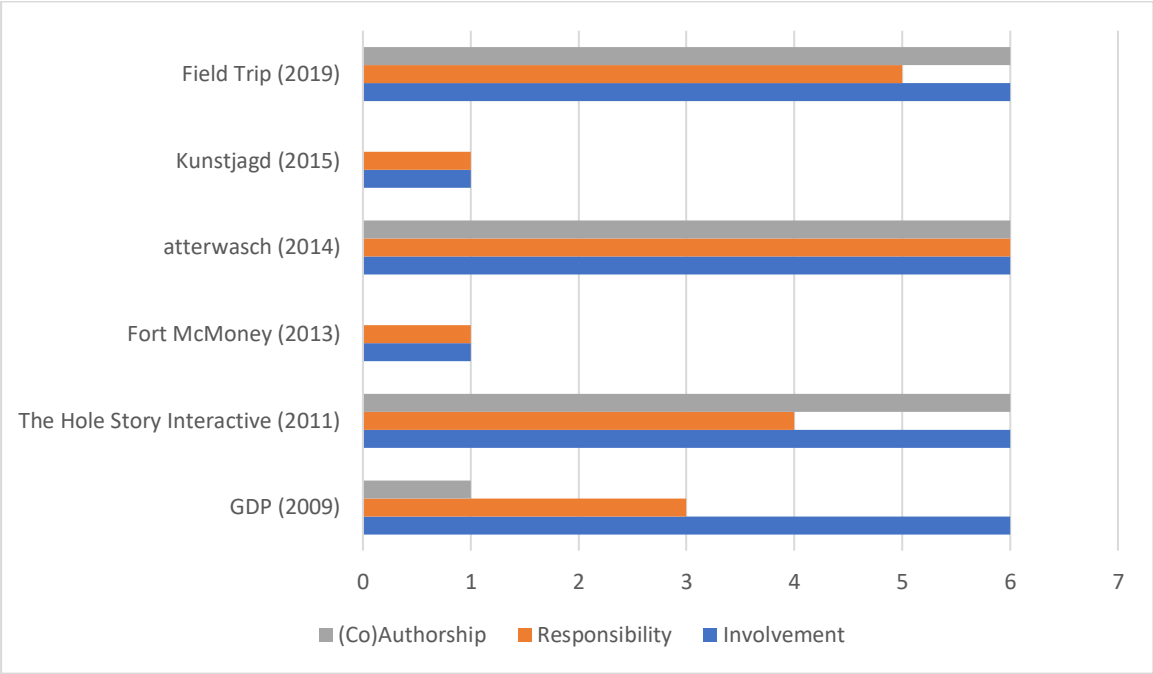

Figure 3.1 Reflective practitioner in six i-docs. Source: by the author.

What is relevant to the purpose of this doctoral dissertation, is the position of a maker of interactive documentary. As a practitioner, I have privileged access to the field and I am well placed to seek answers on how to improve the societal impact of interactive documentary. Even though there are different flavours to the roles that I have played over the last twelve years, the work category is that of a reflective practitioner (Schön, 1984). Some of the reflections I had during my practice were punctual and executed at unregular intervals. But the lion's share of reflections stems from reflective practice in the context of my own direct involvement in interactive documentaries.

The participant observation component most relevant for this thesis, although informed by the last twelve years of practice, was carried out systematically only over the period in which I worked on *Field Trip*. There is a difference between being a practitioner reflecting much on his/her practice, and one that performs participant observation in a research sense. The latter needs to take notes, organise them and build on them. This is particularly useful for writing a thick description, since the personal memos scribbled after meetings and exchanges with colleagues in *Field Trip* permitted me to revisit things that were observed in context, so as to better interpret expectations and intentions of i-doc makers.

The observations mainly took place in Berlin, in the context of group phone calls, irregular face-to-face meetings in cafés, work sessions with partners at their offices, in each other's homes or at

ronjafilm[27]'s offices. Although observation *in situ* was key, meeting protocols are, in hindsight, as valuable when it comes to revisiting the project systematically. In sum, when it comes to data collection for participant observation, the usual artefacts and documents of the production process were analysed *ex-post*. The in-situ observations were focused on observing the behaviour of teammates when taking common decisions. Would natural leadership by one teammate sway the entire team, or was there a true conflict culture? This was not documented by a project diary—which in hindsight I regret not having done—but via behavioural scribbles in a draft chapter 4 text document. Traces of these in situ observations can be found in the interpretations I give to the quotes by my teammates.

3.2.3 Expert interviews

From a total of 16 interview partners (see Table 3.1 below), six were involved in the *Field Trip* team. This prominence is due to the fact that for the main case to be told in a multi-perspective fashion, I needed to have minimal diversity of viewpoints. Then, the majority of interview partners (10) are makers who either worked on 'best practice' i-docs, as referred to in the introduction, or have experience in curating, analysing or funding i-docs. I interviewed makers "that are especially knowledgeable about or experienced with a phenomenon of interest" (Cresswell & Clark, 2011). Additionally, to the criteria of "knowledge and experience" and as described in Palinkas et al. (2015)—drawing on Bernard (2002) and Spradley (1979)—the selection of makers also is related to "the availability and willingness to participate, and the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner" (Palinkas et al., 2015).

The interview participants are *exclusive informants*, says Bruun (2016). Lee and Zoellner (2018, p. 52) build on Bruun, suggesting that exclusive informants are "investigated not as representatives of an elite, but as means to gain insight into the production of media texts. Media producers often have exclusive knowledge, making them irreplaceable as research participants. (Bruun, 2016, p. 139)."

The semi-structured expert interviews I ran were done via VoIP, phone, or in person between January and December 2019. As mentioned above, they lasted one hour and a half on average. I wrote down the replies while interviewing and sent a clean transcript of each interview to the interview partner in the week following the interview, to get their validation and sign-off.

[27] *ronjafilm* is the official production company behind *Field Trip*. For more detail, see chapter 4.

From the 16 interviews listed in the table below, seven were proper semi-structured interviews, including three with *Field Trip* team members, two with interviewees with whom I had worked on a specific i-doc in the past and two whom I had never worked with.

The balance of interviews (9) were done in an unstructured and informal way as part of formal settings, such as workshops, conferences and work environments.

Table 3.1 Overview of expert interviews

	Full semi-structured interviews	**Unstructured informal interviews**	**Subtotal**
Number of interviewees involved in *Field Trip*	3	3	6
Number of interviewees involved in i-docs that I was involved in	2	2	4
Number of interviewees involved in other i-doc projects as makers	2	4	6
Total	**7**	**9**	**16**

Table 3.1 Overview of expert interviews. Source: by the author.

The seven semi-structured interviews were conducted with:

- Carolyn Braun, journalist
- Marie-Claude Dupont, producer
- Joscha Jäger, creative technologist
- Svenja Klüh, executive producer
- Mike Robbins, creative technologist
- Eva Stotz, author, director & producer
- Lena Thiele, story architect/designer

The nine informal interviewees and conversation partners were:

- Floris Asche, producer
- Marco del Pra', photographer
- David Dufresne, author/director
- Frédéric Gonseth, director
- Olivier Guillard, web designer
- Michał Kuleba, film editor
- Filippo Letizi, animator
- Elizabeth Miller, i-doc author and professor
- Remco Vlandeeren, interactive producer

The expert in-depth interview I did with *GDP* producer Marie-Claude Dupont was put in perspective using two interviews by a journalist (Pitzer, 2010a, 2010b) with the same interviewee, published in specialised media in 2009 and 2010 respectively.

3.2.3.1 Interview evaluation

As suggested in grounded theory, I inducted categories of analysis from the interviews. I did not take pre-established categories from theory. I used two key research elements from grounded theory to work out the categories of analysis from the interviews:
1) the coding of text, and
2) the rigorous and continuous comparison of impact categories.

The coding was done by data sorting, meaning that I highlighted and emphasised impact-related categories in the interview transcripts, without resorting to the strict line-by-line coding as described in the initial grounded theory model by Glaser and Strauss (1967). This permitted me to sort the data without losing the narrative context. I engaged in initial coding/labelling, and eventually refined the categories and resorted to focused coding (Lofland & Lofland, 1995). Initially, I coded anything related to *value*, *expectations*, *effects*, *impact*, *change*, *media innovation*, and associated notions[28]. In the focused coding phase, I only labelled the text related to impact and effects. I did not use Computer Assisted Qualitative Data Analysis Software such as NVivo or MAXQDA, as the corpus of transcripts was relatively small. Even though I did code other texts such as emails, collaborative documents, notes

[28] In the interview analysis, I highlighted all sentences including these keywords, bundled them according to media innovation dimensions and looked at the number of mentions in each bundle. This permitted me to evaluate whether different dimensions weighed-in more or less strongly, compared to other impact expectations. Beyond the forcused coding data informing the grounded theory approach, I had also retrieved a number of passages in the interviews during the initial coding stage that albeit not using the keywords, added hidden impact expectations that could not be detected via the fodcused coding.

and scribbles from my field observations, the number of incidences in the focused coding phase remained relatively low.

The constant comparison of categories of impact was done among impact labels, but also by comparing with the categories found in the impact literature (see chapter 2). This systematic theory building approach is grounded theory, but it differs from the original grounded theory as posited by Glaser and Strauss in 1967. Their original model has been criticised for being too positivistic, requiring the researcher to only build theory based on empirical data (induction), and to exclusively pull-in literature at the end of the process so as not to taint the theory-building from the ground up. But albeit being criticised, it remains the leading reference.

What I did, is called 'constructivist grounded theory' such as defined by Kathy Charmaz (1995). Contrary to Glaser and Strauss, I cannot pretend that the conceptual theory that I came up with stems from my empirical research data alone. That would indeed be too positivistic, especially in research-creation studies where the iteration between practice and theory helps elaborate units of analysis. "'Constructivist grounded theory', she [*Charmaz*] suggests, involves utilizing the techniques associated with the [*grounded theory*] approach […] as tools to ensure the research process is rigorous and that there is a close fit between interpretations and data – thereby protecting against the forced or arbitrary imposition of theory" (Hodkinson, 2016).

Although I adhere—as mentioned in the first sentences of this chapter—to an interpretative approach, which builds on inductions first and foremost, it cannot be that alone. I have my world views, theoretical inclinations and values, not to mention power dimensions that also play in when researching[29]. I hereby disclaim: my preconceptions are of personal nature, due to my past i-doc experience and current involvement, and of theoretical nature, in that I did compare my empirical findings with what I found in the literature in an iterative process, especially in later stages of research. Thus, I adopted coding and comparing as constructivist grounded theory techniques to minimise the impact of my preconceptions.

3.2.4 Document analysis

In the context of my thesis, the documents I have used to convey meaning and understanding are written documents. Among them, there were organisational documents such as internal correspondence (emails) among *Field Trip* makers, collaborative project documents in a Google Drive folder, including meeting protocols, memos, spreadsheets of festival and award filings, prototype concept versions, funding applications, letters to partners, etc. There were also external sources, such as i-doc project presentations, accompanying websites and files that interview partners shared with me. The latter external documents

[29] For more on power and preconceptions, please see the section on ethical considerations in this chapter.

were complementary to what I already had collected about the external case studies and provided a way to more precisely contextualise the interview findings of the external experts. External, but most importantly internal documents were particularly useful for tracking change and development of the case studies. They among other helped me keep a detailed account of *Field Trip*'s project timeline and how expectations of impact evolved over time.

After having selected the documents to screen, I analysed them to find supplementary data (including about events that the makers and myself had forgotten about), corroborate the findings in the interview material and come up with more detailed research questions. Most of all, the document analysis was crucial for informing the thick description mentioned in the case study section.

3.2.5 Desktop research

The fifth method I employed is, contrary to the other methods, an almost exclusively deductive one. I engaged in desktop research as a data collection method so as to find academic literature, conceptual work from NGOs or film societies and independent writings about i-doc production. I discovered these sources in libraries (including extensive use of interlibrary loan), Internet-services (e-journals, Google Scholar, ResearchGate, open access books, university repositories) and recommendations by peers in the colloquia and research workshops that I attended. Most theory was collected in an organic fashion by searching online from one source to the next.

My desktop research method was relatively conventional. Most academic references this research is based on are scholarly papers. This is related to the fact that an increasing number of papers are available in open access, which is not the case for most books, yet. The more cumbersome access has been an issue, especially in the production-intensive months that were required by the creative research project. The difficult access to some sources was offset to some extent thanks to the interlibrary loan service offered at the Film University Babelsberg *KONRAD WOLF*'s library, but also by the authors themselves. I received a dozen sources in PDF format after requesting them via e-mail from corresponding authors.

The desktop research of secondary sources, mainly academic, happened in waves, as described previously in the act of writing section. I had three main phases during which desktop research was most active. One was around the concept of *interactive documentary*, another around that of *media innovations* and a third on *impact literature*. In all three phases, sources both from practice and theory sectors were collected, and integrated. A non-negligible number of texts, particularly related to methodology or secondary research concepts, were found in between these waves. These were for instance doctoral and master theses by interdisciplinary researchers, or bloggers specialised on qualitative research methods.

Table 3.2 Methodology overview

Method	Approach	Nature of data (type of data)	Technique of analysis	Findings[30]
Case study	Inductive	Experiential (e.g., social behaviour, interaction, deliberations)	Analytic autoethnography (incl. thick description)	Consciousness of impact expectations in a production team grows over time and can lead to *common ground impact*
Participant observation	Inductive	Processual (e.g., notes, memos, protocols)	Analytic autoethnography (e.g. coding, comparing categories)	Societal impact can be created by operating a change in the way a team works with protagonists (*workflow impact*)
Expert interviews	Inductive	Discursive (transcripts)	Constructivist grounded theory (e.g. coding, comparing categories)	I-docs are particularly adapted to complex/ controversial topics as they can generate *multiperspectivity impact*
Document analysis	Inductive	Conversational/ Performative (e.g., internal and external notes, presentations)	Constructivist grounded theory	The effort invested in securing funding speaks to a negative *return-on-investment impact* in the main case study
Desktop research	Deductive	Scholarly (e.g., impact guides, academic literature)	Classic research, reading and extraction	Understood as media innovations, i-docs are often of high cultural value, but low economic value

Table 3.2 Methodology overview. Source: by the author.

[30] Please see chapter 5 for details and full findings. The findings listed here are exemplary, only meant to help grasp the methodology and how it was operationalised.

3.3 Empirical material

In qualitative social science research, empirical material can be made out of products, documented processes, but also people, as living artefacts. In this doctoral thesis, I drew on two main sources of empirical material: the case of living documentary *Field Trip* and the makers themselves.

3.3.1 Field Trip as a living product

It is easy to take a look at *Field Trip* by going online. But *Field Trip* being a moving target, so to speak, it is tricky to grasp it in full just by looking at the product at one given moment. *Field Trip* has been launched on 13 May 2019 in German. Since then, it was updated on four occasions and took on a life of its own, including in Polish- and English-language. To illustrate the living (in the sense of *constantly evolving*) character of the product, consider that in December 2019 *Field Trip* released all of its Creative Commons content in a 'drag n' drop' mode, for increased accessibility and shareability purposes. *Field Trip* is also present in social media and continues to engage in conversations as late as 2021, even though in theory the production phase closed in May 2019. What is important to consider here, is that the product itself, with all of its features and social media tentacles, continues changing over time. This changing environment is just one form of empirical material that I am drawing on.

The case study described in the next chapter relies on 1 Go of email traffic between team members, meeting notes, strategy scribbles and an electronic collaborative folder filed with some 250 production text files. All of these represent documented processes: a memory of the *Field Trip* project.

Not all pieces of empirical information are of value in analytical terms, but some are. There were email exchanges directly pertaining to how each team member saw impact expectations. There were planning documents in which an entire log of all film festivals to which *Field Trip* had been submitted, was available. There were meeting notes, including with media partners, where ballpark usage statistics were scribbled on, or consider the many funding applications that detailed a vision for *Field Trip* as a project. All of these served as reference points and a memory of the project and permitted me to look back at project phases.

3.3.2 The makers

At the risk of being repetitive, I must remind the reader again that the other empirical material on which this research-creation study is built, is three semi-structured interviews with core team members, as well as three informal interviews with freelancing team members. I have run interviews in 2019 with co-author and director Eva Stotz, creative technologist Joscha Jäger and executive producer Svenja Klüh.

All three were part of the core team at *Field Trip*. I have further interviewed members of the enlarged team: Filippo Letizi (illustration and animation), Olivier Guillard on webdesign and Michał Kuleba, our film editor. These interviews were performed in work settings and in an informal manner. The result are rough notes that I pulled together in short transcripts.
Beyond the official transcripts, the makers were available on demand for answering any queries I had during the research phase.

Now that I have added specifics on the nature of the empirical material that went into the research, I will conclude the methodology chapter by stressing the tightly-knit relationship of scientific and artistic viewpoints in my work, and what the larger ethical implications are.

3.4 How the scientific and artistic parts are interlocked

"Research-creation projects typically integrate a creative process, experimental aesthetic component, or an artistic work as an integral part of a study," Chapman & Sawchuk (2008, p. 5) tell us. In this scholarly study I integrated the creative process and the artistic work *Field Trip* to my study so as to generate knowledge that is informed both by scientific and artistic methods. One component dovetails with the other, or so goes the story. But how exactly does the study differentiate from a study where *Field Trip* would have been produced by a third party? The answer to this question pertains to the *process*, meaning what knowledge is generated "through" *Field Trip*. In other words, the researcher that I am gathers experiential knowledge directly from 'doing media' and contrasts this process-related knowledge with propositional knowledge (document and literature knowledge). It is important to clarify here, that in a fictional scenario, a third party could have made *Field Trip* and thus produced practical knowledge that I, as a distant researcher, could have drawn on. Now, the experiential knowledge is distinct from that practical one in that it provides the behind-the-scenes understanding of how impact expectations are defined in a team, negotiated, redefined, etc. This processual knowledge is often not featured in practical knowledge. More to the point, having been a party to the *common ground impact* dynamic (see chapter 5), I have myself crafted the *impact through openness* motive (see chapter 4) of *Field Trip* and gotten invaluable knowledge on how impact can be intrinsic to an art work's design and motive. The distant researcher could have observed some of that, but not gathered the full understanding of limitations of this intrinsic impact characteristic. I'm mentioning limitations, because although the art work embodies the intent of impact (through its openness paradigm), I experienced first-hand failed impacts or curtailed impact expectations due to often hard productions realities. In other words, the wholistic concept of impact through openness can only be fully assessed by experiencing the reception and production of the art work as such.

My unique maker's perspective also enables me, unlike an external researcher who would be using the same methodologies (e.g., interviews and participant observation), to infer first-hand information out of the many informal and non-scientific moments of production. Speculatively speaking, an external production studies researcher could most probably come up with a decent account of *Field Trip* and some level of analysis of impact. This said, thanks to my maker's perspective, i.e. through choices I made on *Field Trip*'s esthetic, interactive and functional dimensions, but also the backdoor discussions and many in-action and *in-situ* emails and conversations I had with team colleagues and partners, I was informally gathering intelligence cognitively and emotionally. This information is not or too little accessible to external researchers, thereby cutting them off from a more granular knowledge-base to draw findings from. In other words, my research process was continuously informed by priviledged experiential knowledge. The evidence generated through making *Field Trip* percolated and punctuated the more formal research process. Even though the two phases (making *Field Trip* artistically and writing the thesis scientifically) were sequential (with some substantial time overlap though), it remains that the maker perspective continued informing the analycal and synthetical research phase. It can thus be argued that in my research design, the interlocking of the scientific and artistic parts were practice-led but not solely driven by my own practice such as in some *artistic research* endeavours.

A second legitimate question could be: What would a third party learn about the object of study via de plain reception of *Field Trip*? This question mainly relates to the *product,* where knowledge is engrained "in" *Field Trip*, but also the user experience. In both instances, it is the experiential knowledge that is again called upon here: what I learned scientifically by engaging in the creative practice of *Field Trip* and what others discover by interacting with the interactive documentary.

It is difficult to tackle the first question by providing a single answer. So many aspects of this study are influenced by the fact that I have this double-role of researcher and creator. How could it be otherwise? For example, the sheer fact that I interviewed my colleagues about a moment or visions of a project that we all fought for, triggers straight answers that I can immediately contextualise and interpret thanks to my doer lens. But for the sake of providing a straight answer myself, I would argue that the part of the knowledge that is inextricably linked with my direct experience of the process of making *Field Trip*, is a finding that I develop in chapter 5: the **common ground impact**. Without pre-empting it too much here, it suffices to say that engaging in the creative practice of i-doc making is key to unveiling how impact expectations are negotiated and decided upon in a team. When you experience the negotiation for having a stake in it, you can reach a thickness in explanation and interpretation that would not be accessible to the outside researcher.

Living *Field Trip* in my capacity of co-author, taking responsibility for it as my brainchild, showing perseverance in the face of adversity and setbacks, forcing myself to being persistent and tenacious: all

these experiences contributed to being able to interpret knowledge without beautifying. In terms of production, this hands-on experience helps coming up with an honest and realistic evaluation of things like the imbalance between input of time and resources and the financial output, workflow constraints, etc. In sum, the difference between a *research-creation* on i-docs and a *research* (without creation) on i-docs is that the creation offers controls on scientific methods and keeps interpretations down to earth.

The second question relates to the product: *Field Trip* itself. In the creative work itself, I identify at least four discoveries that users would make by interacting with *Field Trip*. These discoveries inform their knowledge base in a vivid and possibly impactful way, something that no scientific account could mimic.

- On an emotional level, the user experiences the **emotional impact** category (see chapter 5) that I inducted from my research. For example, a user watching the former forced labourer telling her story "on the crime scene" might be moved and feel touched by what she sees.
- On an esthetic level, users might be triggered to watch, share or participate in a way that a scientific description could not. A user might for example share the StoryboXX episode of *Field Trip* with a friend on social media after feeling attracted to the poetic visual and sound esthetic of this story fragment.
- On a cognitive level, the user experiences the **multiperspectivity impact** category, that I found to be central in many i-docs. Here, because of the carrousel-like storyworld of *Field Trip*, a user might start listening to a protagonist that they otherwise don't feel drawn to. This opens up the cognitive space of the user.
- On a functional level, finally, the attentive user gets a chance to re-use and re-mix content from *Field Trip*. To theoretically know that *Field Trip*'s content is mostly under Creative Commons licence is one thing, but to being served the files straight-up for immediate re-use, makes the idea tangible. This is an illustration of the **re-use impact** developed in chapter 5.

As stated many times, the consumption, use and/or reception of *Field Trip* is not the focus of this production study. Yet, it is important to stress that the user experience of *Field Trip* that I did observe via prototype-testing and early audience reactions to the release of *Field Trip* online and in public screenings, informs the research question (how to account for the societal impact of interactive documentary?). I observed the above-mentioned-impact categories in the user experiences of *Field Trip* post-release. They were key in triangulating the propositional and practical knowledge. The user experience of *Field Trip* was also a short-term value-added to the experiential knowledge out of production. It helped (in)validate impact expectations that we had. One example is the story of a woman who has left the GDR via Tempelhof airport. We were collectively expecting that this *Field Trip* story would be emotionally so attractive to funders specialised on GDR history, that they would want to support our project. Some historians experiencing *Field Trip* mentioned that this story was not that

evocative from their perspective and thus did not see in what ways our project as a whole was making a difference on the topic of GDR refugees. Based on this anecdotal evidence, we eventually decided to lower our impact expectation with this story, even through we continue to think that it works well in the context of the carroussel type story that we are telling. The user experience knowledge gathered in this example has for one helped the project team readjust and secondly, it has put a check on my study when it comes to understanding where the larger impact of *Field Trip* resides. This is turn has helped bridge to the practical knowledge of other i-doc user experiences explored in my study and to propositional knowledge from i-doc literature.

Users of *Field Trip* have reported that their user experience of the art work can be summed up as *impact through openness*, meaning that the research question is informed by the user experience the art work itself. For more on *impact through openness*, please read chapter 5.

To summarise, the interlocking of scientific and artistic methodologies which are core to research-creation, provide a value to this study that cannot be matched by one or the other alone for shedding light on the i-doc phenomenon. This said, it would be misleading to think that research-creation is a panacea. Indeed, one needs to be clear on the fact that there are limitations on how the scientific and the artistic can play together, so to speak. In my research design, the artistic work particularly, is set to lose, since the bulk of the scientific work is only available after the artistic work has been released. This is a limitation to how the two components are integrated. The scientific might inform further artistic pieces, but it did not influence *Field Trip* in fundamental ways. It accompanied *Field Trip* by allowing me and the team to reflect on practice much more than we would have otherwise, but the main intellectual contribution of my study came after *Field Trip* was released. This limitation is specific to my research design and not something that applies to all research-creation endeavours.

Another limitation to the interlocking of artistic and scientific practice, which in turn is probably common to all research-creation projects, is that the artistic part can become overly dominant in the researcher's lense, thereby foregrounding interpretations, unduly loading analysis and making the scientist jump to conclusions that might not apply outside the artistic practice. I am not saying that this potential bias limited the interlocking in my research-creation study in a decisive manner, but it might at times have curtailed more philosophical findings to bring them in line with a more instrumental reading.

3.5 Ethical considerations

In research-creation, one can never stress the position of the researcher enough. My privileged access to *Field Trip* as a case study comes at a cost: it requires me to be more alert than classic researchers

regarding any biases or potential conflicts of interest resulting from the *interested* position of the practitioner in me.

It is reasonable to ask the question whether this strength is not at the same time a liability. Could it be that the informant (in this case myself), who has primary interest in attaining production goals, is a toxic informant, tainting and orienting the research to suit his practitioner goals? Or is the researcher influencing the practice by projecting concepts and reflections that might slow down production, clog action, annoy other production team members? These side-effects are real. But should they be of fundamental concern?

The double-sided position of a researcher-creator brings more benefits to both the practitioner and the researcher in me, without doing too much damage on either side. But I did notice that certain preconceptions I had, as a maker, made me miss certain aspects in the impact discussion. Particularly impact expectations that are a given, as a practitioner, such as the esthetic impact or the originality of an i-doc, were blind spots that caught me off guard, and which could only be caught up with thanks to the multi-method research design.

The double-role forces me to be even more transparent about potential conflicts of interest, and, as shown here, my methodology. The selection of interview participants was particularly prone to practitioner and researcher bias, since the i-doc community is a relatively small one. I knew all but one interview participant in advance. This said, the use of the critical case sampling method, which generates knowledge that provides insights into other similar i-doc cases, was not done on the basis of convenience, but on the fact that the selected cases are information-rich and therefore significant. Also, by using constructivist grounded theory, I was able to systematically compare analytical categories and triangulating findings, including with out-of-case data, thereby reducing the risk of advocacy findings.

This tension of being two-roles-in-one forced me to make space for views from other interview partners, talk to them in the open, explicating my potential biases, and frequently reflecting on my conceptual work by among other confronting it to peer review.

These checks and balances will not satisfy those who believe research should be done in a distant and objective fashion. In applied research, it can not only be normal, but also wishful to be an active participant to the problem-solving process. But to be clear, the research design was not that of participatory action research (PAR), since the subjects I observed and interviewed were not involved in defining the research design at any stage. I was much more of an overt analytical ethnographer throughout the research project. This role in the field can reveal processual details, especially in the main case study, that a distant researcher could never detect. Also, as described in the previous section,

this role provides an interpretative reading that is experiential (*through* the artistic project), that again, might relativise the risks of being embedded.

This said, sources of potential bias exist in every research endeavour. In mine, beyond what I just discussed, traces of potential bias exist at another level: power. My research point-of-view is obligatorily tainted by the fact that I am male, white, heterosexual, and what Max Weber would probably label as a person of privileged socio-economic class[31]. Also, I lived most of my life in the Global North. This privileged position might for instance introduce bias in the way I interpret group behaviour as part of the case study, or the fact that I unintentionally leave out categories of impact in my analysis. Another example would be that even though I tried hard to keep a gender balance in the interview participants, or in the academic sources that I drew on, I was not always able to deliver on this promise. Power relationships also played out in the artistic work, where in negotiation, I might have imposed my impact expectations over that of others in certain situations, including because of my power status. This, in turn, would have influenced my findings. It is important to keep this ethical consideration in mind when reading the thesis, since much of the data collection and analysis relates intimately to the person that I am.

From an ethical point of view still, it is important to mention that I anonymised names mentioned in interviews and email communication so as to protect those mentioned. All interview partners and email correspondents whose email communication I use towards this thesis have been asked for permission to reproduce.

More generally, I have followed the German Research Council's "Guidelines for Safeguarding Good Scientific Practice" in my research and have more than once asked for advice on how to handle ethical questions internally at Film University Babelsberg *KONRAD WOLF*.

[31] "This model is inspired by the theories of German sociologist Max Weber (1864–1920), who viewed the stratification of society as a result of the combined influences of economic class, social status (the level of a person's prestige or honor relative to others), and group power (what he called "party")." (Cole, 2019).

CHAPTER 4 - Knowledge from the field

As mentioned in chapter 2 when discussing media innovations, I am offering here a thick description of media-based artefact *Field Trip*–the i-doc that I authored and co-produced as part of this doctoral endeavour. I am doing this with a double intent: 1) to document the most important components of the product, the process and the distribution of an i-doc, and 2) to create evidence of harder to quantify impacts and impact expectations that can inform a larger societal impact, as discussed in chapter 2. In fact, a full assessment for this i-doc would require much more information than is available. No one has conducted surveys of audience members for *Field Trip* using pre-tests and post-tests assessing their knowledge, attitudes, and behaviour. Also "attitudinal change happens over a longer term and does not usually come about as the product of a single dramatic intervention" (Whiteman, 2002, n.p.) So, I can offer only some 'educated guesses' on the immediate effects of viewership, but will be able to detail the producer's perspective thoroughly.

I am drawing on Dogruel (2014) to structure the description, so as to best cover all dimensions of media innovation: *content/design-oriented, technological, organisational*, and *functional.* This description lays the ground for understanding the production context and scope. I then go into the heart of the production process of this i-doc by surfacing key impact-related events. For doing so, I am informing the description with the multi-method approach detailed in chapter 3, thereby dissecting fieldwork material stemming from my own ethnographic observations, email correspondence and semi-structured interviews with team members. In the end, I am extracting impact expectations *by Field Trip* makers so as to get a more granular understanding of the societal impact when considering the full production and distribution of an i-doc.

That situated producer perspective is then complemented in the second half of this chapter by descriptions of a corpus of i-docs selected by purposeful sampling (see chapter 3 for a full discussion on sampling) where I identified and selected "information-rich cases for the most effective use of limited resources" (Patton, 2002). Taken together, this largely ethnographic evidence should help me inform the analysis in chapter 5.

4.1 Field Trip–a thick description

A straightforward way of describing Field Trip is as follows: *Field Trip* is a 92-minute web-based documentary about the Tempelhof Field, Berlin. The longer answer, is that *Field Trip* is three things at once: 1) it is, yes, a 92-minute web-based documentary about the Tempelhof Field, Berlin; 2) it is an independently produced social experiment and; 3) it is a research project into the opportunities and

limitations of creating societal impact with creative media. It is maybe because of this multidimensionality, that *Field Trip* is such a rich artefact from which to draw production knowledge.

4.1.1 Content & design

4.1.1.1 Content

It is always difficult for a creator to describe his own work, as the natural reaction is to say: "Go see it for yourself, it's there: https://en.fieldtrip.berlin/". But the truth is, there is much more to gain from cultural praxis than the product that we see. The following is an account, albeit reductionist, of the main elements of content and design in *Field Trip*. The i-doc is made up of fourteen stand-alone stories that dialogue with one another. Each story is a video averaging seven minutes in length, which portrays one or a group of protagonists. At first look, these protagonists have nothing more in common than the location where they were filmed: the Tempelhof Field in Berlin.

The Field, which is a 355 hectares public park since May 2010, still to this day looks like what it was: an aircraft landing field with two airstrips, taxi lanes, red and white checkered airport shacks, lawn and grass in between, black and yellow signage, and control towers. The Tempelhof Field leads to the tarmac, which leans onto a 1.2 km-long heritage site: *Zentralflughafen*—the elegantly curved Tempelhof airport building. *The Field* is situated south of Berlin's city centre, touching three popular neighbourhoods: Kreuzberg to the North, Neukölln to the East, and Tempelhof to the South-West. Before becoming a magnet for Berliners escaping their daily routines, the Tempelhof Field has had a troublesome history[32], slaloming between being a microcosm of Berlin's bustling metropolis (e.g., leisure hotspot in the 1880s and 2010s, Graf Ferdinand von Zeppelin and Orville Wright's air shows in 1909, safe haven for refugees since 2015), and a propaganda venue for German and World politics (May Day 1933; Berlin airlift in 1948-1949).

The fourteen video stories are brought in conversation with one another thanks to the technical infrastructure, which I will detail further down. But for now, let me just indicate that *Field Trip* is using the technique of *open hypervideo* to enable fluid outgoing and ingoing links to and from each story. Each link is stylised in the form of an animation. These animations are rotoscoped illustrations. In the story "The Coal Boy"—about a Berlin pensioner looking back at his teenage years during the Berlin Blockade—the animation of a young man builds up two-thirds through the story over the still running shot on the tarmac. Here, the user is invited to either *lean back* (stay in the story) or *lean forward* (move onto the story of the young man). The young man protagonist is "The Field Dancer", a choreographer

[32] For a full chronicle of Tempelhof Field's history, please go to https://www.thf-berlin.de/en/location-information/history-of-location/

from Rennes who, in 2018, got thousands of Berliners to dance on the tarmac thanks to a collaboration with Volksbühne Berlin. With this particular link, the storyline connects two stories in a *situational* manner. The story-link is in this case the tarmac, meant to call out the user to be conscious about this location.

In another scene, "The escapee"—a woman who left the GDR to West-Germany via Tempelhof airport as a child—says the following: "Being torn away so brutally has been a lifelong process". Right after, an animation of a kite flying loosely over the field comes to the fore. The user is here invited to click on the kite so as to move into the story of "The Kite Builder"—a young Afghan refugee temporarily living in the Tempelhof airport hangars. The story-link introduced here is not situational, but based on *meaning*, as both protagonists share a narrative of uprooting while projecting the hope of freedom.

Illustration 4.1 Interface of *Field Trip* with selected protagonist

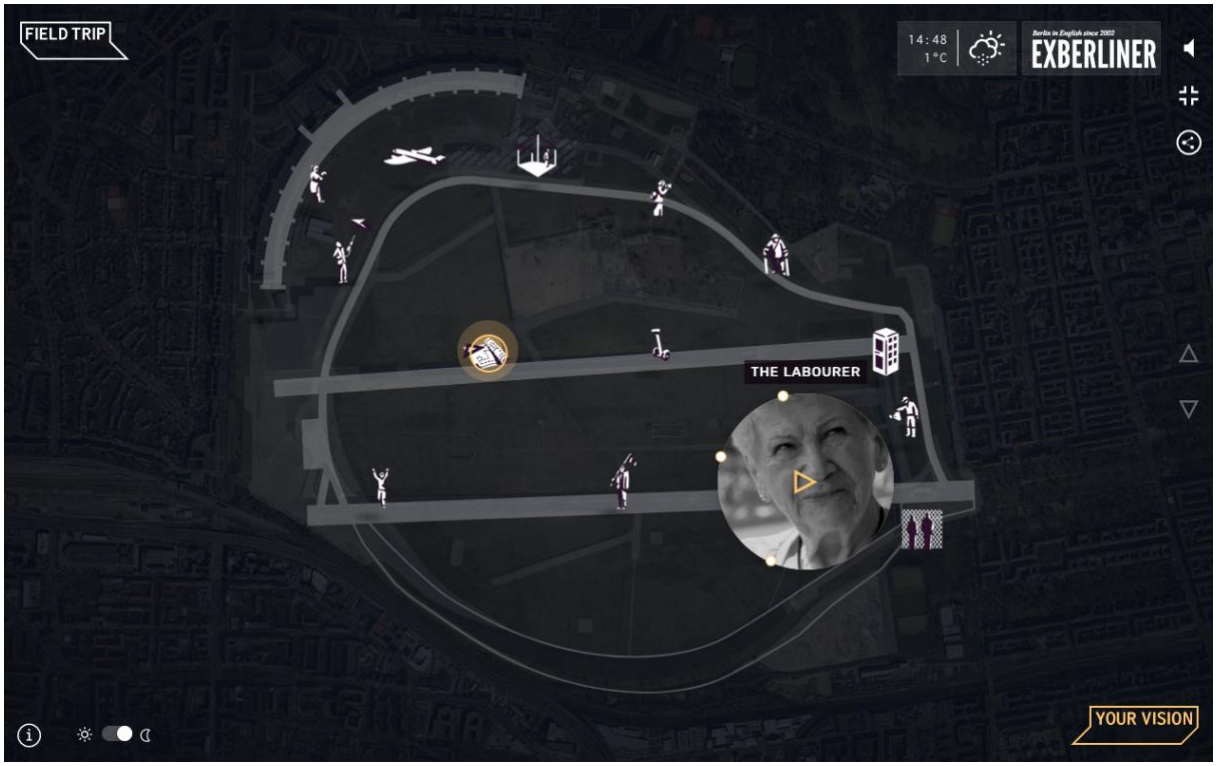

Illustration 4.1 Interface of *Field Trip* with selected protagonist. Source: Field Trip GbR/ronjafilm.

In a quick walkthrough, let me mirror the other stories in *Field Trip*. There is "The Investor"—a real estate entrepreneur who dreams of turning the public park into new neighbourhoods; "The Planters"—a group of neighbours who look after their community garden on the field; "The Labourer"—a pensioner from Lodz who for the first time since 1945 comes back to *The Field*, where at the age of 14, under Nazi Germany, she was forced into hard physical labour; "The Architect"—whose vision it is to leave the land of *The Field* under city control while building housing units on the fringes; "The Onlookers"—a

group of disparate Berlin plane watchers and outcasts filmed in 2004, at a time when the Tempelhof Field was still open to air traffic; "The Father on Hold"—a Syrian man who is staying in a refugee "container village" on the field; "The Courage Runner"—a man with physical disabilities who partakes in an annual inclusion run on Tempelhof Field; "The Dialogue Opener"—an engaged writer and speaker addressing a crowd at a "open society" community event on the field; and "The Veteran Protesters"—two film and theater personalities from Turkey making a political parallel between Istanbul's Gezi park and Tempelhof Field. Last but not least, there is the "The StoryboXX"—a former West-German phone booth turned into a space to exchange books and listen to short anecdotes recorded as part of *Field Trip*. People are free to phone-in and leave two-minute short stories on an answering machine. The most interesting stories were then curated and included in the StoryboXX story, along with visual material shot by the team. The StoryboXX story includes the voices of tourists, a writer coming to the field for inspiration, a sex worker taking refuge in the phone booth and a man sharing an anecdote from his childhood in Cold War West-Berlin.

The content is intentionally quite diverse, as one of the objectives co-author Eva Stotz and I had, was to *reflect the different communities present on the field*. We initially thought that we would be able to release 24 stories or more, but we had to adjust our expectations along the way for a lack of sufficient funds. There were many more historical moments that we would have liked to capture, many more spontaneous protagonists we would have liked to encounter on the field, and many more communities represented. If some of these rich stories were left out, we nonetheless assembled and weaved together enough stories for the i-doc to give a glimpse of the diversity in this urban space. It was our goal to represent more than the sum of its pieces. We ended up with a mosaic-type (some say carrousel-like) documentary in 14 fragments about our main protagonist: the Tempelhof Field.

4.1.1.2 Design

In terms of design, *Field Trip* is a full screen experience. The user can enter the documentary from any of the stories mentioned above, provided they have picked up the URL (deep link) somewhere (e.g. via *Field Trip* social media accounts). Most users come in via the main entrance: the landing page en.fieldtrip.berlin. From there, the user clicks on a play button to get immersed in a full screen introductory video where one flies through white clouds and blue skies. The user hears off voices and approaches the Tempelhof Field from an airplane perspective, and gets closer and closer with the help of quick film cuts, aircraft archive footage, and an echoing sound design. At the end of the introductory video, the user sees a satellite map with fourteen wobbling icons on it. Each icon represents a story. By clicking on an icon, the user sees the story title and still image wrapped in a circle-like design. By clicking on that circle, the user is back in full screen video. If the user does not interact with the interface during the viewing of a story, the story simply loops—instead of automatically hopping onto a random

story. The user is thereby invited to interact as much as possible. This interactive story design element is meant to reinforce the idea that *Field Trip* is not "a juke box of independent stories", but a "spaghetti of stories" that makes for a full meal.

Illustration 4.2 Clickable animation over video-episode in *Field Trip*

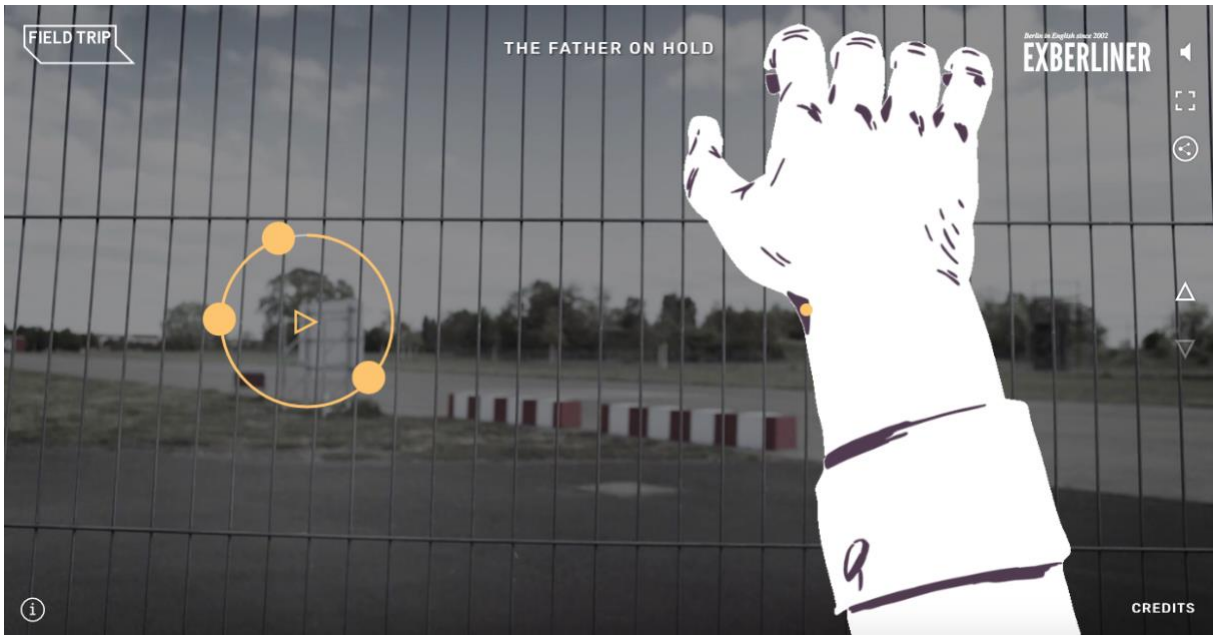

Illustration 4.2 Clickable animation over "The father on hold" video-episode in *Field Trip.* Source: Field Trip GbR/ronjafilm.

Apart from the "main act" (being the video stories in full screen), the user can at any given moment interrupt viewing and go back to the satellite map with the use of arrows. By clicking on the opposite arrow, the user can go back to the paused video story, which then starts automatically. In the satellite map view, which some users referred to as the "home", one can click on the words "Your Vision" in the bottom right corner. There, she can directly phone a StoryboXX-number and leave an anecdote on the answering machine. There is additionally a slider button on the map, for a day *vs* night view of the map. This latter element is more or less an ambient element that does not advance the larger narrative.

Irrespective of where one currently is in the documentary, there are always menu items available as soon as a mouse or swipe movement is made. The menu includes the following functions: Sound on/off; Full screen on/off; Share Facebook/Twitter (pre-written message); Arrow up; Arrow down; About icon. When clicked, the about button superimposes a page with plain information on what *Field Trip* is (About), who the core team members are, who the supporters and funders of the project are, contact information and usual data protection disclaimers. Also, there is a Frequently Asked Questions section which explains what an i-doc is (What is a "web documentary"?), what an "open source documentary"

is, what a "Code Snippet Repository" is, how it works and what technologies *Field Trip* uses, and how the content is licenced. The FAQs are mainly meant to highlight the technological side of *Field Trip*, which I discuss below.

The default licence on all *Field Trip* material is "Creative Commons Attribution-ShareAlike 4.0 International" (CC-licence). It allows the free use, editing and distribution (including commercially) of content, as long as the authors are correctly named and the material is passed on under the same conditions. However, in the case of archive material, such as videos and photographs, licences vary. The *Field Trip* team set up a Media Repository where content files are deposited and freely accessible, together with full licence information. Any content file under free culture licence can thereby be downloaded unhindered via that media repository page[33]. As a team, we estimate that about 75% of our content in *Field Trip* is under CC-licence, with even more unused (unused in our documentary, but shot by us) material put at the user's disposal in the media repository.

4.1.1.3 Makers' expectations on content & design

Through the content of *Field Trip*, co-author Eva Stotz hopes that "people feel empowered to shape their city" (E. Stotz, personal communication, August 27, 2019).[34] That's what many episodes show, she argues: "to use the actual freedom and possibilities in Berlin" (E. Stotz). She adds:

> *We tried to portray people that are in fragile moments in their lives: two refugees, a forced labourer, a man taking part in an inclusion walk, a filmmaker-in-exile. We portrayed them in a moment of strength on the field, when their mood was up. This can have an* ***empowering effect***[35] *on people watching*. (E. Stotz)

4.1.1.3.1 Raising awareness (about history)

Executive producer Svenja Klüh sees the effect of content at the awareness raising level:

> *Although Field Trip is a virtual piece, it still feels tangible. It is a bodily experience because there is something happening, a hologram or something. You get lost in between the people, make quick assumptions, take time to watch what is happening to them, or has happened. This* ***creates an awareness*** *that not everything is how it seems to be. There is no immediate opinion. We take the time for people to settle-in*. (S. Klüh, personal communication, December 16, 2019)[36]

Stotz seems to share this idea that awareness-raising is important, but she connects it more strongly with having an impact on discourse:

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[33] Field Trip Media Repository (content): https://en.fieldtrip.berlin/resources.html
[34] For the remainder of this chapter, I will simply use (E. Stotz) to refer to (E. Stotz, personal communication, August 27, 2019).
[35] Throughout this chapter, I emphasise the most significant statements by boldening them.
[36] For the remainder of this chapter, I will simply use (S. Klüh) to refer to (Klüh, personal communication, December 16, 2019).

> *I would like to be able to say after a couple of years, that Field Trip contributed in a positive way to* ***how the conversation is evolving, how people discuss****. We* ***raised awareness about history****, the past of places. That such stories should be considered when planning the future, is what I would like to see. This would be an output I would be proud of*. (E. Stotz)

While Stotz endeavours to influence discourse about this public space (and its future), Klüh interprets the awareness-raising as something that can potentially lead to individual action. "People connect with the history of the field. […] People feel a desire to interact, […] to participate in society, write history together" (S. Klüh).

4.1.1.3.2 Multiperspectivity supported by interactive design

Creative technologist Joscha Jäger seconds what S. Klüh and E. Stotz say:

> *[…] by providing all these different viewpoints, we automatically trigger people to reflect on their own position… in this case on Tempelhof. Identifying with all protagonists—even the investor. I would probably not have been interested in him… but then* ***seeing him connected, I start identifying at least a little bit with every voice****. It makes you think about your own viewpoint*. (J. Jäger, personal communication, November 1, 2019)[37]

Bouncing off Jäger's comment, Stotz argues that what the team has tried to do with this project, is to shed light in discussions happening on the field today, and in the past.

> *People are very conscious of what they believe in. But by putting one in other people's shoes, it shows that there are other possibilities. We fostered that you reflect on your own ideas. It's a critical way to look at your own ideas. I always thought of* ***enlarging opinions***. (E. Stotz)

Further, "By connecting all the different viewpoints, you start understanding […]. The overall impression is that they are connected and every voice is important. They are all embedded into one interconnected storyworld. This is mainly why it works," J. Jäger argues on the **interactive design**. "For **controversial topics** where people feel they are not being heard, this can provide different perspectives and a feeling that all voices have been heard." (J. Jäger)

Eva Stotz, who made a head start in writing a *Field Trip* tentative script, already thought of shocking the viewer by confronting her to different protagonists. "My approach was that of contrasting. The **interactive format** was the perfect manifestation of this." (E. Stotz)

If the interactive format seems to be a pathway to having impact on perception, it is legitimate to ask how far this impact can come. Jäger sees it locally: "The discussion on the field and in the phone booth took place in actual relation to the protagonists, their story as related to *Field Trip*. If we limit ourselves

[37] For the remainder of this chapter, I will simply use (J. Jäger) to refer to (J. Jäger, personal communication, November 1, 2019).

to the Tempelhof Field, or to **Berlin, socially, there was definitely an impact**," Jäger says, before stating: "*Field Trip* participates in the **larger discussions on the field**" (J. Jäger).

4.1.1.3.3 Scope of impact

But is there hope for impact beyond the local level? Klüh seems positive, a few months into the distribution phase:

> *Field Trip* actually inspires people to form their own opinion, to take a stand, without telling them what to think. Yes, there is potential […] through reading between the lines, to find their own perspectives, see something they don't see. It's a **good training for democracy**. *Field Trip* has 14 stories. It has been viewed by 8,000 people[38], so there is still a long way to go. (S. Klüh)

According to S. Klüh, **impact expectation for *Field Trip* as a training tool for democracy** seems in its beginnings, and it's too early for identifying larger and measurable outcomes.

Further, the director positions the i-doc's content on a historical continuum, hinting **at potential long term impact**. If one day the Tempelhof Field shall be constructed, this would in her words "give a massive dynamic to the films" (E. Stotz). In the interview, she reiterates that there has never been anything permanent built on the field since becoming a public park. If this happened, she adds, "*Field Trip* might give some hope. It will give more perspective to the longer term, including that constructions might even be un-built again" (E. Stotz).

The topic of the documentary is very much for social change, Eva Stotz adds:

> *We're looking at different societies that the Tempelhof Field has seen: open and closed ones, inclusive and exclusive societies. We definitely want to fight for openness, for a place that is open to all Berlin citizens, all citizens […]. Most people support that it stays empty as it is, and does not become commercialised. This is quite radical*. (E. Stotz)

For me personally, it was more about creating a story in which the apparent emptiness of the Tempelhof Field, at least at first sight, would be challenged. *Field Trip* is the attempt to fill and densify this public urban space—not by constructing buildings and pouring concrete, like the investor wants, but with human stories. As an author, I did not have a specific agenda or a message to pass, other than paying tribute to this unique open and public space. I would not say that I wanted to advocate a clear politically position. It was rather implicit and subtle and, in that sense, I never perceived this i-doc in the realm of strategic communications, in Nash & Corner's (2014) sense.

[38] This figure is an estimate at the time of the interview. It is by now obsolete, although we cannot say for sure how many unique visitors have seen *Field Trip*, as per media partner Tagesspiegel's non-disclosure policy on usage metrics.

Yet, I did have expectations when it came to **interaction design** with *Field Trip*'s documentary material. When we started the project, I was really intrigued by the idea of offering perfect transitions between two unrelated documentary scenes. The challenge was to create an experience in which the user would be in a genuine dilemma of whether to stay or to go, because of the smooth and well-integrated fashion these transitions would be crafted. This was my main content/design expectation and qualitative goal. If these transitions were cinematographic, is for users to say, but my expectation very much lied in this audiovidual hyperlinking challenge.

The team of makers seem in harmony when it comes to the content as wake-up material for the viewers, but when we go deeper, expectations start differing. Team members behind the i-doc see *Field Trip* as a media innovation, but they don't agree for what reason. For co-author Eva Stotz, *Field Trip* is "a new way of approaching a place, cinematographically—a **new way of telling a story**" (E. Stotz). "Compared to linear storytelling, the viewer is much more challenged, not only on topic, but interests. We ask them to follow their interests in the way they move in the platform" (idem). This makes them more aware of their interest, Stotz argues, even going as far as inducing **citizen participation**, she says. But that would be "hard to measure," she emphasises (idem). Creative technologist Joscha Jäger nuances this, in saying that "**The way the interactivity works is new**, **how it's published is new**, but the narrative structure is not new" (J. Jäger). "So it's no new genre," Jäger ads.

"My impact expectation is first and foremost that **people get transformed by a story**, that they are not thinking about something the same way before and after seeing the film," Eva Stotz comes back swinging (E. Stotz). She thereby upholds the **effect of the story on individuals**. Svenja Klüh complements this view by celebrating the fact that the content couldn't work as well without the user experience.

> *As a user you can explore a place with characters and the room in between. To me, it feels like floating, floating between characters on a field, and discovering the negative space*[39] *between characters. It is not shown explicitly, it occurs because of the format. You travel through the field, like a hologram or something. It exists, but it's not shown to us explicitly. It starts to happen in the viewer/user*. (S. Klüh)

By the same token, Klüh puts her conception of impact squarely: "Impact is that you go away from the explicit, to something that happens inside of you because of the different perceptions. *Field Trip* allows to create an individual journey, by including people. It's very personal" (S. Klüh). While E. Stotz was hinting at the **effect of the content on individuals**, S. Klüh means the **effect of the design/format and user experience on the individual**.

[39] Negative space, like in an artwork. The space between things. See: https://en.wikipedia.org/wiki/Negative_space

Since we have not collected web metrics ourselves for this project, leaving that piece of the cake to our media partners (and their non-disclosure policy on usage metrics), I cannot offer an informed assessment of user behaviour. But my teammates see the value of these user level metrics to verify with what apparent curiosity the users consumed *Field Trip*. Eva Stotz for instance says:

> *I would be eager to see how people wander through Field Trip […]. The user behaviour through the story could tell much more on whether this fosters critical consciousness or not: if people really use crossroads, want to see certain aspects more in depth, looked left and right, from a different angle. This could help see whether the interactivity fostered curiosity*. (E. Stotz)

Klüh reinforces this idea, albeit with other sonorities: "Some might even think that watching in a linear fashion is politeness, but I really liked it more in fragments. You then understand that it's not about the individual [protagonist], but the collective, a collective experience on this field."

Coming back to the notion of 'negative space in between' Klüh exemplifies:

> *Clicking on an icon is very playful and I would say that this is the biggest offer we make to the user. To trust this format and accept that jumping around is fine. That they won't miss seeing some parts, but actually create a new viewing experience by daring to watch fragments. Only then the space in between comes alive*. (S. Klüh)

Formulated bluntly, Klüh sums up that "*Field Trip* is more than the sum of its pieces" (S. Klüh).

4.1.1.3.4 Open content

Going further into the thickness of *Field Trip*, one needs to look not only at the information or interface level, but also the question of licencing. "After investing such a huge effort to produce the content, it's counterintuitive to let others reuse for free," says Eva Stotz (E. Stotz).

> *I was struggling in the beginning with the idea of putting our content under Creative Commons licence. It was a great revelation, a relief also to me. It suddenly felt bigger than what I would usually produce, which would disappear in archives. This time it will continue living. It is much more valuable to create stuff like this*, Stotz reveals (E. Stotz).

Creative technologist Joscha Jäger adds: "there were several moments where I realised that the approach we took to **open up the assets** are a few steps forward and what differentiates us from projects that only focus on accessibility/esthetics" (J. Jäger).

Both refer to the licence that permits other makers to use, remix and distribute, as long as the license is passed on. This also prevents projects from closing the content of *Field Trip*.

> *Another output I would be proud of is to see our **footage being reused** in new ways, by different people, e.g., journalists that can add their creativity and make something new out of it. This is something I would be curious about. This is something I would like to learn from*. (E. Stotz).

Jäger couldn't agree more, when he says: **"**I would hope to *see people remixing parts* of what we did and use it beyond our own approach. I could realistically see this happening in the next years" (J. Jäger).

Illustration 4.3 Media Repository of *Field Trip*

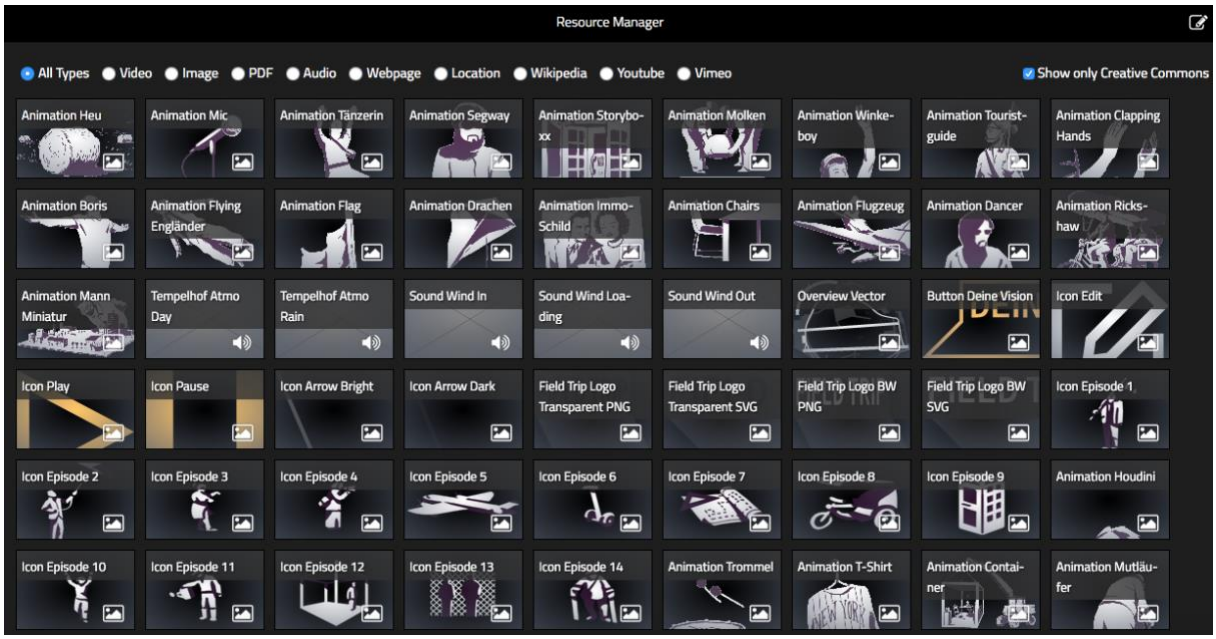

Illustration 4.3 Media Repository of *Field Trip*, where users can download content for re-use. Source: Field Trip GbR/ronjafilm.

Executive producer Klüh has a shared understanding. She sees the licence question as key to creating further impact. "Impact is to change how to deal with exclusive film material, making it more accessible, more playful," she says (S. Klüh). Interestingly, the licence issue is not a one-way street, and Klüh acknowledges this. **"**We had the most beautiful collaboration with filmmakers sharing material" (S. Klüh). At least three out of the 14 stories in *Field Trip* include material that was shot by other filmmakers willing to share it with us. But her idea of how this could create impact is not limited to the makers. "I see it as a **game changer to free-up material**. It goes against the policy that all these big TV stations have. This is where I would like to see change, where I could see impact," Klüh insists (S. Klüh).

So next to the individual impact on viewers, Klüh sees the potential of open licences as a dimension that can have a **systemic impact on media industries**, especially considering that open licences still to this day go against the grain of the mainstream film industry. Jäger agrees and emphasises that patience might be our best friend:

> I hope it will become an early example of open ways of making documentary. It will need several years to grow still, but I feel that **in the long-term, aspects of openness and remixability will have much more impact than they do now**, at the beginning. (J. Jäger)

While Klüh is speaking of TV stations in general, Jäger's vision is on public broadcasters more specifically:

> *Especially publicly-funded media might show interest. […] If this happens, the question is how to make documentary public. I hope that we will at that point have Field Trip as one of the first examples of how that would be possible*. (J. Jäger)

While Eva Stotz and myself were working all along with an expectation of getting users involved in our i-doc on a broader social and political scale, at least Berlin-wide, Klüh and Jäger seem to find even more meaning in the potential of open content, and what I will discuss next: technology. There is a clear departure in expectations here. It is not to say that Stotz and I don't value the open content aspect, Klüh and Jäger advocate much more strongly for this aspect as a source of potential impact.

4.1.2 Technological

*"*The idea behind *Field Trip* is to create a permanently open, changeable project based on open web technologies," a look at the website reveals (Field Trip, 2019). What this means, concretely, is that "all interactive options, visualisations, transitions, effects and everything else apart from the raw material is implemented through small, re-usable snippets of code" (idem). The snippets of code used in *Field Trip* are then made accessible to all via a so-called Code Snippet Repository[40] located at cloud-based GitHub. GitHub is an open repository, meaning that developers and any user can access it to deposit and retrieve code snippets. Our code is entirely under MIT and GPL v3 open licences. Code snippets can determine where a rotoscoped animation is positioned in the page, a complex transition effect or simply the behaviour of a button or icon. The idea of placing the code on GitHub is that independent components can be re-used in other projects (dissociated from *Field Trip*'s context[41]). For convenience purposes, the repository offers both a searchable website and an open interface through which individual code snippets can be retrieved or added.

During the development stage, the team behind *Field Trip* even referred to *Field Trip* as "an open source documentary", but later ditched the attribute as it found it to be too technical. *Field Trip* relies on HTML, Javascript and CSS for its website. While technological components are open source to 100%, some content files did not use open formats or software (see paragraph on licences in content, above).

As mentioned in the content/design section, *Field Trip* is relying on open hypervideo technology to link all project components directly in a browser. This technology was developed as part of FrameTrail (FrameTrail Open Hypervideo[42]), an open source software licensed under MIT and GPL v3 licences. FrameTrail is the creation a Joscha Jäger, the creative technologist on *Field Trip*. Its prototype was first

[40] Code Snippet Repository (code): https://github.com/memory-shuffle/FrameTrail-CodeSnippet-Repository
[41] *Field Trip* on GitHub: https://github.com/OpenHypervideo/FieldTrip
[42] FrameTrail (open hypervideo software): https://frametrail.org/

released in 2012 and then launched as full framework in 2016. It was **developed exclusively with open web technologies and standards**[43].

The code snippet repository mentioned earlier is integrated to FrameTrail to allow users to insert existing components into videos via *drag and drop*, as well as to share new components with other users.

4.1.2.1 Makers' take on technology

In terms of impact expectations, unsurprisingly, the technological lead on *Field Trip* says that for him "it's definitely **more about a format**. My main idea is that it can serve as a blueprint for other stories in this format" (J. Jäger). For this blueprint to work, and this might be a difference among team members, Jäger felt this had to be done in an open source fashion, meaning that the licence on technical infrastructure be open for re-use.

> *Our creative technologist was keen on letting the code open. He did not seek a business model for 'his' technical infrastructure FrameTrail. I had difficulties to get this, as a producer. But because he remained so strict on keeping everything open source, this took away from potential funding. But then again, I am happy we did it*. (E. Stotz)

It is important to note that what Stotz says is not exactly proven. There is no indication that if the code had been proprietary, funding would have been easier. Quite to the contrary, possibly, since Joscha Jäger received financial backing from different open source funds, including from higher education colleges, the PrototypeFund and MIZ-Babelsberg, totaling a decent support. This funding permitted him to spend more time working to advance his technical solution FrameTrail and to sophisticate it, including for *Field Trip*. While Stotz did not fully comprehend the open source code aspect of *Field Trip* at first, she did grasp the fit and potential, when combined with the open content approach described above. "**The whole *Gemeinnützigkeit* of our technology and our content is an aspect of creating more equality**. In combination with the visual story that we tell, that is quite a statement within and for social change" (E. Stotz). Svenja Klüh goes as far as calling the combination of these three *Field Trip* ingredients (visual story, open content, open technology) an **open source approach to documentary**. And to make her expectations even clearer, she states: "I hope that it can inspire others to take the open source approach" (S. Klüh).

I, myself, had been exposed to open source projects early in my professional journey. Not only did I welcome the *open source approach*, but I even pushed for it initially, when we started the project. By bringing co-author Eva Stotz and creative technologist Joscha Jäger together, I knew that there would be no way back on technology. It was sort of a given to me that the project would be open in pretty much all of its dimensions. This said, I have to admit that I then retracted from being an advocate for

[43] For a full list of standards and principles behind FrameTrail, visit: https://frametrail.org/#principles

"open everything" once the project was underway. For one, I felt Joscha Jäger would cover that flank and secondly, my focus was on the user experience and the storytelling during production, and then on outreach and partnerships during distribution.

In principle, everyone agreed on open source, but practically, technology impact expectations were not the same.

> *One major difference in focus for me, as compared to other team members, especially that of our creative technologist, is that* ***they expected a much bigger reaction in the open source community and in the creative commons one. That our project would spread more****. It remained a bit silent in that area. This was a big frustration to them. Since I was not in that community, I did not expect that*. (E. Stotz)

Here Stotz touches upon a truth that was hard to reconcile. Even though our framing on technology was the same, expectations were not. This had a clear consequence for what the project would be able to accomplish technologically. "When discussing with object-based media people at the BBC, I had several moments where I thought we didn't go far enough, that what we did is not good enough in a tech innovation sense," J. Jäger states. While we had these discussions and tried to find the right balance, Jäger does not feel that he managed to accomplish all he wanted.

> *I would have rather tried to make all tiny web objects accessible. Maybe the experience would not have been perfect as a result. I feel we went the distance to make it more of a good experience for the audience of open documentary instead of pushing things forward technologically* (J. Jäger).

This last statement makes it clear that for Jäger, it is the technological use case that he was shooting for all along, while the three other team members, including myself, were sympathetic to and even proactively working towards open innovation in technology, but ultimately not at the cost of an acceptable user and storytelling experience.

This split in priorities has meant that compromises were inevitable. The most striking one was on testing the prototype. "Given the fact that **my main impact expectation was to have *Field Trip* serving as a blueprint**—servicing more radical innovative solutions—structure-wise, my main concern was certainly **not on publishing a final product**," Joscha Jäger explains. "Optimising for as many people as possible, spending a lot of time on what target audiences require, were some of the things I did not find so important or relevant" (J. Jäger). To be fair, the testing phase was intense to say the least. Jäger had the bulk of the work on this end. Even though I did coordinate some user testing and help report bugs at every stage of production, Jäger was ultimately irreplaceable when it came to adapting *Field Trip* to all devices and operating systems. This was particularly difficult for him as the delivery timeframe was extremely short—a consequence of our media partnership with *Der Tagesspiegel* (see next section on organisational dimensions). "The whole time spent additionally to making it work,

making it work for everyone, together with a media partner, was not budgeted in the plan. Even from my side, I didn't think we were going to do this," Jäger confirms.

The creative technologist had to bite the bullet. He was then able to appreciate that his unplanned work on testing managed to comply with impact expectations of other team members: "I do think though, that **it helped a lot with impact. We reached people we would not have reached otherwise. But it's definitely on the story level**. So not my primary focus" (J. Jäger). Even though Jäger walked away from this compromise with a bitter taste in his mouth, including financially, he was able to later see the value in user uptake and appreciation. Beyond showing some of Jäger's personality traits (generosity, willingness to compromise), it goes to show that during production, there is a learning effect—or, **consciousness developing *vis-à-vis* the different types of impact** that a production is bringing forward.

4.1.3 Organisational

In this dimension of media innovation, I am describing in full depth how *Field Trip* was organised. This section helps appreciate the complexity of an i-doc project, thereby illustrating out of any doubt the unfavourable equation with which producers of i-docs are faced. When looking at my research question on how to evaluate the societal impact of i-docs, this organisational aspect is key to providing the foundational and granular case-based knowledge about the discrepancy in impact expectations of makers and outside evaluators.

Formally and legally, the rights holder of *Field Trip* is a production company called ronjafilm. Ronjafilm is a Berlin-based boutique production company led by filmmaker and producer Eva Stotz. Ronjafilm produces films and screen projects related in a way or another with Stotz and operates on a project-by-project basis, collaborating with different outside freelancers based on need.

During the production and distribution of *Field Trip*, a partnership under civil law ("*Gesellschaft bürgerlichen Rechts (GbR)*" in German) *de facto* came to be among the core team members of *Field Trip*. The core team members Eva Stotz, Frédéric Dubois, Joscha Jäger and Svenja Klüh associated informally in this partnership. This meant that all partners were collectively liable, even though they did not officially register the partnership with a trade office.

The official roles in the partnership where as follows: Eva Stotz acted as co-author, director and producer. I was co-author and interactive producer. Joscha Jäger was the creative technologist. Svenja Klüh took the reins as executive producer. This core team formed over time (see section on production process) and operated as a flat hierarchy with natural leadership as the driving force. Although roles

were defined over time, as partners of a small team, tasks were sometimes dispatched or taken randomly as they came along and according to team member availability.

Illustration 4.4 Team page in *Field Trip*

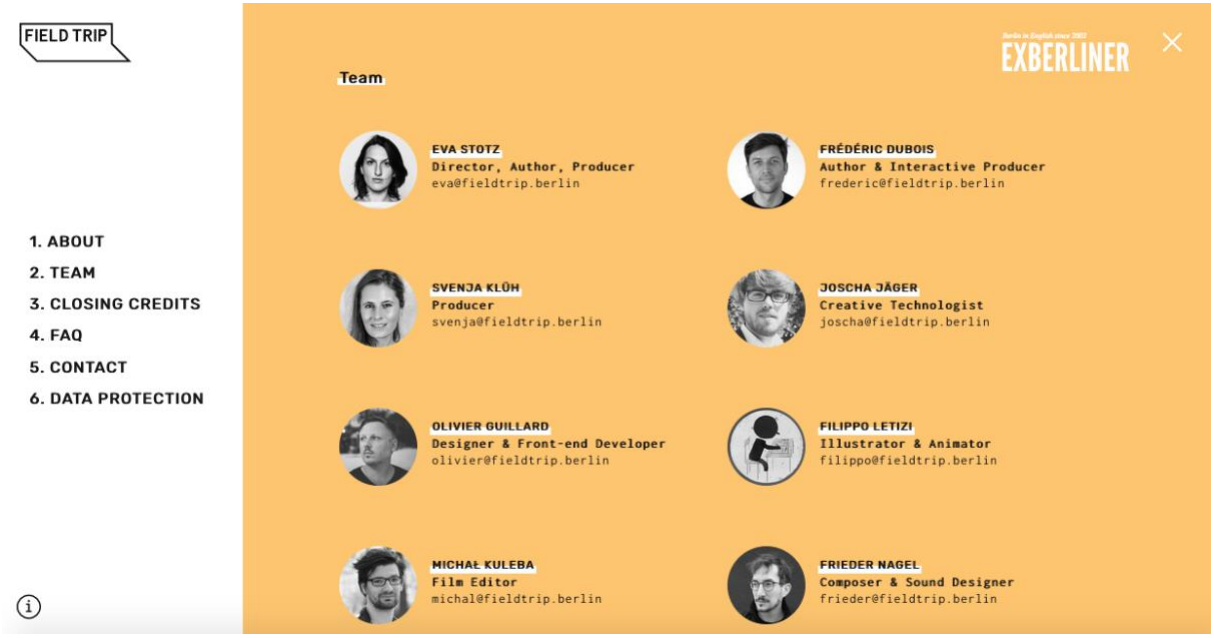

Illustration 4.4 Team page in *Field Trip*. Source: Field Trip GbR/ronjafilm.

Eva Stotz's responsibilities were manifold. She wore three hats: she worked alongside her co-author (me) to develop the story, define the scope of the documentary, the themes that we wanted to touch upon and the general sense that we wanted to convey. With her deep understanding of the Tempelhof Field (she had shot her debut film, *Tempelhof*, in 2004), Eva was the main thrust of the editorial line. As a director, she was focused on identifying the first protagonists to be interviewed. She also organised and directed the shooting sessions together with directors of photography, sound editors, and protagonists. In her capacity of producer, she took the lead for certain funding applications, partnership acquisitions and negotiations, festival submissions, money transfers and all legal matter.

Once Eva Stotz and I had established the fundamentals of our larger story, I was responsible for crafting an interactive storyline, and adapting/updating it in accordance with production realities. As a co-author, I was the one coming up with hyper-transitions between scenes in the documentary and playing translator between the animator, the web-designer, my co-author and the film editor. My role of interactive producer can best be articulated by using the analogy of a campaigner. I initiated and negotiated partnerships, co-drafted funding applications, was the glue for the "design-team" (made up of the creative technologist, the web designer, and the animator), did *in reach* and *outreach* communication work via e-mail, social media (mainly Twitter), and phone. I was also involved in heavy campaigning for our crowdfunding campaign, public voting awards and distribution follow up.

Creative technologist Joscha Jäger is probably the team member who had his work best cut out. At least in theory. The road was paved with challenges, but creative tech Joscha Jäger could concentrate on building a *Field Trip* prototype using technology that he mastered, for having created it. He defined formats, received, put together and edited media files. He worked with partners on refining the technology, testing it at every turn, and optimised it for different devices and operating systems. He exchanged a lot within the "design-team" to come up with proper positioning of texts, icons, visuals, video files, and animations, thereby weighing-in on the esthetic side of *Field Trip*. Finally, he was the main driver of *Field Trip*'s open source tactics, setting up the Media Repository and making our technology accessible to all.

Executive producer Svenja Klüh, who came on board a year after the project was kickstarted, took on common production tasks: writing funding applications, ensuring follow-up with partners, especially with potential funders and supporters, coordinating material needed for the crowdfunding campaign (teaser video, social media banners, goodies), but also organising events (e.g., launch of the StoryboXX, Digital Cultures conference, Warsaw), project documents and planning, etc. Klüh was also involved in most strategic decisions in the heavy production period, often providing clear-headed production advice and experienced editorial input. This was particularly the case with her creative touch and lead role in getting the StoryboXX off the ground.

The governance model with which we went is what I call *passive democracy*. Passive democracy means that decisions were taken in action, quickly, with minimal consultation of team members. Passive democracy implied that team members would share information among themselves and if there was no opposition to a proposed action or decision, the proposing party could activate. For anyone who has produced media, there will be an acknowledgement that this model works imperfectly, as constraints of time, budget, but also ways of working and communicating bring a "healthy dose" of friction to the process. In the case of *Field Trip*, the core team took most big steering questions collectively, even though there were phases during which one or the other was less available.

Throughout the project development, production, and distribution, *Field Trip* crafted partnerships of four kinds, with:

- Sponsors
- Supporters
- Freelancers/contractors
- Media

These partnerships of different shapes and colours were motivated by the need for specialised skills and expertise, in the case of freelancers; the need for funding or facilitation thereof, when it comes to sponsors; and the need for connecting with audiences outside of our reach, when looking at media. As a self-initiated project with editorial autonomy, we needed to carefully select partners and invest heavily in keeping all partners at bay. This balancing act was without a doubt one of the main challenges in producing *Field Trip*.

In Table 4.1, I have pulled together all partnerships that developed in the course of three years of production and distribution, so as to provide an overview. I will describe each stakeholder group hereafter.

Table 4.1 *Field Trip* partnerships

Sponsors	Supporters	Freelance	Media
Media Innovation Centre Babelsberg (MIZ)	GrünBerlin GmbH	Sound design – Frieder Nagel, Clemens Nürnberger	*Der Tagesspiegel* (German)
Rudolf Augstein Foundation	Hörbert	Web design – Olivier Guillard	*Exberliner Magazine* (English)
ElektrizitätsWerke Schönau (EWS)	BücherBoXX	Illustration/Animation – Filippi Letizi	*Outriders* (Polish)
German Federal Foreign Office (AA)	Foundation Topography of Terror	Film editing – Michał Kuleba, Calle Overweg	
Checkpoint-Charlie Foundation	Albert Schweitzer Gymnasium (high school)	Camera - Emma Rosa Simon, Agnes Pakozdi, Jenny Lou Ziegel, Ben Bernhard	
Adam Mickiewicz Institute	Junge Europäische Bewegung Berlin-Brandenburg	Archival research - Katja Schmitz-Dräger	
The Governing Mayor of Berlin (Senate Chancellery)	BBC R&D	Sound editing - Claudia Meyer, Garip Özdem (RiP), Frieder Unselt,	
Berliner Landeszentrale für politische Bildung	Ohne Gepäck Filmproduktion	Colour correction - Rasmus Sievers	
Stiftung Luftbrückendank	Reportero	Instagram - Nico Limo	
Foundation for Polish-German Cooperation (SdpZ)	Film University Babelsberg KONRAD WOLF	Translation - Karolina Szulejewska, Ali Saghri, Magdalena Kilcourse	

Startnext crowdfunding campaign: 151 supporters	Marienfelde Refugee Center Museum	Production assistance - Ann Esswein	
Urbanizers - Büro für städtische Konzepte	Nazi Forced Labor Documentation Center		
Tempelhof Projekt (Tempelhof airport building – visitor centre)	Allied Museum		
	Time Prints Film & Media		

Table 4.1 *Field Trip* partnerships. Source: by the author.

4.1.3.1 Sponsors

From the list of sponsors of *Field Trip*, one can gather that two are of journalistic nature: MIZ-Babelsgerg and Rudolf Augstein Foundation. The first one, a regional media innovation fund, was truly instrumental in kickstarting the project altogether. It was the second time I worked with them, after having produced the scroll-documentary Atterwasch[44] in 2013, with there too, a kickstarting grant. In early 2018, MIZ-Babelsberg agreed to inject a total amount of 37,500€, conditional to a contribution of our own of 12,500€. This initial spark was for the development of a minimum viable product (MVP), meaning a distributable prototype including three stories in open hypervideo format. In March 2018, the Rudolf Augstein Foundation, also a second-time financier of my work[45], agreed to a 5,000€ donation. With that, the project was financially underway.

Further funding sources in the years 2018 and 2019 came in from agencies willing to see their funding going towards specific thematic content (i.e., Luftbrückendank and Checkpoint Charlie foundations for our story on the Berlin airlift; the Regional centre for political education towards stories that fall under the umbrella term of *inclusion*; other public agencies, including Polish-German ones for our story on the former forced labourer from Poland). With this content-specific funding strategy, we were able to reign-in approximately 12,500€ that would go towards fulfilling our funding agreement with MIZ-Babelsberg, putting us at 55,000€ altogether.

Seeing that this would not suffice to post-produce all the content that we had shot and/or gathered (e.g., archives, material from other filmmakers), we ran a crowdfunding campaign on the Startnext platform in May 2019. We received just over 16,000€ from 151 supporters, thereby lifting our production budget to 71,000€ by August 2019. After this period, we received small complementary funding as part of

[44] https://atterwasch.net
[45] The first funding I received was for my scroll-documentary Atterwasch, released 2014.

special funds by sponsors (i.e., electricity cooperative ElektrizitätsWerke Schönau (EWS)), media partner *Der Tagesspiegel* and exposition partner Tempelhof Projekt. This bumped up our total production budget to approximately 80,000€[46].

The *modus operandi* that the production team used to operate was financially conservative. Even though team members personally went into preliminary work on many occasions where project cash flow was disadvantageous, the number of stories within the documentary was constantly re-adjusted to the funding reality. The technical side was more or less covered by the MIZ-Babelsberg prototype funding, meaning that what was left to play with, was the number of stories we would be able to produce.

During the two years of production, the *Field Trip* team prepared and submitted a total of 30 funding applications, of which 13 were successful (see the list under Supporters in Table 4.1). Out of the 17 funding applications that were not successful, I will explicitly mention five which were particularly labour-intensive: Medienboard Berlin Brandenburg (Innovative Audiovisual Content); Kulturstiftung des Bundes; Mercator Foundation; Volkart Foundation and; Projektfonds Zeitgeschichte und Erinnerungskultur. It is important to mention these failures in order to learn from them. Indeed, this might not come as a surprise to experienced producers, but addressing junior producers, it might be worth mentioning that with every application, the team further sharpened the focus of the project. For each submission, new concepts had to be developed, new partnerships established and new tactics for pleasing funders, while keeping the goals of the production on track. Each funding application also meant days of production time. Now, rationales for why our application was declined, only rarely came to us. Sometimes it was the "business case", which was not made convincingly, other times our hybrid format between film and web art was invoked as being too fuzzy. In most cases, the lapidary "because of the high volume of applications…" was served as a reason for not funding *Field Trip*. We will get back to this conversation on differing expectations by different stakeholder groups in chapter 5.

The sponsor group included a number of crowdfunders. Among them, I should mention that the top financial supporters were work colleagues with whom I had worked in the past, with family and friends of the core i-doc team bringing-in the small donations that added up. There were a few larger surprise donations by decision-makers at local institutions (one of them BSR – Berlin's trash collection service; the other a leader of environmental nonprofit BUND), but there were also two even more surprising political allies: a member of the Berlin Senate for the Green Party and a Social democratic member of the Reichstag (who today happens to be one of two SPD party leaders). In all four cases, we did not entertain prior relationships with these political elites. They were the result of our campaign work. This

[46] At project end, this total production budget represented 66% of the budget that the team had planned for, at project start.

raises the question though, of what these elites' motivation was to support and share our i-doc. I will get back to this in the second half of this chapter.

4.1.3.2 Supporters

The supporter group of partners was a mixed bag of organisations. Some permitted us to use their post-production infrastructure and/or technical personnel (e.g., Time Prints, Film University Babelsberg *KONRAD WOLF*), others provided us with footage (e.g. Ohne Gepäck Filmproduktion), archives (e.g. Allied Museum), or content-related expertise (e.g., Nazi Forced Labor Documentation Center). Some other supporters again helped us bypass bureaucratic hurdles (e.g., Junge Europäische Bewegung) or partner on temporary interventions such as the participatory StoryboXX (e.g., BücherboXX; GrünBerlin) and our "*Field Trip* in the classroom" spin-off project (e.g., Albert Schweitzer secondary school).

One might be wondering why the BBC R&D, as a big global brand, is listed in Table 4.1. Despite the fact that *Field Trip* did in the end not integrate the BBC Research and Development's VideoContext library[47]—meant to help us edit cuts, transitions and effects—our creative technologist had intense exchanges with the research and development arm of the BBC around "Object-based media"[48]. This was among other reflected by the blog post *Field Trip – Object-Based Media Meets Web Documentary*[49] by BBC R&D's director Ian Forrester.

Taken together, the supporters of *Field Trip* were the project's accomplices during the production and distribution phase, accompanying us and believing in our risky endeavour.

4.1.3.3 Freelance-partners

This group of actors is what I call our *peer partners*. They are colleagues and friends that worked on a professional level on specific aspects of the media production. The difference between these freelancers and the core team members (also all freelancers) is one that relates to the level of commitment and responsibility towards the project. The freelancers came on board for short periods of time to research, shoot, record, post-produce, translate and help distribute. They were core to the creative documentary process, but they were in no way involved in larger project orientations. In other words, they were all key in their own right to shape *Field Trip* in what it became esthetically and technically, but they did not have to get involved in a deeper fashion. Some, to mention just the web designer and

[47] VideoContext by BBC R&D: http://bbc.github.io/VideoContext
[48] Object-based media at BBC R&D: http://www.bbc.co.uk/rd/projects/object-based-media-toolkit
[49] https://www.bbc.co.uk/rd/blog/2018-04-field-trip-object-based-media-web-documentary

illustrator/animator, were generous with their time and ready to bounce off ideas regarding the general project, its ambitions and ways of appealing to key audiences. But this was the exception, not the rule.

The freelancers worked on an on-demand basis with one part of the core team. If I were to make sharp distinctions here, let me say that a group of freelancers worked more closely with the "film team" and the other group with the "design team". The film team operated in a quite classic manner, going out to shoot, bringing back the material to the film editor who would then work with director Eva Stotz to edit the stories. In the design team, the work was much more individualistic, where each would work on their separate "pieces of the puzzle" and where Joscha Jäger would then assemble and test. I would go back and forth, communicating between the "individualists", providing feedback, testing and keeping all team members engaged in an iterative process. The bulk of the collaboration between the film team and the design team would mainly go through emails and phone calls between the two co-authors and the creative technologist.

4.1.3.4 Media partners

As a self-produced documentary, *Field Trip* made efforts from the start to reach 'low hanging fruit' audiences interested in the Tempelhof Field. For one, the team setup accounts on social networking services Twitter, Facebook, and Instagram. At the close of the project, *Field Trip*'s Twitter account[50] counted 800 followers, its Facebook account[51] had 300 subscribers and its Instagram one[52], 72. The social media was first and foremost used for finding a place in the small online community posting photos, videos and conversing about Tempelhof Field. Then, it was used to connect to potential protagonists, crowdfunders, and other supporters. With 832 Tweets over three years (more than one Tweet per business day) and more than 3,400 people being followed from the *Field Trip* Twitter account, it is important to stress that Twitter was and is the project's primary social networking platform. Facebook and Instagram were used and tested, including for publishing Instagram stories (i.e., short blubs from people randomly met on the field) but not consequently pursued over the duration of the project.

Very early on, the *Field Trip* team approached online mainstream media, including *Arte*, *ZEIT Online*, *Spiegel*, and *Süddeutsche Zeitung*. In 2017, *Berliner Zeitung* (daily newspaper in Berlin, part of the Dumont publishing group at the time) showed interest and even wrote a Letter of Intent. This collaboration was never followed through, in part due to the team's focus on the prototype work, in part

[50] Field Trip on Twitter: https://twitter.com/fieldtripberlin
[51] Field Trip on Facebook: https://www.facebook.com/fieldtripBLN
[52] Field Trip on Instagram: https://www.instagram.com/fieldtripberlin/

because *Berliner Zeitung* did not deepen partnership plans, and in part again because the team was still scouting for a media partner with more circulation.

In 2018, *Field Trip* found an interested partner in the interactive team at *Der Tagesspiegel*. An agreement was inked after eight months of back and forth. While the newspaper did not invest substantial funds, it did pay for a distribution licence. More importantly, the newspaper invested considerable resources in copy-editing subtitles and static texts, testing our prototype on many devices and operating systems, hosting all *Field Trip* videos and the website, reporting, producing podcasts and disseminating the documentary on their website, via social media channels and newsletters. The cooperation agreement was based on a win-win expectation, where the *Field Trip* team would benefit from increasing the quality of its product and reaching larger audiences, while *Der Tagesspiegel* would get to feature an innovative 92-minute i-doc that it would not be able to produce in house. This type of agreement between an online newspaper and an i-doc has been made in the past on several occasions.[53]

The *Field Trip* team agreed to a very tight production and delivery schedule with *Der Tagesspiegel*, which insisted on timing the release with the 70th anniversary of the Berlin airlift (12 May 2019). This meant that the minimum viable product (MVP) that the team was preparing, would suddenly need to be "more than viable", with nine stories (instead of three), and a website accessible on seven browsers, all smartphone devices and all screen sizes down to 320px (e.g., iPhone 5/SE). The delivery date was a true deadline: the team had four months. We accepted that this fast-track post-production process would put a dent in the innovative potential of the interactive storytelling (see section on production process) and delivered. *Der Tagesspiegel* accompanied the launch of *Field Trip* with a centrespread in their print newspaper on 12 May 2019—where our stories were highlighted and the general project was explained. From May to July 2019, the online version of the newspaper ran several articles and podcasts which all featured *Field Trip*, but also some of our stories as linear videos (not as open hypervideos, like in our full web-based experience). In July of that same year, we released an updated version of *Field Trip*, with five additional hyperlinked stories, bringing the total count of stories to fourteen.

Even though I sought usage statistics, including the number of unique visitors, this was not possible, and will remain as a downside of *Field Trip*'s partnership with *Der Tagesspiegel*. Their non-disclosure policy means that statistics for all language versions are gathered on their servers and stay there. It would have been particularly useful to observe variations in visits to the *Field Trip* website as a result of media partnerships, releases, and events.

[53] Documentary game *Fort McMoney* (2013-2014) with Süddeutsche Zeitung, Neue Zürcher Zeitung, Der Standard; Scroll-documentary *Atterwasch* with Süddeutsche Zeitung, 2015.

After a successful German-language release in May 2019, and subsequent update in September, the *Field Trip* team embarked on another door knocking tour for its English-subtitled and Polish-subtitled versions. Both were ready in September 2019 but stayed unreleased that year. They were shared on social media and specialised media (e.g. film review in *Modern Times Review*[54]), and featured prominently at events (e.g. Digital Cultures conference, Warsaw, September 2019), but it was not until 12 June 2020 (more than one year after the German-language release), that the English version was officially launched with city monthly *Exberliner Magazine*. This partnership was of short duration and scope, as it was limited to one interview with Eva Stotz and myself[55], a few social media mentions and a banner ad over a two-week period on *Exberliner*'s homepage. We decided to offer a waiver on the distribution licence after considering the dire financial situation of *Exberliner*—which at that time was crowdfunding to be able to fund their next print edition.

An informal media partnership was agreed upon with *Outriders* for the polish edition of *Field Trip* in late 2020. The young "non profit newsroom covering global issues"[56] is specialised on international reportage and operates from Warsaw. As part of its online platform, it publishes interactive features. We therefore thought that this would be a good fit with our project. At the time of writing, *Outriders* had not yet released *Field Trip* on its platform. This partnership resulted thanks to the intermediary of a Polish colleague involved with the Digital Stories Lab[57], Warsaw, in which Eva Stotz and myself participated in.

4.1.3.5 Makers' take on the organisational dimension

As mentioned in the descriptive part, everyone had quite clear responsibilities in the *Field Trip* team. "In the project, we felt like like-minded partners with equal rights. It was empowering, especially for learning how to work in a team," Stotz mentions (E. Stotz). "We worked as **a collective of different productions**. I feel that there was not a big connection between the episode/film production and the crafter of the user experience design. They were almost completely different departments," Jäger observes (J. Jäger). There was indeed a clear demarcation between the film and the design 'units'. But beyond working in silos on a day-to-day basis, I personally very much experienced this production as being strongly interconnected, meaning that there was at times quite extensive exchange among these silos. Jäger seems to underline this when saying:

> *Several times at the beginning, I think, we had to negotiate. A key moment for me was when we discussed what it means to use open licencing for our material. Yes, licensing is definitely when*

[54] *A field for a changing society*, By Astra Zoldnere https://www.moderntimes.review/field-for-changing-society/
[55] Lead interview *The real faces of Tempelhofer Feld*, by Leander Jones https://www.exberliner.com/whats-on/film/real-faces-of-tempelhof-film/
[56] *Outriders* – About us: https://outride.rs/en/about-us/
[57] Digital Stories Lab: http://totalimmersion.rocks/dsl/

> *I realised something important: I have this picture that we were all in front of a white board and drafted an interactive story. I only then realised that this is not how documentaries work, as things evolve along the way. You cannot script everything. I think I was on another page and I think we were on the same page afterwards*. (J. Jäger)

What does this mean in terms of production? "We, as a team, benefited from the collaboration because we **learned a lot of things from each other**. This is one of the main points [of social change] I would see," Jäger insists (J. Jäger).

Klüh qualifies this production as **an interdisciplinary non-commercial, shared production**. In fact, she feels that "there was no classic hierarchical structure. Each of us put something in. It was very personal, very shared" (S. Klüh). Although I agree with this statement by Svenja Klüh, this shared production only came about with much communication efforts and at times, negotiations (see the point on mediation in the 'key moments of production' subsection). In other words, I feel it is important to stress here that this shared production culture and organisation does not come for free. We all had to engage in frequent email exchanges and phone calls, as well as regular face-to-face meetings.

When asked about what the glue between the team members was, Jäger adds:

> *the **commons perspective** made it work, especially at times when we had no money. We could dynamically change the level of involvement, change expectations along the way. It allowed for much more flexibility than a stiffer production team. It comes with appreciation for the work the other team members do*. (J. Jäger).

"We did not have completely different expectations of impact. I felt there was also something common: the tree trunk is the same, so to speak. But the branches might be a little bit different," Svenja Klüh affirms (S. Klüh). Jäger begs to differ:

> ***I think people had very different expectations and concepts of impact**. For me, for example, **the whole 'way' we were doing things should have made much more impact**. But I realised again and again that it's the stories and the tiny hand-crafted details that really got people interested. The impact that I would have thought to see, or **my own concept of impact, did not really go together with the other members of the team***. (J. Jäger)

In another passage of my interview with Jäger, the creative technologist is differentiating among the audiences that are on the receiving end of the documentary.

> *In a bigger perspective, I think that from the very beginning, the concept of good impact is different depending on each team member. One side was certainly more focused on **the stories and protagonists being powerful, impactful**. Other people focused on **audience**. Maybe that's the big difference. Some of us were focusing on the recipients of the stories and I was more focusing on the **people focused on reusing our assets**: the blueprint for open source documentary that we create*, Jäger explains (J. Jäger).

I tend to share Jäger's perpective that each team member had slightly different expectations of impact, depending on the focus of their work and whom they aimed it at. But contrary to Jäger, who says that

we might have had different target groups in mind, I didn't think in those terms, or in having impact only with the open content approach, or solely with a compelling storyline. I very much believed in a layered approach to impact, where at times one dimension would be better served and at other times, another dimension. Although we did have a generally shared frame for *Field Trip*, the whole production journey meant navigating compromises and ensuring that everyone stayed relatively happy with the product and process. "What we did was always the project of a collective, finding a middle ground. You need to stay open to compromise," Jäger adds (J. Jäger). For Klüh for instance, the licence aspect discussed in the section on content is what fulfilled her. "I came to the project last. A lot was already done and I wasn't involved. So I had to find my own way into it. […] We all have different backgrounds, artistic lives, and are just different in general" Klüh says (S. Klüh). "[…] I am more this changemaker and creative person not limited to film. For me, **the CC thing was where I smelled that there is something interesting there. I am already satisfied with this aspect**," Klüh adds (S. Klüh), referring to the Creative Commons licenced material.

This said, there were challenges for all team members. What Jäger experienced in the prototype testing phase (see section on 'technology'), Klüh had on the nitty gritty of production work:

> *My position might have been a bit poorly designed. When I applied for it, the team was looking for a production assistant. It ended up being more, but still doing work of production assistance many times. The latter left me unsatisfied, as it frustrated my* ***creative impact expectations****. I had to take care of a lot of little things on the production side. This could have been rethought, but there was no more money, time, resources to change that, I guess*, Klüh reflects (S. Klüh)

But this bitter taste seems to come from external factors, as Klüh puts it: "I never felt cut in my expectations. […] I was much disappointed by outer worlds: funding, festivals, media partners. I would have loved for people from the outside to see the potential" (S. Klüh). Klüh made those comments in late 2019, when the distribution phase was still in full swing. Since then, external institutions and persons have seen the potential (e.g., distribution licence sold in late 2020, awards received in late 2020), but financially, it has remained slow.

4.1.3.5.1 Financial organisation

Beside organisation and governance, the *Field Trip* team had to fight hard to amass the required funding as described above. "We say: we don't want you to pay to have the *Field Trip* experience, because **the impact we're seeking is more valuable than the monetary one**," Stotz told me (E. Stotz). This said, how does this relate to a financial impact? "**There is no economic impact at all**, right now," Jäger answered, in late 2019. Note that Jäger employs the term "economic" but in fact refers to the financial return-on-investment (viability) of the project, rather than a macro-economic impact. How could there be a positive return-on-investment, one might ask, as "*Field Trip* had no business plan" according to Klüh (S. Klüh). In fact, the outcome has been "very weak for the team, or the larger community" Jäger

insists (J. Jäger). In his words, financially speaking, *Field Trip* and its production model did not "**challenge the economic perspective**" (J. Jäger). It must be understood that the production barely broke even, and the initial ambition in terms of content and interactivity had to be curtailed as a result.

Stotz clarifies: "In terms of production, we couldn't pay anyone along the standard fees. This made it very obvious that only the ones that felt devoted to the project could go the distance" (E. Stotz).

> *This was the best team I have ever worked with. It was a completely different hierarchy from that in usual film production, where people are paid different rates. We had a strong team of four people, who all came to the project with time and money commitment. This structure of four was really stable*. (E. Stotz)

If budget-wise, the production was not empowering, Eva Stotz mentions being committed to changing that aspect in the future. Speaking of the *Field Trip* experience, Stotz takes a defiant stance when saying that "it makes it visible how we are more advanced than the funding system that we are surrounded by" (E. Stotz). Deepening from there, Stotz suggests: "The impact that I would love to see in this regard [is for *Field Trip* to] help **re-discuss funding structures in Germany and abroad**, meaning to help other ways of funding take the lead over the revenue model" (E. Stotz). This economic impact expectation is quite widespread, when speaking from a Do-It-Yourself production perspective, but it is a legitimate hope coming out of this very rough financial journey. "If it went into a museum, an exhibition, this would get it [*Field Trip*] out of its Sleeping Beauty Sleep—the *Dornröschen Schlaf*. That would be great," says S. Klüh, hinting at the difficult funding route that self-initiated digital storytelling projects such as *Field Trip* often go through.

4.1.4 Functional

From a user perspective, *Field Trip*, as a production, offers different levels of interaction. In their exploration of i-docs, Vázquez-Herrero and colleagues come up with five parameters (or levels) of interaction which can come handy here: *selective*, *immersive*, *social*, *generative* and *physical* (Vázquez-Herrero et al., 2017, p. 407).

If we look at *Field Trip* as a web-documentary only, then we can subsume its interactivity under the *selective* parameter in Vázquez-Herrero et al.'s typology (2017, p. 407). It is characterised by an interaction that induces the user in choosing a path. It is the most basic form of interactivity: a binary one. The user either stays in a story, or goes. Albeit not being particularly sophisticated, this form or interactivity permits the free exploration of the documentary material, without any linearity involved, and no set ending. It is a form of interaction that these authors see as indicative of "personal consumption and user control over the story" (Vázquez-Herrero et al., 2017, p. 407).

To a lesser extent *Field Trip*'s functionality is also defined by a second interactive parameter: the *generative* one. With the "Your Vision" functionality mentioned above when describing the website design, one can identify that the team tried to make space for the user to have a voice, to be included in the documentary narrative, generating audio content. This user-generated content is nothing more than an anecdote left on an answering machine, but it means that the user is more than a viewer. She gets to choose her own path and to co-create in telling her fragment of the larger narrative.

Via a collaboration with a book exchange project, we set up a telephone booth on the Tempelhof Field between August 2018 and August 2019. From the 22 user-generated stories we received, we were able to recycle seven strong ones, five of which were included in parts of "The StoryboXX" episode in the documentary. The anecdotes were also shared on social media and email subscription lists, including that of our media partner *Der Tagesspiegel*. The documentary production thus uses an old technology (phone link), combined with a digital platform to foster the participation of audiences. In Dogruel's model of dimensions of change the participatory aspect qualifies as a functional dimension, as it is part of "new ways of consuming, discovering and sharing" documentary material (Dogruel, 2014, p. 63).

Illustration 4.5 StoryboXX on the Tempelhof Field

Illustration 4.5 StoryboXX on the Tempelhof Field, as portrayed in *Field Trip*. Source: Field Trip GbR/ronjafilm.

Even though there is no guarantee that one's anecdote will be selected as part of *Field Trip*'s narrative, "The StoryboXX" story is entirely produced based on five of the 22 voice messages left of *Field Trip*'s

answering machine. Vázquez-Herrero et al. (2017) speak of "user as producer" for this type of interactivity. Since in *Field Trip*'s context, their editorial control is quite minimal, I would rather defer to what Bruns calls *produsers* to qualify those users involved in our narrative (Bruns, 2007).

From a functional point of view, there are other ways in which users could engage with *Field Trip*. As mentioned, one way was via social media channels. There, they could voice appreciation, critique, feedback on our production and give us heads-up on dynamics on the Tempelhof Field that we might want to look into. All of these engagement possibilities were activated, albeit on a minimal level.

What was more present, functionally speaking, was what Vázquez-Herrero and colleagues (2017, p. 407) call *physical* interactivity. Although they mean it in a more mediated manner, such as with virtual reality goggles and augmented reality applications, they also mention live performances. *Field Trip* did offer entry points for those less interested in individual interaction with the artefact and more into big screen collective viewing, or live streaming. Due to the Covid-19 pandemic, the 2020 live performance options were much more limited than anticipated, which resulted in cancelling one event in a community centre in Hamburg and curtailing efforts towards a full-fledged festival circuit. Table 4.2 lists all live performances which offered a form of collective experience of *Field Trip*. The first five were very classic screenings followed by a Q&A. They were designed for a general audience, although two of them were with a closed group of workers doing an educational trip to Berlin. The more recent events were all for a more specialised crowd of university students in Germany, Canada and Poland. They were all unique in that they highlighted different aspects of *Field Trip*, with one focusing on the ethnographic term of *field work* (University of Halle-Wittenberg) and another one on the documentary dramaturgy (University of Montreal). The participants engaged in lively discussions (esp. in Halle-Wittenberg and Lodz) and were able to consume parts of *Field Trip* in a reflected way. Taken together, if my math is correct, we reached some 600 people through live performance.

Table 4.2 *Field Trip* live performances

Live performance	Date	Place	Number of participants	Reference
Double-ticket: Movie theater Premiere / Kliffs Concert	15 August 2019	Wolf Kino / Saarbach Bar, Berlin	25	n/a
Screening with director	17 August 2019	Wolf Kino, Berlin	20	https://wolfberlin.org/events/2019/8/17/eva-stotz-zu-gast-field-trip
Short screening & Q&A	09 September 2019	M100 Young European journalists workshop 2019	27	http://www.m100potsdam.org/m100/m100-young-european-journalists/zusammenfassung/

Official Polish language launch event: Short screening & Q&A + Workshop on creating hypervideos	28 September 2018	Digital Culture Conference, Warsaw	Between 100 and 250	http://digitalcultures.pl/en/programme/field-trip-where-asphalt-keeps-silent-stories-are-needed (inactive)
Screening and tech Q&A	5 October 2019	Mozilla Festival	Between 40 and 60	https://discourse.mozilla.org/t/field-trip-open-source-web-documentary/46759
Screening & Q&A	16 October 2019	Wolf Kino, Berlin	20	n/a
Screening & Q&A	13 November 2019	Wolf Kino, Berlin	20	n/a
Screening & Q&A	28 December 2019	36C3 – Chaos Computer Conference, Assembly: Art & Play	35	https://events.ccc.de/congress/2019/wiki/index.php?title=Assembly:Art-and-Play
Screening & Q&A	5 March 2020	CityLAB, Berlin	70	https://www.citylab-berlin.org/events/fieldtrip/
~~Screening & Q&A~~	~~23 April 2020~~	~~Kölibri community centre, Berlin~~	~~none~~	Cancelled
Screening & discussion	21 January 2020	University of Leipzig, Media and Communications	25 students + 1 professor	n/a
Screening & discussion	28 April 2020	Oneline (Zoom): Film University Babelsberg (Experimental narration seminar)	20 students + 2 professors	n/a
Screening & discussion	19 May 2020	Online (Zoom): University Halle-Wittenberg, Media and Communications + Ethnography	30 students + 2 professors	[photos available]
Webinar w/ screening	26 August 2020	Online (Facebook/YouTube) : University of Montreal, Campus MIL, Goethe Institute Montreal, Labdoc UQÀM	20 live + 80 on-demand	https://www.goethe.de/ins/ca/en/ver.cfm?event_id=21945191&fuseaction=events.detail& https://www.youtube.com/watch?v=Uo5ODNZQDi4
Workshop w/ screening & coaching	03 November 2020	Online (Zoom): Lodz Film School, Visual Narratives Laboratory vnLab	20 students + 2 professors	n/a

Table 4.2 *Field Trip* live performances. Source: by the author.

The *physical* interactivity with *Field Trip* also takes place in a more permanent form. *Field Trip* will be included in the permanent exhibition of the visitor centre of the Tempelhof airport building, as an installation. It is a station with a touch screen where visitors can interact with *Field Trip* in all three

languages. This partnership was initiated in November 2018 and took two years to get through. With some estimated 80,000 visitors a year, this location could become one of *Field Trip*'s main distribution platforms. This will only be accessible once the Covid-19 pandemic will have been contained.

Finally, it is worth mentioning that during the development of *Field Trip*, a few other physical events have marked milestones accomplished. These were:

- 1 September 2017: Kickoff of *Field Trip* with team and musicians on the Tempelhof Field.
- 2 September 2018: StoryboXX Grand Opening Event on Tempelhof Field[58].
- 14 May 2019: Meet the makers of *Field Trip* at the StoryboXX.
- 18 June 2019: Concept by Kliffs on Tempelhof Field to celebrate the successful crowdfunding campaign.

4.1.4.1 Outreach efforts

Beyond these partnerships, we invested much effort in reaching out to film festivals on the one hand, and prizes on the other. We identified about 75 film festivals, and approached some 50 of them in 2019 and 2020 combined. We received 20 declines, and 30 did not bother answering or replying to our submission. Most festivals did not have a category for web-based films and instead offered virtual reality screenings as part of their "new media" programming. At the time of writing, *Field Trip* was selected by one film festival only, the Melbourne Documentary Film Festival (MDFF). Here, one could have thought that the Covid-19 pandemic could have created a favourable momentum for the distribution of web-based films. I cannot confirm that this is the case on the basis of the limited interest from the film festival sector. At the time of writing, *Field Trip* is pursuing its efforts to see the i-doc selected for European film festivals.

In terms of prizes, which contribute to flagging cultural works in the attention economy, we entered the competition for a handful of them, including: VOCER Netzwende Award (Web projects award), Deutscher Reporterpreis (German reporter award), Grimme Online Award, iF Design Award, CIVIS Medienpreis (civic media award), Lovie Awards, and Prix Europa. The result at the time of writing is that *Field Trip* was selected as winner of a **2020 Gold Lovie Award (documentary category)**, a **People's Lovie Award (documentary category)**, and as **Best Interactive / VR Documentary** at MDFF 2020**.**

[58] Article in German about the StoryboXX opening: *Die Storyboxx präsentiert Tempelhof-Erinnerungen, Helena Wittlich, Der Tagesspiegel, 02 September 2018.* https://t.co/JvVpvVMVYE?amp=1

Illustration 4.6 Landing page of *Field Trip* showcasing awards

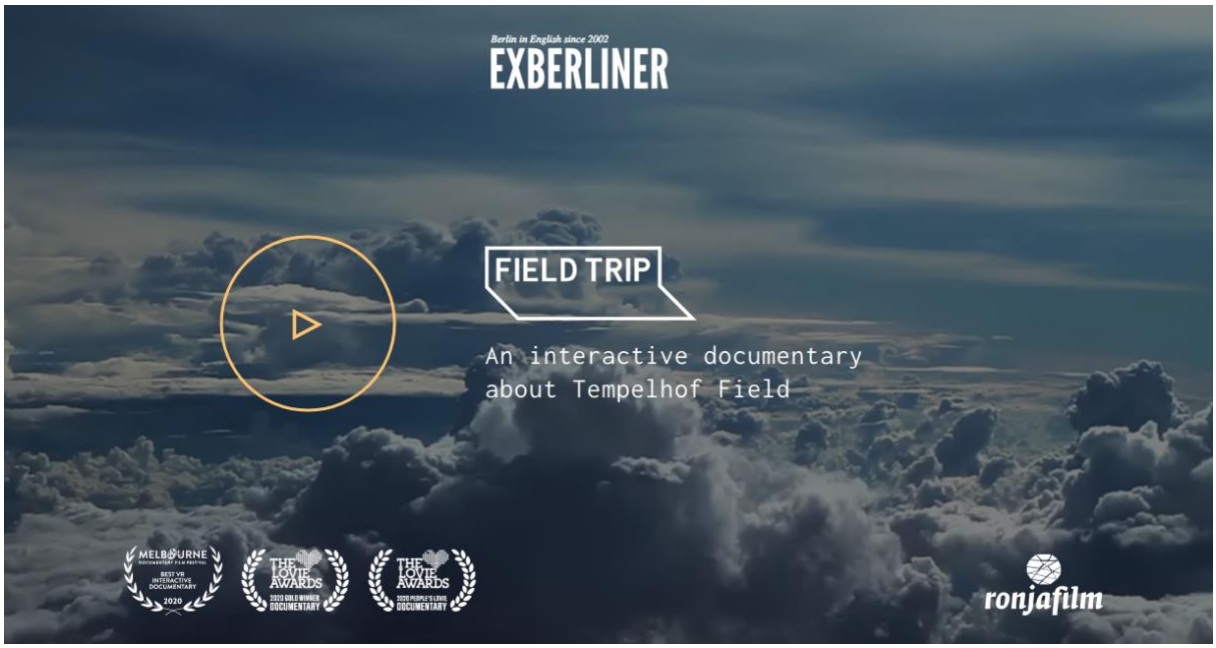

Illustration 4.6 Landing page of *Field Trip* showcasing awards. Source: Field Trip GbR/ronjafilm.

Personally, I view outreach efforts as a major category in this production. **The input side outweighs the output one massively**. I have to add a disclaimer to this: if the i-doc had not been produced as part of my doctoral journey, I would have probably invested less heavily in going the extra mile. There was much leg work involved, especially in three phases: the initial funding phase, the crowdfunding campaign, the distribution phase. What I am extracting from this, is that **many of the outputs in terms of recognition would not have been possible without a disproportionate amount of time invested** on following-up with festivals, the visitor's centre of Tempelhof airport, universities and prize-giving institutions. To put it clearly: without a dedicated team and the intense communication fight during and after the release of the project, the public would have registered *Field Trip* as an experimental student project. The outreach efforts were in the end decisive for the public to acknowledge *Field Trip* as a professional media production, relatively successfully released in mainstream and specialised media, with some significant accolades in the cultural sector. In times of the pandemic, this is no little accomplishment. **Outreach efforts are thus in my view as important as story design, technology and funding for creating the desired societal impact**. I would add that producing an i-doc feels like being in an electoral campaign, with door-to-door canvassing being the best bet for lowering the production risk.

4.1.4.2 Makers' take on functional dimension

> *The planned impact or the one I wished to have, was to change how people do webdocs, towards* ***a more web-native documentary*** *which doesn't focus so much on the story itself but also the format, the environment in which it is published. Regarding the actual measurable impact until now, I fear* ***it has had most impact with the StoryboXX component****, not so much the fact that it's in web-native format*, Jäger deplores (J. Jäger).

Functionally-speaking, Jäger feels that "the ***impact by format*** is not really there yet" (J. Jäger). To be fair, such an impact most certainly needs much more time, as other makers first need to notice, experiment with the format, and then produce a work of their own. But already, there was demand for the format. A media artist associated with Lodz Film School is interested in using *Field Trip* as a format for her next story. The same goes for an Armenian journalist wanting to use the *Field Trip* template to document what her country is going through in late 2020.

Eva Stotz, at least implicitly, also acknowledges a functional change expectation:

> *I would love that this kind of storytelling be applied to other places. For telling the story of a person, telling the story of an institution. The format can be applied to different things, and different places. I would like to see the thing we started evolve in many different directions*. (E. Stotz).

I agree that this dimension has not come full circle at the time of writing, but note that some of this is due to a lack of capacity to follow-up with requests we already received, and the fact there is still potential for promoting *Field Trip* on platforms which attract remix and/or open source creators, like Wikipedia.

The functional short-term impact might well come from the **participatory dimension**. At least, this is what Klüh senses, when referring to the StoryboXX:

> *We got many touching stories. This was irreplaceable and necessary in this project. I would have liked more episodes like this, maybe in a different way, because it brings you back to the people. It's tangible, not like fancy filmmakers going there, but really stories of the people. It's my favourite part of the whole thing*. (S. Klüh)

Director Eva Stotz agrees, and brings the functional discussion into the realm of *Field Trip* being a *living documentary*: "It's beautiful when people participate in telling their views on the Tempelhof Field. Also, we can reopen that story. It would be beautiful if this episode could **get richer and richer and change over time**." (E. Stotz). Executive producer Klüh deepens this thought, saying that *Field Trip* goes away from an end product as a closed format, to something that can grow, something "that is much broader than just this epic film piece," she argues (S. Klüh). "It's rather something that is online, that you can play with, that can grow" (S. Klüh).

Functionally speaking, the project is "**a combination of interaction, participation and activation of people**," Klüh believes (S. Klüh).

> *Users are empowered because they can actually do something with the film and through the film. You may feel empowered because you see how history changes and is rewritten, and that you can be part of that. Then you can explore it, click on it, also leave your [own] story.* ***Creative empowerment*** *describes it very well*. (S. Klüh).

Here, Jäger is less optimistic, or rather, expresses *Field Trip*'s impact on users in a somewhat ambiguous tone: "It would be nicer to say that this empowers people on the field to become part of the documentary, to become more active. But I am not sure if this is the case" (J. Jäger).

4.1.5 Points of impact along the way

To round off the thick description of *Field Trip*, I am adding a compact discussion of the key moments in production. These key moments were mentioned by the team members as moments in which they felt *Field Trip* was having particular impact. There are plenty more moments of significance, but these milestones help illustrate what makers perceive as specifically meaningful, and how impact expectations are iteratively formed and dissolved.

4.1.5.1 The spark

The initial moment, in 2017, when Eva Stotz and I first met to discuss the project, I felt that the open vision of the Tempelhof Field that she possessed and my multiperspective and interactive storytelling approach really cross-pollinated well and started crystalising into a proto-storyworld that laid the foundation. This moment was foundational and made a strong impression on each other. The effect on us, makers, was empowering.

4.1.5.2 Building a team

Not long after, Eva Stotz started looking for camera and sound people that would be ready for this uncertain trip on the Tempelhof Field. I did the same, verifying the availability of Joscha Jäger, whom I knew, and aligned the spark idea with the affordance of his technological framework and vision. Not long after, a seasoned web designer and an illustrator and animator came on board. This might sound banal, but from a maker's perspective, their coming together under a vision, as a foundation, and the team, as the artisanal component that would actually make this vision concrete, has made the concept of *Field Trip* evolve in many unexpected ways. All of a sudden, we were not just telling a story about Tempelhof, but agreeing on the terms of this production. Open hypervideo was added to the project design, a visual style, sound, etc. Building the team was less of a hurdle, but securing the funding, or rather dealing with many funding setbacks early on, was what helped cement the team. By going through

early battles, one of which was a first rebuttal and later acceptance for a kickoff grant by the MIZ-Babelsberg agency, we matured into a true team that would show commitment towards the project. The egalitarian workings and collective decisions made us push for an agile production culture. Continuous collegial feedback loops and appreciation for the work and competence of the other, were key to building a stable team. It is not until executive producer Svenja Klüh came on board though, that the team felt complete.

4.1.5.3 High-school collaboration

Another key moment, was in the form of a high school collaboration. We made an agreement with a history class of Berlin-Neukölln high school *Albert-Schweitzer-Gymnasium*. We had a former forced labourer coming for a shoot to the Tempelhof Field—where she was made to work in 1945. We made a school project out of it. To make this cooperation happen, we spent two afternoons in a history class. "It felt kind of absurd, but I loved it, because **it was real tangible**. **Pupils where learning something off our media project. We involved others in the making**. I could feel that this had impact," film director Stotz says (E. Stotz). "I certainly feel that going to schools—much beyond the documentary work itself—has the potential to **cross over to social change**," Jäger adds (J. Jäger). This collaboration meant taking the longer path, but I would also think that this was probably one of these moments where **all parties felt empowered**: the pupils, we—the makers, our protagonist who met with the pupils on the field, and the forced labour information centre that we pulled into the partnership.

4.1.5.4 Shooting on the field

> *While shooting, I very often had that feeling that people had a big urge to talk about the field. It was incredible how much pressure there was for people to speak out about this case. For us to provide a platform, felt to me as if we were doing something important, having an impact there, because **we were those pulling together different crowds that don't talk to each other***, E. Stotz says (E. Stotz).

These moments in action, on the field, were like "a **big mediation**", according to Stotz (E. Stotz). A mediation that we did as a team and that we shaped into a film "that everyone could understand" (E. Stotz). Jäger sees this type of mediation, to which Stotz is referring, as something having **participatory impact**. "Director Eva spent a lot of time on the field and establishing contact with protagonists of the field is one way of fostering participation" (J. Jäger).

4.1.5.5 StoryboXX inauguration

Without wanting to reiterate the StoryboXX idea described above, I will limit myself to say that the inauguration of this participatory component of our project was a moment of great relief and hope. We

had waited for months to get the authorisation to install the phone booth. The books were in, the audio apparatus too (thanks to a donation by a children mp3 wooden box manufacturer) and we could celebrate the official opening. The StoryboXX, as small an element of the project as it was, meant something to all the team members. It mainly meant an outpost of our digital media project directly in the space that we were documenting. The media intervention was thereby perfect. The inauguration gathered some 25 people, not more, but was fun and felt like the consecration of *Field Trip* becoming a true *objet étrange* (weird object), like documentary professor Viva Paci has called out project once[59].

4.1.5.6 Team mediation

While Eva Stotz self-describes *Field Trip* as a big mediation, as a team we also went through a mediation ourselves. This was particularly impactful on one team member. "I remember an impact that is more of a personal one: the process with [the lawyer and mediator] Raban [von Buttlar]," Svenja Klüh remembers (S. Klüh). Here, Klüh is referring to four pre-conflict mediation sessions that were offered to us by a media lawyer. We decided to use the opportunity so as to curb or prevent potential conflict. This was at a time where funding was extremely thin, and uncertainty over whether we would be able to bring the project to fruition was hovering like a black cloud over our heads. "I liked how we took care of what each of us wanted out of the project: we wrote down numbers, and attributed value to work," Klüh explains (idem).

> I found it honest. I felt that I was heard. I found it transparent. I could also comprehend what the mediator or the others were saying. I like it when things are on the table and we're not tip-toeing around them. (S. Klüh).

The mediation was indeed asking each of us about expectations regarding *Field Trip*, including money-wise. We agreed on a procedure, "on a percentage of money to get in the end and what we would do if the percentages weren't met" (S. Klüh). In hindsight, I believe this negotiation was **one of our best production moves on a communicational** level. It permitted us to engage in feedback loops spread-out in time, and only focus on the production, not the product. I certainly agree with Klüh that this had a **decisive impact on our production** and helped plan for the future (distribution phase). The procedure that we agreed upon was respected and served us many times in later stages of production.

4.1.5.7 Launch of Field Trip / 70 years of the Berlin airlift

As mentioned, we agreed to a tight schedule with *Der Tagesspiegel*, which insisted on timing the release with the 70th anniversary of the Berlin airlift. Interestingly, we had lively discussions in the team about whether to drop the partnership with the newspaper altogether because of the extremely short timeframe that we were suddenly faced with. The shared framing of expectations (expected quantitative output;

[59] See https://www.youtube.com/watch?v=Uo5ODNZQDi4

credibility expectations *vis-à-vis* the *Tagesspiegel* brand) were such, however, that we preferred to roll up our sleeves. We reluctantly accepted, albeit anticipating that the fast-track post-production process would put a dent in the innovative potential of the interactive storytelling, and also meant compromising on a few secondary aspects, such as access to usage statistics. This moment of decision also had many other effects, including limiting artistic freedom, less technical freedom and **constraints that would induce impact of certain layers of *Field Trip* (e.g., wide circulation) over others**.

4.1.5.8 Crowdfunding

In my view, the crowdfunding campaign that we timed right after the release, was instrumental for enlarging the impact of *Field Trip*. Through the call and successful collection of 16,000€ with 151 individual donors, we were able to 1) meet our objective to add enough episodes for *Field Trip* to make true on its documentary storytelling promise; 2) show that we have a community of people behind us and; 3) mobilised many different communities (e.g., **advocates of the Tempelhof Field; political elites; media producing peers; more generally culture-hungry groups that are prepared to support financially for themselves and others**) that would then support us in the distribution phase. This felt very empowering, although it was exhausting, to say the least.

4.1.5.9 Campaigning for a People's Lovie Award

In a nutshell, campaigning to gather enough votes for winning a People's Lovie Award—an award "recognising the best of the European Internet", was similar to the crowdfunding effort. It involved mobilising friends and family, but also all the stakeholder groups that participated in *Field Trip*. To the difference though, that this time the campaign felt like an *au revoir*, like soliciting everyone one last time for something that was easy to comprehend: a prize. This moment felt to me like the last mile of this long trek. It was important to me as this prize would value the documentary quality, but also the web-based / interactive nature of our project. Even though it wouldn't reveal more than that, this recognition that we received together with all supporters felt like our project has been of importance to at least a certain supporter base and the award-giving jury.

4.1.6 *Impact through openness*

It would be hard to sum up the above dimensions without losing too much context and nuance. But for simplicity, I would argue that the core makers of *Field Trip* had complementary impact expectations. In a very schematic summary, I would pretend that the four focus areas and priorities were as follows:

- Eva Stotz: *Field Trip* as a compelling story, fostering engagement and recognition.
- Joscha Jäger: *Field Trip* as a full use case for open hypervideo, fostering re-use of tech.

- Svenja Klüh: *Field Trip* as a multiperspective and playful story, fostering re-use of content.
- Frédéric Dubois: *Field Trip* as an open project (open content, open source code, participatory), fostering engagement and recognition.

These four focus areas that came together in the project were constantly being renegotiated to give rise to compromises under the pressure of production realities.

From the above thick description, it can be concluded that a central motive of *Field Trip* is *openness*. All aspects of the art work embrace the openness paradigm: content, structure, esthetics, and even the legal/licencing dimension are all oriented towards being extensions of the openness motive. The topic of the Tempelhof Field, as the largest open space in Berlin, permits to set the scene for an open narrative. The narrative architecture of *Field Trip* is open to an ever-growing number of protraits without being at risk of become inconsistent or inappropriate. The esthetics of the interface is minimalistic and leaves room for the diversity of content to play out and pay tribute to the open charater of the field. Openness is further reflected in its openly re-usable content, the open hypervideo format and the technology, via the use of open source and creative commons licences. Finally, the motive of openness is carried by the participatory components of the documentary project.

Even though not all impact types in *Field Trip* can be subsumed under the openness paradigm, the idea of impact in *Field Trip* in inherent to the art work. Much of the impact expectations negotiated above follow the artistic approach of *impact through openness*. In chapter 5, I will analyse whether this approach informs a larger impact framework for i-docs in general, or whether this is only specific to *Field Trip* as a project embracing openness as a motive.

4.2 Three i-doc case studies

In this section, I am offering a complement of information sourced in i-doc production practice. It is less with the objective of offering yet other full case studies, and much more an attempt to bring in deep knowledge from other makers of i-docs. All of them are long-time media practitioners, although their profiles differ quite a lot. One's background is in print journalism, one is more story-design-oriented and the third is closer to the technological dimension. Their subjective take on impact is based on one major recent i-doc production they took part in, as well as their seasoned maker track record. These three perspectives are not meant to describe their i-doc projects in full detail, but rather to get one situated perspective grounded in one particular i-doc. These points of view, so I expected, helped control for the *Field Trip* findings and add complementary empirical data, so as to inform the baseline impact framework in the next chapter.

4.2.1 Netwars

> *Impact always needs to be related back to the goals that were set in the beginning* – Lena Thiele (L. Thiele, personal conversation, February 12, 2020)

In 2015, production company Filmtank released *Netwars – Out of CTRL*[60], a transmedia project on the issue of cyberwarfare. The award-winning production was unrolled on five different platforms: a TV documentary, a web documentary, a graphic novel app, an eBook, and a TV series. The web documentary was planned as the centrepriece, where all other parts convened. In a way, the centre of a storyworld. While this is a 100% Filmtank GmbH production, it was produced in cooperation with Miiqo Studios UG, Bastei Entertainment (a division of Bastei Lübbe AG), and ZDF/Arte.

The Netwars i-doc is organised as a five-episode web series. It includes a fictional narrator meant to confront the user, and lets one explore each episode in a point and click fashion. You can thereby experiment a cyber battleground live, deepen knowledge about the phenomenon by choosing to activate different experts in full screen video format, and answer questions popping up sequentially. It is a journey in between facts (often visualised) and fiction, and between a rational reading of actuality and an emotional one. If the user is quick, *Netwars* lasts five minutes per episode, but if the user is curious, there is enough material for filling an entire evening. The twist in this web series, is that while going through the experience, user data is being collected in the background, and the drastic provocative actor gets nastier from episode to episode, thereby pulling the user deep into the cyber battleground, including with data flows that she is not even aware she is giving away. It is a linear narration, with plenty of interactive possibilities along the way.

The author and creative director on the i-doc is Lena Thiele of Miiqo Studios. She was also the lead transmedia strategist and artistic lead for the entire project. Lena Thiele (*Farewell Comrades!*, 2012; *Netwars*, 2015; *Myriad*, forthcoming) who also works as a professor of digital narratives at the *ifs* film school in Cologne, comes from a story design perspective, first and foremost.

On process, Thiele says that for her, *Netwars* can best be defined as an "interdisciplinary production", which was made with partners and people adopting different roles. Concretely, this included a technical director from agency britzpetermann, film director Hendrik Hölzemann, Filmtank producer Michael Grotenhoff, consultant Sandro Gayken from the Free University Berlin, art director Sebastian Baurmann and Thiele as the author and creative director. In the development stage, this core team looked into "the most creative and approachable concept and solution" (L. Thiele, personal conversation, February 12,

[60] *Netwars* is accessible here: http://www.netwars-project.com/

2020),[61] as well as the do-ability. Once they all understood and agreed on the basic structure of the project, "everybody could do their own writing" and "their most creative work in the framework of the whole project," Thiele explains (L. Thiele). But then again,

> *[…] if you have a project that involves lots of different partners, different formats, balancing them gets tricky for the production company to manage. […] In a single project, you suddenly have completely different structures and expectations as well as individual market needs*. (L. Thiele)

The experienced digital storyteller adds that in the *Netwars* production "One of the learnings was that we had to define specific goals […],". These goals may change in the process, like in any production "so you have to discuss in the team what the consequences are: what this means for the general concept, technologically-wise, etc" (L. Thiele).

As compared to classic film productions, where there is a concept first, a production, and then a final result, with *Netwars*, there were two things that had to be levelled, Thiele finds. There were frictions "when linear production processes clashed with more agile production processes" Thiele remembers (L. Thiele). "The more agile work changes how you work with external partners," she illustrates, before adding that "there are many changes as a result of testing" too (L. Thiele).

When questioned about impact, Thiele reveals that **impact, in her view, always depends on how you define it at the beginning of a production**. In the case of Netwars, she adds:

> *We set three goals:*
> *1) **Reach different audiences**, as measured in numbers,*
> *2) **Create awareness for the production company profile in the interactive media field**,*
> *3) **Create awareness about the topic of cyberwarfare and encourage discussions***. (L. Thiele)

But apart from these larger impact expectations, Thiele herself holds onto a personal goal, which is to "bring fact, fiction, art, science, and technology together" (L. Thiele).

Of these common project-wide expectations, the audience reached by *Netwars* worked to the satisfaction of producer Filmtank and its partners, according to Thiele, among other thanks to a media partnership with *Heise Online*—a specialised but widely-read IT magazine.

The company profile goal also seems to have been attained, when Thiele mentions:

> ***The success of Netwars in the industry** empowered us for making new projects. We suddenly had a different **standing in the market**. This by the way also applies to Farewell Comrades! [produced by Gebrüder Beetz]. The industry sees that there is reliability […]. Partners know you can actually do it*. (L. Thiele)

[61] For the remainder of this chapter, I will simply use (L. Thiele) to refer to (L. Thiele, personal conversation, February 12, 2020).

Beyond the reliability and the track record of delivering ambitious and sophisticated i-docs, Thiele says that external factors such as **international recognition** pay off when it comes to positioning a production company: "It also had an impact for the company rising from a national player to international awareness, with a SXSW award, and other **international awards**" (L. Thiele).

This said, it seems that even within this production, there was an internal, institutional impact: "we were **testing different production structures**. For a production company with a background in linear storytelling, yes, I think it had a huge impact." (L. Thiele). Thiele expands by saying that "Netwars had an impact in testing **different production structures, certain partnerships, how to work with audiences**." (L. Thiele).

When it comes to the third intended impact expectation, Thiele provides an answer that does not clearly establish that the goal of fostering discussion worked out fully. "We had a much higher level of involvement planned, especially for mobile phone users, in between different episodes of the web series. That was kicked out due to timing, and production constraints," she specifies (L. Thiele).

The second part of her answer, hints at a passive form of user engagement, which this time seems to have worked, even though not so much for fostering discussion. "We tried to integrate data of users in the format itself, thereby giving this 'hacking your computer' feel to it. This personalises the format. This happens in a passive way. This is what is the frightening part," she explains (L. Thiele). "But a more active activation *(sic)* did not happen," says L. Thiele, specifying that there were even plans for the Free University Berlin to take over the website, so as to trigger more discussion, and to associate with NGOs such as Algorithm Watch.

In the course of the interview, Thiele emphasises that for some parts of the transmedia project, there were **financial impact** expectations, but that for the web series type i-doc, it did not have any specific revenue model. "The idea was rather to **create an IP** with a character in the middle," Thiele explains (L. Thiele). This seems to point to a long term impact via return-on-investment.

During production though, one key moment, where Thiele felt *Netwars* was having impact, was at the Frankfurt Book Fair's 2014 StoryDrive. Still at a prototype stage, the makers presented a *Netwars* trailer to an audience of 400 people. "The audience was divided: one half hated it, the other loved it. There was such a controversy, and I was like: 'this works!' I could see the **emotional impact and the public impact**." (L. Thiele). On other occasions, it was the topic that seemed to work for the audience, especially when there were articles published and encounters with outsiders during the production process.

Beyond the intended impact expectations, Thiele also believes that *Netwars* pushed boundaries when it comes to **innovation in user interface**. “If you think in terms of testing artistic usability, i.e. the somehow intertwined content on an emotional and a fact-based level, it worked. There are people still approaching me today for interviews on usability” (L. Thiele).

What at first looks like a successful project in terms of numbers and recognition, when looking closer, has had a series of other impacts. Thiele points at short term media effects, but also inward-facing and external institutional impacts, innovation in UX, and an original IP. If a longer-term societal impact has not materialised in Thiele’s view, these different types of impact do have long term ramifications.

4.2.2 Die #kunstjagd

> *I-docs are a good way to tell complex stories* - Carolyn Braun (C. Braun, personal communication, November 29, 2019)

In May 2015, a team of journalists under the label of *Follow the Money* went live with *Die #kunstjagd – Wo steckt das verschollene Gemälde?* (German for *The #arthunt – Where is the lost painting?*), an i-doc in the form of a series of six podcasts found at kunstjagd.com, Whatsapp groups, and a live participatory investigative 7,200 km road trip with two Westfalia vans. *Die #kunstjagd* was subsequently augmented with a TV documentary produced by Gebrüder Beetz Filmproduktion and broadcast on public channels BR (Bavaria), SRF (Switzerland) and ORF (Austria). In essence, *Die #kunstjagd* is a live participatory search for a painting by a Jewish painter, which disappeared from the Engelberg family home in Munich, in the 1930s Germany. That painting had a sister-painting, almost identical, which the Engelberg, a Jewish family now living in Portland, Oregon, USA, still have.

The project ended up being a coproduction between Follow the Money GbR (now dissolved) and Gebrüder Beetz Filmproduktion. With the help of the broadcast partners mentioned above, the German public radio *Deutschlandradio*, two first-grade newspapers (*Süddeutsche Zeitung* in Munich, *Der Standard* in Vienna) and the regional paper *Rheinische Post*, the team managed to enter different channels serving a variety of audiences. On these platforms, as well as on social media accounts of these media, users would be called upon to visit kunstjagd.com and to join a Whatsapp group during the six weeks of the live investigation. Users would provide hints, ideas, and stay informed on the progression of the search combing through the different Länder of Austria, Germany, and the Cantons of Switzerland. At the end of six weeks of authentic field investigation, with all its ups and downs, the team found the painting. In fact, "on 18 November 2016 the Jewish Museum Munich opened a four-week exhibit, in which for the first time in the past 77 years, the sister paintings were brought together again" (Die #kunstjagd).

One of persons that was deeply involved, is journalist Carolyn Braun, together with other "boring print journalists," as Braun sarcastically puts it (C. Braun, personal communication, November 29, 2019),[62] referring to the fact that she and her colleagues were trained in a classic fashion where one researches, writes up a story and is done once the story is published. In i-doc production, there is always a project after the project, which is to fill the experience with life via outreach. For *Die #kunstjagd*, Carolyn Braun was responsible for research and production, although her role in the eight-person team included many other facets, among other being part of the six-week road trip with three other colleagues of the core

[62] For the remainder of this chapter, I will simply use (C. Braun) to refer to (C. Braun, personal communication, November 29, 2019).

team: podcast-series producer Fredy Gareis, partnership-maker Marcus Pfeil, and director Christian Salewski.

For Carolyn Braun, the impact of *Die #kunstjagd* is nowhere close to a "big external impact" (C. Braun). In saying so, she means impact as expressed by "**user reach and reaction**" (C. Braun). In revisiting the project, she reflects on two possible reasons for why reach and reaction by the audience was limited. "One was that looted art (*Fluchtkunst* in German) is a **complicated subject matter**. People didn't get nor like the topic so much" (C. Braun). Secondly, she mentions, "the **partners were not ideally selected**. You need to take what you can get. Sometimes it is not about the perfect target groups" (C. Braun). This said, *Die #kunstjagd* had, similar to *Netwars*, a quite impressive string of media partners spanning TV, print and radio. "When you look at all the media partnerships, it is kind of surprising to us that not more people took part in the **participatory possibilities** with us on the trip," Braun states (C. Braun).

When drilling deeper, it seems that the user reach did in fact work out satisfactorily to a certain extent. For example, Braun singles out two media partners who covered some ground in terms of quantitative reach: "*Süddeutsche Zeitung* […] did write good companion pieces and also had good reach. And Austrian public TV ORF was a great partner, because we were featured on their well-visited starting page for six weeks!" (C. Braun). Although there are no comprehensive web metrics available for this project either, it seems that it did reach quite a few audiences[63].

Even on the reaction side, it appears that *Die #kunstjagd* has had some clout, when only looking at the number of Whatsapp followers (766 in just six weeks, according to the project's blog[64]). "Those who took part in the live research, who accompanied us on Whatsapp, were **warm and interactive, participative**," Braun recounts (C. Braun). In fact, the team even ran a survey among Whatsapp users, to which 149 answered (19,5% of all followers). The result is a blog post[65] which reveals individual qualitative reactions (88 users actually sent in a comment), but also quantitative results such as 70% saying their interest for the topic was at 7 (out of 10), 85% saying they wanted to stay true to the Whatsapp group until the painting was found and, a resounding 89 % saying they enjoyed the **new transmedia narrative format**. These figures go to show that at least part of the audience was close to the story, even following it passionately, and that the live character actually worked relatively well.

[63] Smaller projects such as *Atterwasch* (2014), also in conjunction with *Süddeutsche Zeitung*, managed to reach more than 100,000 unique visitors in just a few weeks (see Dubois, 2018)

[64] See blog post *Die #kunstjagd in Zahlen*, from 27 June 2015 (German) http://www.kunstjagd.com/blog/484

[65] See blog post *Fast so wie damals, als wir frisch verliebt waren*, from 20 July 2015 (German) http://www.kunstjagd.com/blog/503

Braun's take on getting users to really engage with the live search is ambiguous at best. For the team, the interaction with Whatsapp users was challenging and not crucial to the storytelling. "We were just being nice with the users, sending emojis, though in some cases, it did become very personal. Some people gave us hints, practical information," she mentions. "A very committed 70-year-old guy doing ancestry genealogy did lots of research for us. He was great. We **got some clues** through him" (C. Braun). This new form of working was apparently useful though, especially on the road, as **it helped the team to learn from the user**. "It was encouraging and tiring at the same time," Braun sums up (C. Braun).

The film about the live search, released many months after the road trip, reached audience numbers that were average, says Braun. Nothing to be remembered for in terms of reach. "When it comes to the exhibition in the Jewish Museum–this went pretty well. It certainly has to do with the fact that it is a house with **the right target audience,**" Braun guesses (C. Braun). Here Braun emphasises once more the importance of getting to the right audience. If that is not always possible via media partners, it might well be via institutional ones, such as museums. It seems that targeted and framed audiences can indeed pay off when it comes to reach and reaction.

Braun remembers the team coalescing around a common project understanding early. "We had a Medienboard funding application in 2014, which was quite a detailed outline of partners with which we could work later on. So this was already an agreement: a **shared framing on production**" (C. Braun). Also, Braun says that beyond the general shared framing, the story was quite oriented already. "Our objective was to find the painting, so **we were not thinking about impact objectives**. We were not strategic. […] We went into this project in a naïve way, which was good. There was no master plan" (C. Braun).

Braun does mention that there was an **impact on a more private, individual level** (C. Braun). This is best exemplified by the Engelberg family, who saw their family story being told in a completely new fashion, with the prize being that they received their missing painting at the end of the project. In a more minor fashion, the project also hit individuals in the Whatsapp groups, as some shared personal stories, and others got excited and engaged by the project. But these were only a handful, according to Braun (C. Braun).

On a more personal note herself, Braun reveals in the interview that as a maker, she is driven by **how a story is told**. Although she adheres to journalistic conventions, such as getting facts straight, she says she is:

> *more interested in **complex contexts** (e.g., how we produce milk, or the stories behind the 75th anniversary of the liberation of Auschwitz). These are not stories that need to be dug out, but they need to be **revealed in new ways**.* (C. Braun)

Braun further expands on i-docs being "**a good way to tell complex stories**" (C. Braun). She says that as a maker, the job is to give people the necessary information for them to get thinking. Referring to her daily beat as a journalist, she adds:

> *When you learn about how to write an article, you are drilled to provide a hook, thesis, then give an answer. I am bad at this type of journalism. I am interested in the **many ways of seeing the world**. This type of project gives you some **space to look at the grey zone, have discussion, debate**.* (C. Braun)

Economically speaking, the project did not have a larger external impact. Internally though, it seems to have been in line with expectations, working out well. "I try to do projects where we can pay everyone [including the makers] solidly. But it usually also is **a big risk because when you start the work you don't know if it is going to work out** and whether you get paid." (C. Braun). This financial high-risk aspect, is what Dogruel refers to when looking at media innovations (2014). Here, the makers, similar to those of *Field Trip*, took the risk and managed to pull the project through.

But then, it is legitimate to ask, what the media innovation was, in the case of *Die #kunstjagd*. Braun clearly sees it in the amount of media partnerships involved. "We were part of this development where **news organisations were starting to collaborate with other media**" (C. Braun), and mentions that slowly, they also "**bring social media into the equation**" (C. Braun). The activation of Whatapp users was indeed something new for all partners involved then, and a feature that has taken up momentum in other projects since (see e.g., Bayerischer Rundfunk's *Ich, Eisner*, 2019[66]). Here, Braun is calling up an organisational and a functional dimension of innovation.

Like in the example of *Netwars*, the maker finds that there was impact on the **individual audience level**, but that **for a larger audience impact, the addressees of the project need to be designed much more precisely and activated specifically**. Yet, unlike *Netwars*, there were no specific impact goals set from the start, other than finding the painting with the help of Whatsapp users. Here again though, the maker herself identifies the **media partnerships** as a possible level where the project inspired others. Also, she sees the clever use of social media as something new but is unsure whether *Die #kunstjagd* had a lasting effect with these.

[66] *Ich, Eisner!* – Messenger Story (in German): https://www.br.de/extra/themen-highlights/ich-eisner-preise-104.html

4.2.3 Highrise

> "*The true value [of i-doc productions] is unquantifiable*" - Mike Robbins (M. Robbins, personal communication, January 31, 2020).

Launched in 2009, *Highrise* is a multiyear documentary project directed by Katerina Cizek and produced by Jerry Flahive at the National Film Board of Canada. *Highrise*'s overarching topic is that of "life in residential highrises," (Highrise) which is declined in the form of five interactive and/or multimedia documentaries released sequentially between 2009 and 2015: 1) The Thousandth Tower, 2) Out My Window, 3) One Millionth Tower, 4) A Short History of the Highrise and 5) Universe Within: Digital Lives in the Global Highrise. There were also 20 spinoff projects which included art exhibits, live performances, films and mobile apps. Apart from Cizek and Flahive, the other core team members were creative associate Heather Frise, project coordinator Paramita Nath, community media project coordinator Maria-Saroja Ponnambalam, technical director and post supervisor Branden Bratuhin, and Helios Design Labs.

The project's website[67] says that the vision of the makers behind *Highrise* is "to see how the documentary process can drive and participate in social innovation rather than just to document it" (Highrise). This vision is what carried the essence of *Highrise*'s innovative potential: *Highrise* pushed the boundaries of documentary making by not only **embracing digital technologies early**, but by also **putting co-creation methodologies in practice at a community level**, and making the project literally become a living documentary over more than six years.

Highrise's exceptional i-doc journey was possible, among other things thanks to a flurry of high-profile media partnerships, including with large organisations such as SBS Australia[68], Wired.com[69], The New York Times[70]. The project also managed to attract festival attention, including the Mozilla Festival, the International Documentary Film Festival Amsterdam (IDFA Doclab) and DOK Leipzig, just to name a few. It won several prizes, including a 2016 Webby Award for Online Film & Video / Best Use of Interactive Video.

Mike Robbins came to *Highrise* from a design and technology perspective, as part of his company's two-year participation in the project (Helios Design Labs). I interviewed creative technologist Robbins in Berlin, where he is now working as a freelancer.

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[67] *Highrise* website: http://highrise.nfb.ca/about/
[68] *Out My Window*
[69] *One Millionth Tower*
[70] In *A Short History of the Highrise*, the New York Times opened its archives to the *Highrise* team and published the resulting i-doc.

Highrise is *"*a self-organising five-year exploration of the way people live," Robbins says (M. Robbins, personal communication, January 31, 2020).[71] The self-organising bit comes from the fact that Cizek and Flahive have pushed this 5-year project, which ended up being a six-year project, with no particular plan, and no milestones, according to Robbins. "Many," Robbins says "are victims to saying 'we're gonna make a book, a game, a film'." (M. Robbins). This is precisely what the Highrise did not do. "For Kat [Cizek]," he recounts:

> *it was important to make something that was **open-ended**. It was her idea. It appealed to me. As a creative studio, we were like: 'what's the plan?'. She used the word 'opportunistic'. The idea was that **without a plan, it left you open to different opportunities***. (M. Robbins)

Since the National Film Board of Canada (NFB), as a public film producer, needed to know what it was asked to fund over a five-year period, the team did a world-building exercise, mapping out, and exploring the topic. The result was a pitch tool that was public-facing.

In the words of Robbins, the (part-project) i-doc *Out My Window* "was a **co-creation** endeavour" (M. Robbins). The team initiated collaborations with 50 photographers around the world, with the aim of creating moving pictures without using film. "This set the tone […]," Robbins explains. The **experimental spirit** was indeed carried over to the next part-project, i-doc *One Millionth Tower*, when the team associated with private company Mozilla to take advantage of open source technology WebGL, which Mozilla was already advocating for. "This became a thing that was part of the story. Tell a story about a space, by making 3D stuff on the web, using Javascript," M. Robbins recalls.

> ***Co-creation: Highrise is to me a blueprint for this methodology**. That's one thing that would describe the process most. The idea of co-creation is to blur the lines between the perceived producer, and the storytelling. For me, too often the production process can be like Planet of the Apes, where the roles are determined by the colour of one's hair: the coders are the chimps, the director is the orangutan, and the producers are gorillas. The idea of co-creation is to go beyond that. I realised in that process that coding is creative and part of the storytelling. [Transmedia author] Michel Reilhac pointed me to a quote by [film critic] Roger Ebert to the point that it's not what you say but it's **how you say. This is important in i-docs**.* (M. Robbins)

Like in *Field Trip*'s production process, Highrise was produced in a non-hierarchical manner. "To a certain extent, you still have someone making executive decisions, but makers in i-docs hold similar levels of importance: it's horizontal. […] Our level of involvement as [story] architects, was equal to that of others: photographers and animators," Robbins says (M. Robbins).

Mike Robbins adds that ***Highrise*** **was "limited to festival and conferences," when it comes to audience impact**. "These were the people we were talking to. A lot of the people who were interviewing

[71] For the remainder of this chapter, I will simply use (M. Robbins) to refer to (M. Robbins, personal communication, January 31, 2020).

Kat (or me at times) were people also interested in the making," he insists (M. Robbins). Yet, drawing a parallel with other technological developments, such as desktop publishing in the 1990s, Robbins sees that **technologies used in i-docs can become "democratisers"**. For *Highrise*, this was the case of WebGL and Html5, "tools [that] were suddenly so simple" (M. Robbins), "a lot simpler than expensive movie cameras, a film crew" (idem). Now, the specific use of Html5:

> *caused a huge problem for the NFB, which had invested in Flash in the years prior to this. They couldn't believe we were so stupid to use Html5. This meant months of acrimony. […] We stuck to the guns and they grudgingly agreed to release it*. (M. Robbins)

In the meantime, Flash has all but disappeared. At that time though, the *Highrise* team was **pioneering this technology in storytelling**.

Generalising from there, Robbins suggests that it is the case for a lot of i-docs that:

> ***impact is more on the peers, than the general audience***. *[…]* ***It changes the way people make things***. *The cool thing about i-docs, is that it made it clear that* ***you can make things in a different way***. *At venues like Tribeca, IDFA, Sheffield and so on, people saw this and say: 'F*ck, I can do this' […] In i-docs, the idea of transmedia really works*. (M. Robbins)

One of the reasons why general audience pick-up is slow, Robbins suggests, is that i-docs are less accessible and participatory media than social media for example. "Many of the things we were making, were not as public facing as they could have been," he reflects (M. Robbins). In that sense, it is in Robbins' view difficult to be a part of i-docs, "except if you're into making stuff. […] ***Highrise*'s true audience was other makers and academics**," Robbins boldens (M. Robbins).

A third level that Robbins mentions in a very distinct fashion, of why **audience impact might not be massive, is related to dramaturgy**. In i-docs, "there is a tension between narrative and story" (M. Robbins). He goes on: "These are two different things. Narratives are linear, while stories can be non-linear" (M. Robbins). Taking a self-critical stance, Robbins continues:

> *Out of all the things we tried in terms of physical interaction, the end result is that they were crude. The idea of tapping a button, scrolling, is crude. […] In hypertext stories, there is not enough days in the week to make* ***meaningful links.*** *I think that humans have a highly developed sense of story, and it takes them a split second to realise that a narrative path might be actually bullshit*. (M. Robbins).

More specifically, he claims that "**Branching narratives is the biggest part of i-docs that never really worked out**" (M. Robbins).

When asked whether there was a a financial impact, or impact expectation, Robbins puts it this way: "**If you measure it on economic… there is no business model**. […] There was **no real serious attempt at a revenue plan**, which films always have" (M. Robbins). Here, Robbins refers to the financial impact of the project, even though he employs the term 'economic'. This seems to be a common thread among

the three i-docs mentioned here. The difference being, that *Highrise* was produced and co-produced over six years with quite consequential budgets. This has much to do with the fact that a public producer was backing it, or like Robbins puts it "This is also the problem of the world we live in: there is an imbalance. Not so much at the NFB. They don't really run a business like Arte. They don't ask 'How much did it cost per seat?'" (M. Robbins). And on that note, he adds that the companies he worked with in Berlin, are very much financially-driven. In other words, **they produce "things that are based on expectations to get money back**" (M. Robbins). "This is where the wheels fell off for i-docs. When things were popular enough, you could get to Sheffield, but there, the decision-makers were asking what the business plans were," he says, referring to the Sheffield's documentary film festival (M. Robbins). "When I moved to Germany [2016], it was still glorious times in Leipzig [DOK Leipzig], because **people were listening then**," he recalls (M. Robbins). But he sees a second reason for the slow regression of interactive documentaries, which is intimately related to the first reason: the ***unfavourable equation*** mentioned in chapter one.

> *It's like [i-docs] Fort McMoney and Do Not Track: they both got an audience that the makers were satisfied with, but broadcasters were thinking 'this amount of money vs. that traction…'. The million viewers of Do Not Track was maybe something that was satisfying to BR, here in Germany. They were like 'Wow cool…', but that was f*cking a lot of work!* (M. Robbins)

This said, Robbins sees some evidence of **audience impact with certain projects**, such as the participatory *Quipu Project*, with both impact on hundreds of protagonists and vulnerable people demanding justice, and a relatively defined secondary audience of Peruvian policymakers[72]; or *Cloud over Sidra* aimed at a small audience of multilateral diplomats at the United Nations.

Reflecting on i-docs in general, Robbins says that "It's kind of broken: i-docs never got to a level of proficiency. In human terms, it's like a baby. With human talk." (M. Robbins). His point in terms of financial impact, is that i-docs are "experiments and essays, which are all super cool, don't get me wrong, in many cases really beautiful" (M. Robbins). He even insists that he would want to continue doing i-docs, "but I wouldn't want to do things that were already done before," he says (M. Robbins), revealing his innovative spirit.

After having mentioned the impact on the maker community and academics, Robbins interestingly mentions the impact on one's self.

> ***I think it's presumptive to think that you're making things that are changing people's lives*** *[…] A lot of people […] ask 'What is the impact?' and forget the* ***impact on themselves****. Maybe it sounds self-indulgent, but there is a truth in value that you have to change yourself first. […] The idea that you could make something that* ***changes your life****, is the important part.* (M. Robbins)

[72] For a proper case study of the impact of *The Quipu Project*, please consult The Impact Field Guide: https://impactguide.org/making-and-moving-shorts/case-studies/

When asked what the key moments in the production were, Robbins doesn't hesitate to say that it was getting awards. "Some of the **awards** were […] the Emmy awards, the Peabody awards. These were mainstream. **We felt we were having impact.** We thought that these awards were **holding up certain things in culture for others to see**" (M. Robbins). This is an intriguing and at the same time important point made by Robbins, to which I come back in the next chapter.

On a more philosophical note, Robbins draws on William Uricchio's studies of ephemeral media (Uricchio, 2016) and posits that "in this day and age of creative vortex," where technologies change, become brand new then obsolete at a frantic pace:

> ***We don't spend enough time on the medium to understand how it works****. We consume something, then someone says we need to move on. This leads to super small hyper condensed bubbles. It makes it volatile. Flash, then HTML5, then VR. We only have time to say 'Look what I did, Mommy' before we have to learn a new way of speaking. People have had decades to learn how to film-speak. For i-docs, I don't think we ever had a chance to spend enough time learning, so that people could sit down and say 'We'll have friends over and watch or go see an i-doc'.* […] *William Uricchio says that we're in this hyper-microcosm where things move too quickly. People don't learn as much****. If we had 20 years of i-docs, it would start to approach emotional impact such as in music, film or books****. There are some digital pieces that do have impact****. But in general, it's such a struggle to express yourself. The intent gets lost in the attempt.* (M. Robbins)

Interestingly, author and i-doc maker David Dufresne makes a similar point, drawing on Roger Odin's semio-pragmatic research (Odin, 1992).

> *Roger Odin speaks about 'spectatorial capacity' (*capacité spectatorielle[73]*), where in the early days of cinema spectators were afraid when they saw a train riding into the railway station on screen.* ***We are developing new spectatorial capacities. We are at the forefront (*****avant-garde*****).*** (D. Dufresne, personal communication, November 6, 2017).

Taken together, Robbins' views reveal that media innovation of this type, is **as much about the product, as it is about the process**. But contrasting quite strongly with Thiele's account of *Netwars*, where impact goals were defined, and impact measured against these goals, Robbins draws a picture in which *Highrise* was more or less an open-ended project based on many uncontrollable variables, including due to the highly co-creative production process. He sees a **larger impact on the maker community**, including the makers of *Highrise*, and individual impact as a result of the process. As a matter of fact, he contradicts some of the views in *Field Trip*, saying that he is not convinced that the product, with its "crude" interactivity affordances, is conducive to having emotional impact on viewers. He believes instead that on an **institutional level**, the impact on the NFB, including on technology, was

[73] Even though Dufresne uses the term *capacité spectatorielle*, upon verifying, it seems that Odin speaks of *institution spectatorielle*, which would translante into 'spectatorial institution'.

considerable. He explicitly mentions awards as a source of recognition that for the makers, felt like they were having **cultural impact**.

Beyond impact, Robbins concludes by saying that **"The true value [of i-doc productions] is unquantifiable**" (M. Robbins).

CHAPTER 5 - Results & discussion

Based on the research-creation approach underpinning this doctorate, I am here presenting how my induction from the empirical data, mainly impact expectations, in the field of i-doc production (chapter 4) dialogues with findings deducted from impact literature (chapter 2). Chapter 5 is separated in two sections: results, and discussion. In the results part, I look closer at the question of impact in the i-doc scene by synthesising a number of triangulated results from fieldwork, starting with major findings around impact expectations by makers of interactive documentary. Secondly, from these findings, I am distilling impact types as part of my societal impact framework for interactive storytelling.

In the discussion part of this chapter, I am both deepening and broadening the analysis. I am adding depth by interpreting minor findings and case-specific ones related to i-doc *Field Trip*. Then, opening up the discussion, I speak to the implications of these findings, and situate them *vis-à-vis* the question of impact evaluation. Finally, I close off the discussion of results by offering answers to the main research questions from chapter 1.

5.1 Results

5.1.1 Major findings

As has been stated and observed in the previous chapters, let me start by re-affirming that there is no one thing called impact. It means many different things to many different people. Independently of whether makers of interactive media projects define and redefine impact at the beginning, halfway through or at the end of a project, the fact is that understanding the different types and forms of impact will help practitioners think about what to define exactly, and why. The theoretical construct of societal impact, that I am synthesising in this chapter, is rarely explicit in the maker's perspective, meaning that it is rarely expressed in a multidimensional way within the team and over time. My hope is that the discussion in this chapter will contribute in supporting makers to think about and make their impact expectations explicit.

When looking at my findings from observing and interviewing i-doc makers still active today, I was able to uncover a number of major impact expectations that were **shared by all or a significant number of participants** involved in this doctoral research project. These findings are not necessarily universal, but provide a valid qualitative reading of i-doc production cultures.

In order to induct impact criteria for i-docs, the question is **whom exactly is expected to be impacted**. I have tried to make this explicit in each of the findings, so as to make the impact as graspable and contextualised as possible, thereby hopefully avoiding the common trope of "having impact", repeated as a mantra in some strategic communication circles.

5.1.2 Outcomes

Before getting to impact expectations, let me make refer back to outcomes, as these are the elephant in the room. I-doc makers, this study shows, value **short term quantitative outcomes**, such as reaching, informing, engaging, and mobilising target audiences. This is certainly important to all makers, even though nobody mentioned expecting granular or specific quantitative outcomes specifically. I interpret this shared wish as the will to make projects public beyond the maker community. But since this pertains to project outcomes (as defined in reference to Napoli (2014, p. 9) in chapter 2 – where outcomes are *shorter-term effects*), and not impact, I will not dwell on these. In-depth discussions of quantitative and short-term outcomes are plenty. Most impact assessments, as we could draw from the impact guides in chapter, value observable outcomes, measure criteria that are relatively easy to capture. While this discussion is of interest and should not be ignored, this thesis is delineated as an attempt to seize the larger qualitative impact.

Moreover, outcomes depend on a number of factors, many of which are largely outside the makers' control (e.g., reaching a successful partnership with mainstream media; getting prize recognition; overcoming algorithmic hurdles in an app store; having reach on social media by profiting from a hashtag with momentum). Even though the level of input invested in outreach work will remain central, this alone, does not guarantee successful outcomes. Thus, making a fair comparison of outputs and outcomes of i-docs is particularly difficult, or at least requires much more context around analytics data, such as suggested in *thick data* (Wang, 2013).

I am finding that unveiling *thick data*, which uncovers the meaning of metrics, does not necessarily happen in i-doc production teams. Some teams don't even have access to detailed user statistics during production (e.g., *Atterwasch*, 2014; *Field Trip*, 2019), others simply have no time to devote to contextualising project outcomes. There is a search for answers in data (e.g., number of people who watched an episode over another) but rarely are there satisfactory answers, or anything significative that would orient future projects on how they can for instance change individual behaviour, induce changes in public policy, or the like. Yet, user behaviour is on makers' minds when trying to figure out if the interactive story's dramaturgy holds up to users' navigation. "Makers are interested in finding out whether or not users use crossroads, explore aspects more in depth, look left and right, etc" (E. Stotz,

personal communication, August 27, 2019). Engagement of audiences with the story is therefore a goal shared by all projects in my sample.

Having put outcomes-related expectations in context, we can now focus on the more significant impacts.

5.1.3 Impact expectations

In what follows, I am structuring the main findings on impact by using the media innovation dimensions of change by Dogruel (2014): content/design, technology, organisation, function. This allows for a systematic overview that best dialogues with the way in which the main case study in chapter 4 is structured.

5.1.3.1 Content / design dimension

By looking through the content lens, I find five central impact expectations.

I-doc productions all expect to impact the individual user thanks to a story that is compelling. I am referring to this as ***emotional impact***. That impact would translate into individuals being touched and therefore transformed, in an emotional and/or sensorial sense, by the story itself. This change can only be captured in a qualitative manner weeks and months after an individual has experienced the story. It is an impact category that is close to an outcome, but unlike the former, *emotional impact* lives on beyond the short term. It is less ephemeral in that "it grows on the individual" over time.

Staying at the individual level, i-doc makers seem to coalesce around the impact expectation of **raising awareness about, and consciousness of**, a factual topic. Here, with the ***factual impact*** i-docs seek to draw users into the history of a place (*Field Trip*), the circumstances around looted art (Die #kunstjagd), life in high-rise buildings (*Highrise*), and cyber-attacks (*Netwars*). Makers have a clear idea of what they would like users to go home with in terms of knowledge acquisition. In all cases, they hope that this information will help users become more aware of the complex world that surrounds them. The factual impact often depends on the quality and quantity of research that went into a documentary. The newness and scope of substance will determine if the facts transported in an i-doc are able to have lasting effects on individuals. An eye-opening moment can be registered directly after viewing an i-doc. That would be a measurable outcome. But like for the emotional impact, to verify whether this eye-opener can also become a game-changer in one's long-term awareness of a situation depends on the facts passing the test of time. It is important to differentiate between short term factual outcomes and long-lasting impacts as a result of the new facts.

The first two major findings are quite straightforward and would most certainly also apply to more classic documentary works, as the impact models in chapter 2 confirm. This said, in i-docs, one fundamental characteristic inducing the emotional and factual impact types, is to be found on the interface design level. The impact expectation is to pull people together on more than, say, estheticised content. Makers in my sample expect that the multi-perspectivity via protagonists (e.g., real estate investor and housing activists a click away in *Field Trip*), co-creation (community storytelling workshops informing *Highrise*) and live research (Die #kunstjagd's road trip putting protagonists, users and makers in dialogue), is particularly adapted to describing complex subject matter, where one single answer does not exist. But *how* the storytelling is performed, is not just a means to an end, i.e. multiperspectivity is not just used to create emotional or factual impact on users. Protagonists, but also users as *produsers* (Bruns, 2007), *internautes* (Jouet, 2003) or *co-creators* (Wiehl, 2016) and even co-authors are brought into the act of storytelling—into a space that they are not used to be in together.

My autoethnographic work shows that multiperspectivity can be an end in and of itself. Referring to early i-doc *GDP* (2009), producer Marie-Claude Dupont for instance stated that "Diversity wasn't that great, but multiplicity of points of view gave a critical dimension to the piece. This is different from single author documentaries." (M.-C. Dupont, personal communication, January 14, 2019). Inducting and synthesising from there, I am coining this finding ***multiperspectivity impact***.

A further impact expectation worth holding up, based exclusively on fieldwork this time, is the impact that can ensue from the re-use of content. The re-use can be twofold: one is related to the exact content that makers would like to see circulate and remixed. This maker will is frequent and even at times a driver in open cultural projects. I synthesise this finding as ***content re-use impact***.

For other makers, it is the recipe, the storytelling template or the "IP" that is expected to make waves in a sector or in an industry. That would be the ***format re-use impact***. To the difference of the previous findings, these address potentially smaller target audiences of peers, media makers, and producers. A minority, but a non-negligible number of makers are hoping to break the dominant production mould by opening up assets, such as exemplified in my study by *Field Trip*'s media repository, or its open hypervideo format. Another group of i-doc makers very much adhere to industry standards and rather hope to see the unique copyrighted content they created being sold for the purpose of making a profit, like in *Netwars*' special blend (IP) of emotional and factual content and design. Other i-doc makers then again simply innovate with a road trip format (*Die #kunstjagd*), without an afterthought of circulating the format once the project is over.

Summarising along a product and process split, these are the impact types as expressed in terms of content / design.

Table 5.1 Content / design related impacts

CONTENT & DESIGN DIMENSION	
Product	**Process**
Factual impact	***Content re-use impact***
Emotional impact	***Format re-use impact***
Multiperspectivity impact	

Table 5.1 Content / design related impacts. Source: by the author.

5.1.3.2 Technology dimension

Following Dogruel's dimensions of media innovation (2014), there is trace of one technology-related impact expectation in my study. Unsurprisingly, this was particularly voiced by two interview partners that came from a technical side of things (Joscha Jäger and Mike Robbins). Both these experts have expressed strong views in favour of open web technologies as *democratisers* (M. Robbins, personal communication, January 31, 2020)—Jäger for open hypervideo, Robbins for WebGL. Both express the expectation that their respective i-docs would serve as blueprints or use cases. Both see open web technologies as a two-way street, where the technology they use for their project originated from a larger open source technology community. In that sense, what they use and transform, is originally attributable to others. They are thus inclined to give the fruit of their labour back to that community. Concretely, what I call ***tech re-use impact***, is what is being pursued with a Code Snippet Repository (e.g., *Field Trip*)—where code is available for anyone to transfer technology in a user-friendly 'drag-and-drop' fashion, or through a collaboration with Mozilla (in the case of *Highrise*'s *One Millionth Tower* sub-project).

While original technology assemblages are in use in all i-docs, combining low and advanced technology—such as best illustrated by *Die #kunstjagd* mixing podcasting to a classic road trip investigation with live messaging—this study also shows that not all i-doc makers attempt to create impact with the technology they use or develop as part of their project. This is further triangulated by looking at the number of makers using out-of-the-box technological solutions for creating i-docs, such as Klint, Korsakow, RacontR (Cruz, 2018). As a matter of fact, aside from freelance makers, only a handful of media are open to technologically experimental projects. Most i-docs created in the field of news journalism use ready-made tech solutions. This has to do with the low level of creative technology skill in newsrooms, but also the fact that mainstream journalism generally focuses on *factual impact*, and factual impact alone (i.e., the artistic or creative skills are generally limited).

A finding that could be seen as unexpected by those looking at i-docs as drivers of innovation, is that what could have been called *tech innovation impact* does not seem to power-up i-doc productions. As expressed by all makers in this study, technology is seen as an infrastructure element supporting a story and a particular storytelling format. Even projects like *Netwars*, where technology is very much centre stage story-wise, the makers used conventional technology to create an innovative format, and not the other way around. The low expectation *vis-à-vis* technological innovation might also have to do with the fact that i-docs are now in the institutionalisation phase (Vázquez-Herrero, 2017), where the tech research and development curve has reached its zenith, and is now starting to decline.

Summarising further, these are the impact types as expressed in terms of content / design and technology.

Table 5.2 Content / design & technology related impacts

CONTENT & DESIGN DIMENSION	
Product	**Process**
Factual impact ***Emotional impact*** ***Multiperspectivity impact***	***Content re-use impact*** ***Format re-use impact***
TECHNICAL DIMENSION	
	Tech re-use impact

Table 5.2 Content / design & technology related impacts. Source: by the author.

5.1.3.3 Organisational dimension

On an **organisational** level, makers of i-docs all seem to share the idea that the deepest and longer-tasting individual impacts of i-docs are on the makers of the project, and the maker community of peers. I-docs are in and of themselves projects where team members learn a lot, as they are charting new territory, practicing media innovation. Protagonists can also be closely impacted, like the example of *Die #kunstjagd* shows—where a Jewish family gets a looted painting back, thanks to the i-doc's social intervention. But even before we get to protagonists, partners, and audiences, in that order, the deepest impact will be on the maker team, and its community-of-practice. The maker is the one carrying the project and if successful, she will be the one reaping the benefits in terms of recognition, learning, growing. The maker is also the first one to be impacted negatively due to difficult production conditions, especially for small-scale producers. In this dimension, I synthesise six impact expectations.

The ***common ground impact*** is the first one. Although this inward-looking impact is not made explicit by makers themselves as a proper impact expectation, my observations show that all makers go through the process of listening to each other's expectations. They then need to ensure that everyone's expectations are at least partly met. What I call the common ground impact is thereby magnified when all team members value a caring approach, independently of production constraints and difficulties. What might sound banal, is very difficult to keep up for the duration of a production, especially knowing the harsh production conditions that i-doc makers need to put up with (limited funding, no established models, mainstream media insensitivity). From my analytical reading of the field, I further induce that consciousness of impact expectations of other team members grows during the production. If makers are able to turn this consciousness into productive compromises, this will grow the societal impact of a project. Also, it helps coming up with a shared framing of impact that a team is shooting for during a production. Funding applications were mentioned by several makers as particularly useful in reaching common understandings of impact at an early project stage. In later stages, pre-conflict mediation *à la Field Trip* and workshops in the case of *Netwars* are efforts that pay off in terms of multilayer impacts.

In the organisational dimension of i-docs, one of the most recurring impact expectations expressed by the makers relates to capacity-building within an organisation. This was the case with the first i-docs produced at the National Film Board of Canada for instance, where the workflow was completely turned upside down when compared to traditional film production (M.-C. Dupont, personal communication, January 14, 2019). ***Workflow impact***, although not an expectation voiced by each interview participant, is a common thread for virtually all i-docs. The workflow can refer to the acceleration in certain production steps, or skipping some altogether, to the benefit of a leaner structure. But since workflow impact also relates to how the documentary makers work with protagonists and users (i.e., whether they allow co-creation, or integrate user generated content), this is an impact shared with the functional dimension of innovation (detailed below).

Another dimension of impact related to institutions is the positioning of a production company in a media segment. This can be a high-level impact expectation, as we've seen in the case of *Netwars*. What I induct as being a ***positioning impact*** will help the production company, but can also be of particular benefit to those media partners involved in projects mentioned here—*SBS Australia*, *Der Tagesspiegel*, *ORF, Der Standard*, or *Heise Online*. These are often the actors being most impacted by this maker expectation. The media stakeholder group usually invests minimal time and budget, especially in view of the benefits associated with releasing complex and high-quality projects. This can contribute to positioning a media institution as producing high-end and innovative journalism, while demonstrating an openness to readers. *A short history of the highrise* (*The New York Times*, 2013) or *Fort McMoney* (*Süddeutsche Zeitung*, *Neue Zürcher Zeitung*, & *Der Standard*, 2013) are good examples of i-docs generating *positioning impact*.

Furthermore, the *Netwars* team, which collaborated with market leaders in different media segments, including book publishers, TV stations and app makers, could position its production company in different segments at the same time. Similarly, the *Die #kunstjagd* makers have created partnerships with a variety of news outlets, covering the spectrum of TV, radio, print and the web, in several geographical markets. While media partnerships can potentially generate quantitative benefit, there are also other associated benefits. Some i-doc makers report that their i-doc became more professional, accessible and gained depth as they collaborated with high-quality media. I, myself, but also the team of *Die #kunstjagd*, experienced a qualitative bump in the collaboration with Süddeutsche Zeitung specifically (e.g., video and text copy-editing, fact-checking, high quality companion pieces, etc).

Digging deeper in the organisational dimension, my investigation finds that maker teams engaging with *non-media partners* felt that this is where most impact could occur. Building partnerships with the educational and the museum sectors were seen as particularly fruitful for fostering change in awareness of and consciousness around a documentary topic. These partnerships were often kickstarted during the production phase and meant to generate impact on the story itself, like in co-creation, or on a specific target public (e.g. a history class in high-school). Particularly in distribution terms, this type of partnership was seen as helpful. Some see the benefit in the fact that partners often serve sharply defined local or thematic audiences, meaning that not every impact thinking needs to come from within the project.

From my autoethnographic observations, as well from interviews, for instance with Carolyn Braun of *Die #kunstjagd*, I noticed that GLAM—a shorthand for Galleries, Libraries, Archives and Museums—are particularly well-suited for i-doc partnerships. This has to do with their complementariness: they are generally performative and can thereby be allies of i-doc teams for larger events, longer-lasting exhibits and the like. They are also most generally equipped with dedicated acquisition budgets or have direct access to public funding bodies. Moreover, GLAM are those institutions most likely to already participate in the *digital commons* (Dulong de Rosnay & Stalder, 2020), as they might be involved in projects working to digitise public domain works of cultural heritage value (Mazzone, 2011). This might be a natural fit for public interest oriented i-docs. Yet, the ***partnership-induced impact*** on specific target groups is not limited to these actors. The educational and civil society sectors are also present in my sample. Yet again, to add a nuance here, makers also reported that taken together, museums and schools, as relatively conservative institutions, live in completely different time zones than media productions, thereby putting at risk what could otherwise sound like fitting partnerships. As part of *Field Trip*, for instance, the team has been working on reaching out to several museums, including exile museums or those interested in history. Most often than not, these institutions, which operate in a programmatic

manner, with permanent exhibits planned ahead of time, could or would not open up to partnerships with i-docs in a diligent manner.

In terms of a potential *financial impact*, this study finds no evidence of convincing revenue models for i-docs visited here. There are a few promising revenue possibilities when it comes to distribution licences, as found with museums, or some larger media partners, but these would never be enough to offset costs of production. This means that I could not induce a category for this type of impact, as it was too marginal or situated. The two projects in my selection that from a maker's perspective, could guarantee stable finances, are *Highrise* and *Netwars*. The former is a project enjoying many freedoms at the team and production level, as a result of being produced by a public producer, of which there are only very rare exceptions in today's world. The latter has been funded by private production company Filmtank in an effort to (successfully) position the firm. The firm was therefore ready to invest in this project. The makers have been working on stable contracts as a result of these exceptional circumstances.

The ***return-on-investment impact*** can be positive when i-docs can lean on public funding, but is otherwise most generally negative, echoing other high-quality public interest (but costly) forms of expression such as investigative journalism, feature documentary filmmaking and serious games. Interestingly though, most projects manage to break even thanks to a creative mix of private and public funding sources: innovation funding, journalism funding, partner funding, crowdfunding. The flipside of the coin, is that makers can only make i-docs if they are willing and/or in the privileged position to tirelessly put-in unpaid hours. The 'privilege' is also reserved to those producers that are risk-takers, as they will need to hit the ground running, by going all in without any guarantee of recouping costs. This is a production reality that should not be left unacknowledged when discussing the return-on-investment impact, my study shows. This also means that the field is nearly not accessible to newcomers.

The macro-economic impact of a single i-doc is marginal, and therefore not further discussed in the context of this study. Yet, future studies, like argued in chapter 6, could build upon i-doc empirical evidence to verify if there was/is a significative economic impact as a result of large institutions allocating consequential portions of their budget to digital storytelling production. At least one i-doc maker has mentioned aiming for larger economic impacts in that she hoped her i-doc would help "re-discussing funding structures in Germany and abroad to move away from revenue model" (E. Stotz, personal communication, August 27, 2019). This latter expectation relates more to a ***political impact*** expectation than a macro-economic one.

Findings show that many i-doc makers want to challenge the economic condition that they are in. They see the current production model as not empowering for the makers, nor sustainable if seen from the

revenue angle. Thus, for many documentary producers operating in a more stable TV or cinema-oriented fashion, producing i-docs is not an option. Although many i-doc makers advocate for the state's responsibility to part-fund self-initiated i-doc productions, most producers in the media industry (with notable exceptions) don't. This situation relates back to the broader question of cultural value of i-docs (see chapter 6) and whether, despite the *unfavourable equation*, i-docs as cultural productions are worth supporting in the future.

Table 5.3 makes us realise that from these major findings, the content / design dimension, and the organisational one, are the two categories in which makers seek to have most impact. Interestingly too, I interpret the findings up until here as revealing, since although the makers clearly want to have impact with the i-doc as a product, the processual impact is in the lead. I am now tackling the last dimension, the functional one, to see if product-related impacts will make a comeback.

Table 5.3 Content / design, technology & organisation related impacts

CONTENT & DESIGN DIMENSION	
Product	**Process**
Factual impact *Emotional impact* *Multiperspectivity impact*	*Content re-use impact* *Format re-use impact*
TECHNICAL DIMENSION	
	Tech re-use impact
ORGANISATIONAL DIMENSION	
Political impact	***Common ground impact*** ***Workflow impact*** ***Positioning impact*** ***Partnership-induced impact*** ***Return-on-investment impact***

Table 5.3 Content / design, technology & organisation related impacts. Source: by the author.

5.1.3.4 Functional dimension

If we move on to the functional dimension of change, one expectation that was clearly voiced is that of creating ***participatory impact***. Although multi-perspectivity and participation can be closely associated—particularly in co-creation—with participatory impact, I mean the potential that an i-doc project has in activating and empowering citizens. *Field Trip* was described as a *training tool for democracy* (S. Klüh, personal communication, December 16, 2019), while *Netwars*, for instance,

includes interactive avenues meant to confront citizens and unleash privacy protective action. In *Highrise* and *Die #kunstjagd* then again, citizens take action, create meaning, provide hints, try solving, if you will, a 'detective question', or simply share their vision. Makers in my i-doc sample expect users to leave the comfortable-sofa-viewing-setup aside, to embrace what they see as a richer participatory experience. They look to harness users' creative potential to better tell their story on the one hand, but also offer a social intervention meant to trigger *creative empowerment* (S. Klüh, personal communication, December 16, 2019) (make them part of the larger discourse) on the other. This participatory promise is one way not to leave the field just to experts, but help negotiate discourse together with citizens. The findings show that participation is core to i-doc practice, but one of the most difficult goals to attain, as it depends on so many factors, including the factual and emotional impact, but also successful partnerships for reaching out to citizens.

Zooming-in on distribution, my study shows that film-related conferences and festivals are still important in the minds of makers, and are often seen by them as default distribution venues for i-docs. But, they are not perceived as key in terms of realising larger societal impact. They are rather understood as spaces of recognition that contribute to *positioning impact*, for instance, rather than audience reach. In that sense, partnerships with mainstream media, as expressed earlier, play a more prominent role for reaching mass audiences.

As imperfect as they are (see Dubois, forthcoming), awards and prizes carry weight and might be decisive for the audiences or the industry to take note of i-docs over the middle term. They might also feed into the narrative that a production company is successful. Three projects in our sample won prizes (*Field Trip*, *Netwars*, *Highrise*) and in all three cases the makers could see this contributing to reputation and to the larger cultural value. It is not clear from our analysis though, that prizes are correlated to more viewership. In fact, author and i-doc maker David Dufresne thinks that "there is not a single award that creates an audience" (D. Dufresne, personal communication, November 6, 2017). This would still need to be corroborated by quantitative studies, which is outside the scope of this thesis, but in case this is confirmed, the awards model would need to evolve from a recognisance model to one where the winners in each category are seen by a large, targeted audience.

The impact expectation of contributing to larger social change, was not mentioned by any of the makers. Most makers keep it humbler than that, from impact on the maker and the maker community, to the media/funding system, to local communities and specialised publics. But there are exceptions, where targeted publics are more specific and where makers expect social change (e.g., Robbins mentioning *The Quipu project*[74]). The larger ***society-wide impact (****which I call here* ***societal impact)*** therefore, seems

[74] The Quipu Project: https://interactive.quipu-project.com/#/en/quipu/intro

to be rather the exception than the rule as a result of i-doc production culture. My interpretation is that the societal impact is a container category of impact, which is too wide for makers to get their heads around. This will not be resolved by my thesis. It is this overarching category to which all other impact types contribute. Drawing on the definition adapted from Holmberg et al. (2019) from chapter 1, where *societal impact refers to all types and forms of impact that digital media production has at different levels and areas of society*, it cannot be said that societal impact is just the sum or aggregate of all types of impact explored here. That would be too simplistic and a rather quantitative understanding of impact. Instead, my findings show that the societal impact of i-docs is more of an aspiration that signals that there is more to impact than only sectorial impacts, i.e. there is more than the sum of its pieces. In other words, my study finds that societal impact needs to be evaluated by carefully segmenting the types and forms of impact such as proposed in impact frameworks, and then identifying which types weigh-in more than others. By listening to the maker's perspective, evaluators, I argue, can best establish the coefficient of each impact type. This will not add up to one societal impact, such as the *impact factor* in scientometrics. To the contrary, instead of one big figure, societal impact is like a compass inviting us to zoom in on the types and forms of impact and discuss which ones are most prominent and/or significative.

Going back to our work-in-progress table, we can now add a few more types based on the functional dimension of innovation. From a maker perspective, process-related impacts continue to dominate.

Table 5.4 Major impacts related to all four dimensions of innovation

CONTENT & DESIGN DIMENSION	
Product	**Process**
Factual impact *Emotional impact* *Multiperspectivity impact*	*Content re-use impact* *Format re-use impact*
TECHNICAL DIMENSION	
	Tech re-use impact
ORGANISATIONAL DIMENSION	
Political impact	*Common ground impact* *Workflow impact* *Positioning impact* *Partnership-induced impact* *Return-on-investment impact*
FUNCTIONAL DIMENSION	
	Participatory impact

Table 5.4 Major impacts related to all four dimensions of innovation. Source: by the author.

5.1.4 Societal impact framework

After having deducted impact criteria from the fieldwork evidence, I now synthesise them. I go beyond the common impact criteria from chapter 2 to come up with a societal (and thus multilayer) impact framework. In more specific terms, this framework is a baseline typology of factors of i-doc impact. I take the opportunity to stress once more that my argument is not to replace existing models with this new one, but to challenge current media impact practice and theory by offering a new framing on impact which, hopefully, fills the main gaps and shortfalls from existing models (chapter 2), particularly on the processual side. All models presented in this thesis are thus not so much in competition as they are to be read side by side and in combination with one another.

Based on the grounded impact expectations of makers inducted from chapters 4 and 5, the common characteristics of i-docs, as well as impact literature deducted from chapter 2, I am now finalising the work-in-progress table from last section and mature it into a proper framework. This framework can be used to sensitise makers to impact, or help stakeholders of media production and distribution consider types of potential impact. The different layers of impact are entangled, but this research finds that the layers need to be differentiated according to product and process and innovation dimension, as this helps evaluating an interactive documentary to its true value.

Table 5.5 Societal impact framework

Societal impact framework	
Product-driven	***Process-driven***
CONTENT & DESIGN	
Factual impact (i) *Emotional impact (i)* *Multiperspectivity impact (i)* *Interface / format impact* (i)	*Content re-use impact* (m, c & e) *Format re-use impact* (m, c & e)
TECHNICAL	
	Tech re-use impact (m, c & e)

ORGANISATIONAL	
Political impact (g)	*Common ground impact (m)* *Workflow impact (m, c & e)* *Positioning impact (m, c & e)* *Partnership-induced impact (c & e)* *Return-on-investment impact (m, c & e)*
FUNCTIONAL	
Originality / uniqueness impact (all)	*Participatory impact (i; g)*

Table 5.5 Types of impact of i-docs on different audiences. Source: elaborated by the author

Table legend: (i) impact on individuals; (g) impact on groups; (m) impact on makers; (d) impact on decision-makers[75]; (c & e) impact on the cultural, media and educational sector.

The attentive reader will have noticed that from Table 5.4 (previous section), the framework presented here has incorporated two additional impact categories: *Interface / format impact* and *Originality / uniqueness impact*. These did not stem from the case studies, including the interviews, with this terminology, nor from document analysis. But desktop research has permitted me to deduct two more impact categories that resonate with my participant observation and previous i-doc experience. *Interface / format impact* might sound close to format re-use impact, when in fact it refers to the creative spirit of i-docs. The interface of an i-doc, as described before, needs to be in perfect harmony with the story that is being told (e.g. *Gaza/Sderot*). The esthetic coherence with the place, story or topic at play, is precisely something that differentiates i-docs from most journalistic projects in which the factual impact predominates. Although not mentioned explicitly in the interviews as an impact aim, this deduction throws one back to the fact that esthetic expectation in sound design, web design and the interface in general is a key part of the i-doc craft. I am taking this on from theory, as it resonates with what I observed and practiced.

The second criteria I am adopting in the framework is that of *Originality / uniqueness impact*. This could also qualify as a given, and might explain why makers among themselves did not explicit it. But this

[75] Decision-makers are here understood mainly as funders, policymakers and other elites.

category is not only specific to the creative i-doc segment (e.g., it also applies to forward-looking literature, music, films and other arts). The media innovation literature points at this uniqueness factor and how only when product and process are more than the sum of the two, is it warranted (Klaß, 2020). All i-docs analysed as part of the case study have attracted audiences and stuck with viewers as a result of their original and unique treatment of reality.

Based on these baseline impacts, we can observe that interactive media affordances and process-related dimensions play, if not a decisive, at least an important role. This is an important expansion to the pathways and coalition models presented in chapter 2. Particularly, the *re-use* triad, as well as the *multiperspectivity* and *participatory* impact expectations complement those elaborated by colleagues.

Accurately and holistically measuring the impact of interactive documentaries will always be a challenge, as they are hybrid forms sitting at the crossrads of art, design, journalism and community development. Each of these categories play by different rules. I therefore hope this section helped gain a more grounded and granular understanding of the significance of the main *impact expectations*.

As mentioned earlier, Table 5.5 is an attempt to sum-up impact types most prominent in i-docs. The table design being limited, it does not translate the dependencies among impact types and does not detail the forms of impact illustrated in the case studies of my doctoral thesis. The table is meant to offer an impact picture, at the risk of oversimplifying the complex interplay, granularity and dynamic evolution of impact expectations and impact results. To use the analogy of a mobile in a child's room: table 5.5 is only a picture taken of that mobile.

In order to deepen that understanding, I am now proceeding to the second part of this chapter, where minor findings, case-specific observations and implications thereof are discussed. This discussion does more to deepen and broaden the results section.

5.2 Discussion

5.2.1 Minor findings

Beyond the major findings informing my impact framework, which is relevant across i-doc projects, there are a number of minor findings that help shed light on the specific production culture of i-docs. These are findings that do not necessarily help inform my impact framework in a decisive way, but they add much needed context on how i-doc makers understand the notion of impact. I am here discussing them one by one.

- Coming up with a compelling story is common to every i-doc project, but within each project, it might not be a shared impact expectation, as evidenced by this research. Creative technologists, for instance, are much more interested in the methods and format used to tell a story. They are not ready to put at risk the story, but if it weren't for the authors, they could live with a less compelling story, as long as the three *re-use impacts (content, format, tech)* are met. This reveals that **sharing all impact expectations at all times during the production, is not a must**.

- Even though i-docs explored in this study are non-strategic for the most part (i.e., they are not part of larger campaigns or efforts designed at producing specific change), they at times employ campaigning techniques. This is particularly the case in crowdfunding, when mobilising for a people's prize, or to activate the public in road trip storytelling. What follows from this, is that makers are conscious that i-docs are cultural interventions that require community outreach work. Further, when makers organise a campaign with or around an i-doc, such as doing crowdfunding to save a production, these can be a catalyst for widening audience, engaging communities. Inversely, if you are doing a campaign-type documentary, like NGOs and advocacy documentarians are doing, a less participatory and multiperspectivity oriented format might be more adequate. In other words, **linear formats might be more fitting than i-docs** for campaigns where the author wants to optimally control the message.

- In this study, the expectation to have impact with an i-doc on elites, such as suggested in the literature (Whiteman, 2002, 2004), is not wide-spread and was not mentioned specifically by makers. Robbins did mention the interest by academics for the formats of i-docs, or in exceptional cases such as *The Quipu project* (see chapter 4). Contrary to what could be drawn from Whiteman's coalition model of impact (see chapter 2), elites don't seem to be in the target audience of i-doc makers in my sample.

When looking closer through autoethnography, all i-doc teams need to successfully interact with elites and decision-makers for funding (funding juries), distribution (journalists, editors) and partnerships (school and museum directors). *Field Trip*'s fight to secure funding with the MIZ-Babelsberg exemplifies this part-dependency on elites. *Field Trip*'s application and subsequent presentation in front of a committee composed of media managers and politicians, was at first rejected. The team wrote an official letter of complaint, requesting an independent evaluation. The second project presentation got through, thanks to a positive external independent appraisal (by an *Arte* executive). Another example came in the form of the endorsement of a local Green Party MLA who defended the project and whose voice was decisive in convincing Tempelhof airport to engage in a distribution deal with the *Field Trip* team. A last example in this regard, is the *Field Trip* crowdfunder, where getting support by economic elites was as important as the grassroots funding by friends and families. Taken together, although **elites might not be audiences where makers seek to have impact *per se*, they are unavoidable for healthily maturing all i-doc projects**. In other words, although the impact on elites is very real, most i-doc makers in my study don't view it as an end. This might vary depending on the subject matter of i-docs, where some may very well be targeting medical, political, econimic or legal elites, but most often, these audiences would be secondary audiences.

- Impact expectation on social movements (e.g., open source community, internet rights advocates) was present in certain projects, but they are rather of secondary order for this type of non-strategic i-docs. This said, it is important to understand that this "secondary" impact on the other hand sometimes really matters to social movements. In *Field Trip*, groups and citizens fighting for social causes, such as preserving Tempelhof as a public park, have used and hailed *Field Trip* to demonstrate their point. They have celebrated awards we won, used our project to counter messages (judged as hostile) by opposing elites (e.g., FDP political party—in favour of real estate development on the field), and even invited us to screen *Field Trip* in their venue (e.g., Kölibri community centre, Hamburg).

Illustration 5.1 Tweet exchange with social movement

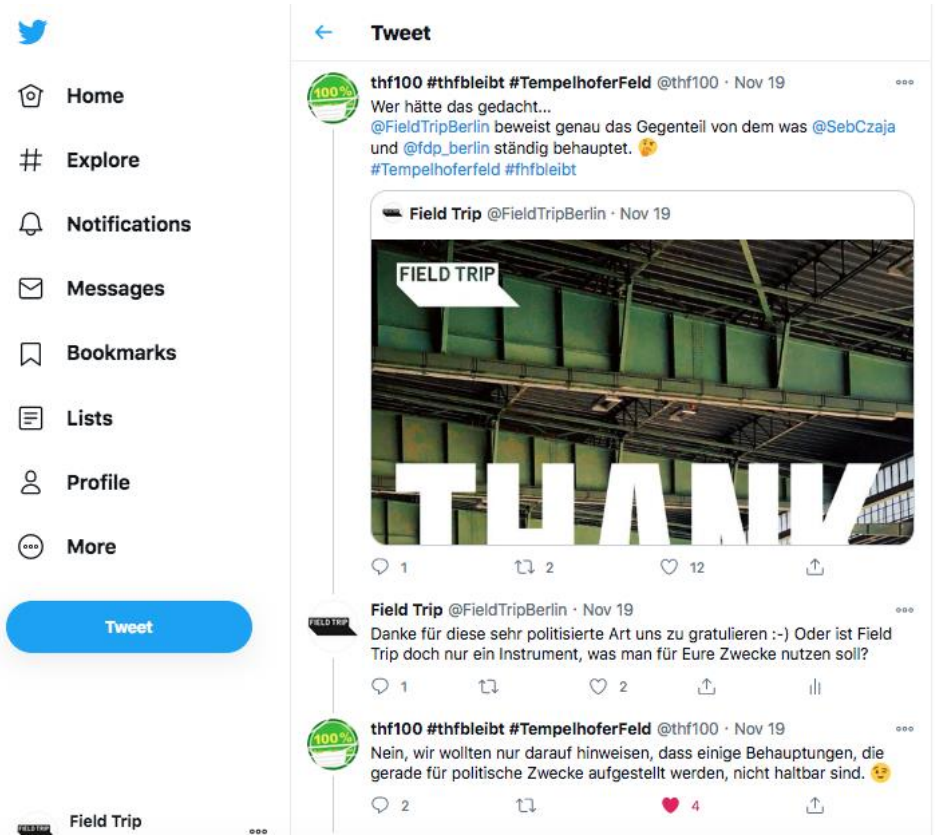

Illustration 5.1 Tweet exchange with social movement *100% Tempelhofer Feld*. Source: Twitter.

It is my participant observation of interactive documentary practice, that i-doc makers see social movement collaboration as both desirable and tricky at the same time. **Activists and advocates are natural allies for i-doc projects, but they come with their own agenda and their own way of telling their story**, sometimes in a narrower (e.g. single issue) or ideologically tainted manner. This makes for strange bedfellows and might explain why i-doc makers do not put the influence of—or from—social movements on the top of their list.

- There are many concurring impact expectations in each project, sometimes at odds with each other. The negotiations happening at the team level during the production process, and the **external realities of production mean that impact expectation shifts occur**, including impact types taking over decided-upon ones. These shifts are sometimes intentional (e.g., *Field Trip*'s tech re-use impact expectation side-lined to the benefit of factual and emotional impacts) and sometimes unexpected (e.g., *Die #kunstjagd*'s protagonist-focussed story accompanied by the partnership-induced impact).

- **Makers often think less in terms of impact categories during production, and rather simply in terms of general needs for the project**: financial support, recognition (attention, prizes), etc. This is an important secondary finding, as it takes the onus away from streamlining a production in terms of results, like in strategic documentaries. My study shows that there are two phases when makers really think hard about impact: one is in the planning stage, when funding applications are written, and the other one is once distribution kicks-in. In these two phases, makers of i-docs are absolutely capable of formulating impact wills and communicating them.

- At least two makers in the sample, Lena Thiele of *Netwars* and Svenja Klüh of *Field Trip* used the same term to describe what type of i-doc production they were a party to: ***interdisciplinary***. This adjective could also well be applied to the two other i-docs examined in this thesis. This has no direct implication for the impact discussion, but is noteworthy for semantic purposes, and more importantly, for designating the specific **production culture**. Moreover, i-doc makers mention **risk, both in financial terms, and in the uncertain encounter with audiences, as a fundamental characteristic of this type of production culture**. Beyond the fact that a story needs to be appealing, the best antidote to risk, it seems, is to engage in outreach on all fronts.

- Unsurprisingly, all makers described the process of production as requiring agility and flexibility, since these are mostly open-ended projects, done in moving waters. Contrary to games, books or films, where the distribution aspect is by and large (even though unsatisfactorily) figured out, i-docs are a work-in-progress and **makers need to be *opportunistic*** (in a positive sense), like Robbins recalls Katerina Cizek (author of *Highrise*) as saying.

- A last secondary finding is that at least one of the makers (Mike Robbins) sees i-docs dramaturgy, especially branched narratives, as a key hurdle in reaching a mass audiences. I purposefully qualify this finding as secondary for two reasons. One is that, as explained in chapter 2, audience reach is an outcome, not impact. The second reason is that no single maker has expressed an expectation to reach very large audiences. There is clearly a general expectation to capture audiences, but I could not detect more specific quantitative expectations, beyond the release of an i-doc with a mainstream media organisation. Nevertheless, Robbins might have a point that would be worth exploring more in film studies (e.g., narratology, dramaturgy).

5.2.2 Case-specific impacts

Now that I have laid out the major findings, elaborated a societal impact framework, deepened the analysis via minor findings, in this section I complete the presentation of findings by including case-specific factors of impact—those that only apply to *Field Trip*, or better said, to this type of i-doc. The aim is twofold:
a) to help the reader differentiate between universal impact criteria and context- or case-specific ones;
b) to explain how baseline criteria and case-specific criteria layer and hierarchise over time.

The study of *Field Trip* over the entire duration of the production permits me to disambiguate a certain number of impact expectations. Now, for assessing the impact of a single project, I am referring back to the criteria from Notley and colleagues' Pathway model, the one from chapter 2 that I found to be most adapted to i-docs:

- *define and review impact objectives*
- *choose methods*
- *document evidence of impact*
- *analyze your data*
- *reflect on changing situation*
- *respond and adapt*
- *develop impact stories* (Notley et al., 2017, pp. 240-241)

5.2.2.1 Define and review impact objectives

In *Field Trip*, the emphasis was on creating a multiperspective story about an open field, using an open content (shareable and remixable), open tech (open source) and open format (open hypervideo) approach. These baseline *re-use impact* expectations (content, format, tech) were at par with the *multiperspectivity impact* expectation. I would even say that they were melted in one another. In other words, since an early stage of the project, the makers agreed that for the project to be round, all aspects of it needed to be open. On a story side, this meant being open to different perspectives on the field.
The product itself, *Field Trip* makers mentioned—especially those on the narrative side, should have a lasting *heritage value* (F. Gonseth, personal communication, September 11, 2020). Documenting a public park, which in a few years might be taken over by city developers, was a key motivation. This preservation objective can only have impact if two contextual conditions were met:
a) the i-doc is present in the eyes of the Berlin public and decision-makers;
b) real estate gets developed on the field, thereby creating an increased need for heritage narratives of the Tempelhof Field. The makers worked hard on fulfilling a), but obviously would in no way wish for b) to happen. In this sense, the team's position *vis-à-vis* the heritage value was ambiguous at best.

The core team of makers in *Field Trip* defined these main *impact objectives* early, without much controversy. They reviewed these objectives, among other by curtailing the number of multi-

perspectives they could take on, or by including copyrighted content, as discussed in chapter 4, when initially this was supposed to be avoided. From then on, this meant that both the *multiperspectivity impact* would be lessened, as well as the *content re-use impact*. Along the way, new impact objectives were added and the perception of the i-doc evolved. The most striking change was in how team members started perceiving *Field Trip* as a living documentary which can grow and get richer and richer over time. This open-ended and modular nature of the project only came about after the prototype phase.

In the process of making *Field Trip*, some team members intended on making a social intervention beyond the release of the i-doc itself. As mirrored in chapter 4, they did so by trying to break down one of the topics[76] in the documentary for a history class in a local high school. This objective of seeing pupils engage with, and appropriate, one of the stories in *Field Trip* was meant to make history live, tangible, real. Independently of whether this intervention would be seen on screen or not (in fact, the scene where the former forced labourer encounters a group of pupils from history class was cut from the final documentary), the makers felt the need to break free from the digital mold so as to increase the chances that *Field Trip* have a *factual* and *emotional impact* on this small target audience.

Moreover, out of the motivation of amplifying the voices of a diversity of protagonists on the Tempelhof Field, the *Field Trip* team, in reviewing its objectives, eventually added the *participatory impact* component, mainly via its StoryboXX on the field (see chapter 4) and via an answering machine, where virtually anyone could leave an anecdote. This objective came later, but was borne out of the same *multiperspectivity impact* expectation.

5.2.2.2 Choose methods and document evidence of impact

Notley et al.'s impact model (2015, 2017) argues in favour of defining methods that best fit the type of impact sought by makers. In the case of *Field Trip*, the team did not pick and put in place methods for robustly assessing impact. Our production practice was limited to getting a sense of how the audience was reacting to the documentary in screening it in academic and cultural settings, as well as collecting feedback via social media accounts, emails and by requesting usage statistics from the main media partner *Der Tagesspiegel*. The systematic documentation of evidence through this doctoral project is the most significative documentation, even though it is outside of the production and distribution phase. The amount of work involved in coming up with adequate methods, reading, running interviews, reviewing methods, and collecting evidence is simply not realisable on this scale in the context of a production.

[76] Forced-labour.

5.2.2.3 Analyse your data

This step, that Notley et al. (2015) suggest, could only be partly done in the context of the project. First, the usage data was not readily available to team members, since the project was colocated on "the non-disclosure *Tagesspiegel* server". The team did not know this from the start, but accepted it as part of the media partnership tradeoff at a later stage. This meant that granular stats would not be available, and thus not analysed. On the qualitative side, the only way the team could have measured whether or not the *multiperspective* and *re-use* objectives would be met to a satisfactory level, would have been through the use of methods such as focus groups, prototype testing and the like. The sudden release did not fully allow for these otherwise quite common methods. All the team did, was to test and bug-track the prototype with three emerging journalists and staff at MIZ-Babelsberg, a funding partner. Although this data was very useful for polishing the prototype in terms of user experience, quality of texts, and experience depending on browser, operating system of device used, there were not enough hours in a day to properly generate data on how for instance the content of *Field Trip* could be re-used in this or that context. Once launched, there were several attempts at transferring the project's technology or content to other creatives, but these efforts did not end up in data significative enough for the team to be able to infer whether there was impact. The data there was to analyse, therefore, was partial data from sources such as editors at media partner institutions, or early users via social media. We could for instance realise only weeks after the May 2019 launch, that online engagement in terms of shares or comments on Instagram, Twitter and Facebook would remain very low. Most social media engagement happened over time, with just a few dedicated users and groups on Twitter. The crowdfunding campaign in May and June 2019, and the run-up to the People's Lovie Award in the Fall for 2020 were highlights in this regard. To get back to the analysis of the data, this only happened *en passant*, without proper systematisation.

5.2.2.4 Reflect on changing situation, respond and adapt

There where the production situation changed, the team was agile enough to adjust and adapt. For instance, the pre-conflict mediation described in chapter 4, was such a situation. Realising that our financial objectives would not be met anytime soon, if at all, the team sought a solution by pulling in a third party (lawyer/mediator). This helped reassess where the project was at, where each of the makers stood, and to agree on our new objectives. In this case, the new objectives came in the form of a new redistribution model for any upcoming revenues, as well as a clear *common ground impact* on limiting the number of stories we would be able to accommodate in the final version. This was painful, but reflected upon and responded to in quite an orderly fashion, thereby guaranteeing, to a certain extent, that we could come out of these decisions stronger as a team.

Later in the year of *Field Trip*'s release (2019), when all three language versions were made available, and when we were in the midst of the distribution phase, I ran interviews for this doctorate with the team members. This intervention was actually key in reflecting back on the project as a whole, not just for me, but also the other team members. Seeing that each team member was still thirsty for impact objectives to be quenched, my co-author and I had a longer conversation on what each of us would need to be in peace with *Field Trip*. We put the "rainbow-question" to our colleagues on 14 January 2020, which in a way, marked the collective realisation that:

a) the situation had changed and we were now in the distribution phase,

b) we were not yet in peace with the situation in terms of impact expectations, and

c) there was still a will, albeit with reduced energy, in how we could attain the pending objectives.

The answers (translated from German by the author) were:

Eva
- Find a home for *Field Trip*
- Funding for up to six additional episodes
- Three international film festival selections; get some attention from the film landscape

Frederic
- Find a home for *Field Trip*
- Find a media partner for an English language release

Svenja
- Get an award
- See *Field Trip* content re-used

Joscha
- See *Field Trip* content and tech re-used

As the distribution phase progressed, some of these objectives were fully attained (those in green), others not (in red). But in the end, one realisation, based on Notley et al.'s model, is that *Field Trip*, as a non-strategic i-doc, did have its strategic moments. This reflection and response to a changing situation gave way to a number of further results. Interestingly, many of the results that were realised—despite the 2020 pandemic—were made thanks to sustained efforts by team members. Securing the visitor centre of Tempelhof airport (as a home for *Field Trip*) was a labour of years, as mentioned in chapter 4. Finding a media partner in English, was also mainly due to tenacity in pursuing this distribution objective. The objective of getting *Field Trip* into film festivals and attracting some recognition in the film and award-giving sectors, was also the result of insistence, fee waiver requests, patience, and continuous communication.

When I look at those objectives that did not materialise, some of it has to do with the fact that we were not behind them enough. We did not defend the re-use impact expectations as vehemently as we worked

the ropes on the award and film festival side. To give an example, we could have created Wikipedia articles from where the *Field Trip* content could have been made accessible, we could have organised re-use workshops to transfer content and technology to different settings. We could… But in the end, we could not, resource-wise. This learning about output and impact, as a result of input, might be of value to other i-doc teams: settle on a certain number of objectives and pursue them vehemently, as things will not happen on their own.

The failed objective of securing additional funding for six new episodes, failed for the same reason. After having fought an uphill battle as a production team from 2017 to 2019, human resources were depleted, and market conditions, as explained in previous chapters, unfavourable for this objective to be tackled half-heartedly.

5.2.2.5 Develop impact stories

The last point in Notley et al.'s pathway model (2015), is for the teams to develop stories of impact. This echoes what Chattoo & Das (2014) are pleading for and which I flag in chapter 2 as a feature that is a mere proxy for impact, rather than a true assessment of impact. But for the sake of going through the pathway model with *Field Trip*, I am here attempting to pinpoint the stories of impact that were developed at the end of the project duration.

In fact, although the most tangible impact lies in the production process rather than the product itself, it must be acknowledged that winning awards and receiving laurels from film festivals remains one strong selling point in terms of a story of impact. After winning a Lovie Award, and being selected to a first film festival, the *Field Trip* team has used the laurels in its communications on social media, and when approaching further festivals. An award-winning documentary generally carries more gravitas, independently of the award that was won. For the film and web connoisseur community, winning a Lovie Award means something, as it is one of the most valuable recognitions on the European level. This recognition suddenly shifts the light from the production shortcomings, as communicated implicitly with the 2019 crowdfunding campaign, over to the product's qualities. This shift is a symbolic door opener, but at the same time does disservice to our understanding of impact. It puts blinkers onto the project, and reduces the view to the product itself, thereby veiling many other dimensions, including process-related impacts.

That the more complex story of impact gets tainted and veiled by awards is an important point. Another one regarding *Field Trip* is that whatever the makers value most in their production and where they see evidence of impact, this impact story will not be picked up. The interest for the pedagogical impact, or the fact that *Field Trip* has served as a sort of public space for hearing and discussing the future of the

Tempelhof Field, will not survive the test of time. This is because all of these smaller narratives of impact are harder to understand and situate in contexts that most people are not familiar with. For instance, the fact that *Field* Trip is being used in storytelling and film classrooms might show its value in terms of its format for addressing complex issues, but this will continue being overshadowed by simpler stories of impact, such as the number of viewers or recognitions.

To take an analogy from academia, this would be the impact factor for journals: a crude number calculated on the basis of citations in relation to the number of articles published by a journal in a given period of time. All this to insist that when developing impact stories, there is a motivation to keep the story simple, if not simplistic. The *Field Trip* team has articulated the cultural value by insisting in social media and in public screenings on the value of open licences on content and technology, the re-usability option of the open hypervideo format, and the value in portraying the Tempelhof Field by amplifying myriad of voices. But these stories of the larger cultural impact narrative will remain largely ignored by the majority of stakeholders that are a party to the production and distribution process.

Finally, whether or not stories of impact get heard, it is indeed important for makers that their project is remembered as a success, at least on some account. Here again, the story of impact is more of a useful proxy, than a scientifically sound assessment of impact.

After having interpreted case-specific impacts and impact expectations to deepen the analysis of impact evaluation, I am now stopping the vertical dig so as to discuss the findings and answer the research questions more directly.

5.2.3 Implications of these findings

When funders, prize juries and media partners evaluate an interactive documentary's potential, they might look down on the work based on formal industry or implicit impact expectations. To balance off this one-way perspective, I here discuss the findings above in light of how they can inform formal impact evaluation.

The first implication of these findings is that **external evaluators share many impact expectations of makers**. The *factual* and *emotional impacts*, but also audience reach *outcomes* are seen as important to both makers and external partners alike.

Additionally, media makers' oft-mentioned focus on having an impact on the creative maker community, can be hard-baked as impact criteria going forward. The *reuse-triad* (*reuse of content*, *format* and/or *tech*), as I call these criteria, need to be acknowledged and evaluated at par with

conventional impact criteria. This for instance would mean that a funder would start considering the innovation in licencing, or include an open culture category into the section criteria.

The maker perspective elaborated in this study, which brings to the fore impact criteria that can loosely be associated with open culture and the notion of cultural value, is most often hidden. In order to operationalise impact criteria directly connected to the maker perspective, makers need to develop impact expectations and not take for granted that an artistic intent is enough to go on. One implication of my findings is thus that makers need to be trained in how to develop impact expectations, how to adjust them during a production and how to articulate them to the outside world. On the other side of the spectrum, cultural decision-makers need to take a harder look at makers' intent and impact expections. Particularly in the realm of media innovation, where i-docs are situated, there is a need for makers and decision makers to make explicit what they understand as having cultural value. For seasoned decision makers, the impact expectations related to the 're-use triad', which are often core to the production reality of i-docs, might simply be seen as economic externalities. But these positive externalities are not just "nice add-ons", but in reality legitimate core characteristics of i-docs and thus, key externalities of these cultural goods.

A concrete implication of the maker perspective of i-docs found in my study, and which would certainly represent a game changer for the i-doc scene, is if public broadcasters and funders would open up to the positive externalities articulated here and let them percolate their classic evaluation models of media and cultural goods.

If the *how* (of integrating further impact criteria from the Societal impact framework) is relatively straight-forward, the question of why decision-makers should embrace this level of complexity is still open. The answer to this is to be found in my study, including via the control case studies. Innovative public goods can only develop with full potential and with optimal learning effects (what we can learn from them for long term growth of the digital cultural sector) when they are funded consequentially. Decision-makers should not necessarily embrace the Societal impact framework in its entirety, but extract the impact criteria that are most appropriate for capturing public goods with added value, such as the i-docs described here. The implication of this would be far-reaching and stabilising for the cultural sector, as for instance the integration of the *re-use triad impacts* could help many more projects get funded or recognised that make a long-term contribution to the production and artistic landscape, i.e. funders do not 'just' support one esthetic story, but an esthetic story that uses content, a format and technology that can be re-used by other projects to tell their story. Another example is that the *participatory impact* criteria, by becoming integrated in formal evaluation grids, would favour projects that attempt to make a democratic contribution, thereby recognising the democratic role and responsibility of public goods.

As indicated in the findings, organisational level expectations are present in all i-docs examined, and play an important role. The will to either overhaul the production workflow in an institution or to re-position that institution with the help of an i-doc, can have larger implications for the media institution internally, for the media sector, or the attractiveness of a geographical location for media creatives. These ramifications are significant and should not be downgraded by public funding agencies as a strictly financial consideration. An institution producing state-of-the-art i-docs might for instance cause ripple effects in the cultural sector, helping museums in a given location to take a sharp digital turn.

Attached to this discussion is the realisation that there is a hierarchy of impacts, with individual impacts (*common ground impact*, *factual impact*, and *emotional impact*) and organisational impacts as high-level, and other impacts mentioned above as less valued effects when it comes to makers (i.e., elite targeting, social media outcomes). This general observation is meant to feed into the baseline types of impact, but does not mean that in certain cases, the hierarchy might be upside-down. It just means that certain impact types tend to be of higher priority to makers of i-docs.

My findings go to show that media makers are frustrated in their attempts to innovate. I-docs are media innovations and are thus generally produced under experimental/pioneer conditions. This said, innovation is often stifled due to poor funding options, risk-averse or bureaucratic partners, and increasingly, the political economy of media consumption (i.e., large web platforms replacing organic internet cultures; smartphone screens as premiere viewing interfaces, etc.). The implication of this, is that the i-doc production culture is fainting and a significative cultural artefact is starting to being erased and replaced by pre-formatted and linear media products. This implies a loss in media and cultural diversity. To reverse this, it would for instance require that media partners consider under what circumstances a self-initiated work was created, and if innovation in workflow was brought about. This way, the i-doc would be judged more holistically and permit to reward the merit involved. In other words, makers and external production stakeholders share a number of impact expectations, but the discrepancy in impact expectations exists, and leads to systemic problems for producers, including the stifling of innovation. This was clearly stated by makers of the i-docs analysed as part of my study.

The uncertain return-on-investment of i-docs, which especially funders such as the Medienboard Berlin-Brandenburg expect, explain why most i-doc projects do not get supported by public funds. The unspecified nature of i-docs, as *interdisciplinary digital productions*, which makers see as a strength paying off in terms of *multiperspectivity impact*, is another major reason why classic and risk-averse cultural funders (e.g., Kulturstiftung des Bundes) do not see themselves as the ones responsible for i-docs.

Besides, the *impact arenas* (Whiteman, 2002) that i-doc makers see on the community level, for instance, are not compatible with those of mainstream media, fixated as they are on mainstream discourse. This expectation gap has been hard on makers during the heyday of interactive documentary, and is today what continues to slowly and softly kill this media innovation practice.

The findings from the fieldwork and document analysis, combined and further informed by the writings presented in chapter 2, reveal that the bulk of literature on media impact and effects is biased towards measurable elements, leaving out contextual, social and hard-to-measure criteria, such as the impact on makers and institutions. Some might not be surprised by this finding, since it is easier to evaluate media productions using decontextualised measurable elements, but easiness is not a category of good research practice.

Contrary to what I had expected, the makers of i-docs do not expect long-term cultural impact. They are rather looking out to have a short- and medium-term cultural impact. The implication that follows from this, is that many projects make use of technology that will not pass the test of time, or work on experimenting with short term outcomes instead of enduring societal impact. This further translates in i-docs not establishing themselves, and not finding adequate solutions to the archiving conundrum. In fact, only a handful of i-docs have been "refitted" or "remastered" over time (e.g., *Welcome to Pine Point*, *Bear 71*), leaving the brunt of i-docs falling into desuetude. The question of archiving web-based cultural productions would merit a research strand of its own.

5.2.4 Answering the research questions

My research results reveal a number of macro observations. On the basis of the empirical chapter (chapter 4), the conceptual chapter (chapter 2), and the findings and discussion in this chapter, I am now in a position to answer the main research questions with some level of certainty.

How to account for the societal impact of interactive documentary?
Compared to productions developed within established film industry settings, i-doc evaluation needs to account for the *societal impact* of an interactive documentary, which encompasses all other types of impact. How to do that, lies in the evaluation of:
1) almost-objective outcomes and impacts (e.g., number of unique visitors, multi-perspective approach to a topic) and combined to this;
2) hard-to-measure factors (e.g., *partnership-induced impact*; *political impact*).

In order to evaluate impact successfully and without giving-in to bias, impact evaluation needs to look beyond stories of impact, as explored in the case-specific impact findings. Stories of impact are needed

from a maker's perspective, but they are a smokescreen bringing about proxies of impact rather than understandable or verifiable impacts.

Does the most important impact of an interactive documentary reside in qualitative results?

This is a difficult question because the answer varies depending on who is asked. If we're to believe practitioners, the answer would be *yes, but… numbers matter*. This study reveals that indeed, qualitative and therefore hard-to-measure impacts often provide the contextual elements to be able to appreciate the breadth of an i-doc, and particularly of its production process, which needs equivalent if not more consideration than product-focussed criteria. This said, what this study also suggests, is that usage statistics such as reach, number of screenings, engagement-related metrics are outcomes that are important to both makers during the prototype stage, and for other stakeholders. Yet, it is true to say that the most valuable types and forms of impact of an i-doc can only be discovered via qualitative methods, as many of them are buried 'under the hood', at the process level.

Are interactive documentaries specific cases for low economic value associated with high cultural value?

Taken individually, i-docs are indeed found to have a relatively low financial return-on-investment, if at all. The larger macro-economic value is difficult to establish on the basis of this study. A more holistic examination, including with cultural institutions, would need to be performed. As mentioned before, a cultural institution like the National Film Board of Canada, as a driving force for the film industry in that country, has invested heavily in i-doc production over a decade. This has certainly had a larger economic footprint in the film and creative industry in Canada, although this is outside the scope if this study. On a micro-economic level though, it is reasonable to say that the economic value of i-docs is low, especially for the creative teams. Although some could sustain themselves in 'the i-doc decade', the current phase of institutionalisation might prove tricky in terms of working conditions.

In all i-doc examples discussed, the *cultural value* of discovering and telling the story of looted art, paying tribute in a modern fashion to a one-of-a-kind heritage site in Berlin, or giving people living in highrises a common sense of identity, is present. Whether i-docs are of *high cultural value*, as envisaged by Throsby, needs also to be established on the backdrop of media innovation brought about by these artefacts. Unsurprisingly, I interpret the extraordinarily creative moment of documentary production powered by the clever use of web technologies as a milestone in the cultural form of documentary-making and thus answer the question affirmatively.

Further, this study shows that i-doc teams need to coalesce around common impact expectations, and thereby decide to what extent they are ready to pursue cultural value in the face of minimal public funding options. My study cannot be generalised to all i-docs, but the visions explicited in the interviews

show that public funding has largely left i-doc makers behind. While this was not corroborated by the secondary case studies, which were produced at a time when more public funding was still available for i-docs, the more recent case of *Field Trip* seems to confirm the lack of public funding for this type of cultural production in Germany.

In chapter 1, I asked what role i-docs have, moving forward. On the basis of the impact expectations and the framework that I elaborated, it could look like i-docs have a cultural and social role to play for telling complex stories in an interdisciplinary fashion. This could happen in collaboration with media, such as online newspapers, public broadcasters and/or with museums and schools, where interactive formats are becoming ever more common.

But are i-docs "the most direct and cost-effective way of achieving particular social or economic aims"? (Holden, 2006). This is at best doubtful, considering that i-docs are work-intensive. On the other hand, cost-effectiveness, although a sacred dimension in market capitalism, should not take precedence over the potential societal impact that an i-doc may have. By considering the forces and weaknesses of the i-doc format, funders could help reinvigorate the genre and help establish a sustainable niche. As argued in chapter 6, I find inspiration in the developments in the realm of the commons, where makers agree to enter into a tradeoff: they receive public funds in exchange of producing cultural works that are then 'given back to the public' under open licences. At the moment of writing, the latest test made in this regard—with i-doc *Field Trip*—permits me to conclude that only a handful of funders and other institutions are ready to support this type of media practice as of now. What remains to be seen is whether public funding agencies and GLAM institutions will step up to the plate, i.e. adopt a larger understanding of impact in the years to come, so as to embrace innovative media practices serving the public interest. Yet, also these institutions come with their own agendas. To evaluate the true potential of the institutionalisation of i-docs, it would require researchers to study whether i-doc makers will be able to preserve artistic freedom and protect their subjective point-of-view in collaborations with GLAM institutions. The latter might require that the subject matter of an i-doc be geared more or les strictly towards their collection, exhibition, or cultural content.

CHAPTER 6 - Outlook

This PhD dissertation about documentary production and the question of social transformation permitted me to situate interactive documentary in terms of societal impact. I argued that this form of cultural media production is mainly to be read as media innovation in the realm of public interest oriented media. From there, I was able to pose the research question: *How to measure the societal impact of interactive documentary?* To answer it, I referred back to literature on media innovation to posit that interactive documentaries are a *genre innovation* (Miller, 2016) but that each individual production needs to be assessed on the basis of dimensions of change (Dogruel, 2014). Subsequently, I drew on concepts, as well as complementary literature to shed light on the notion of impact, which is a useful and graspable indicator of an interactive documentary's footprint. I provided three case studies of interactive documentaries—*Netwars*, *Die #kunstjagd*, and *Highrise*—and a thick case study of *Field Trip* to illustrate the object of study and the dimensions of change. Finally, I discussed *Field Trip* and the other i-docs as storytelling productions bridging the concepts of media innovation and societal impact.

This thesis does not attempt to evaluate the impact of a media innovation but rather to contribute, with the help of the main and secondary case studies, as well as further empirical and secondary data, to the discussion over media impact. This was key for establishing a societal impact framework that considers the product and process of i-doc making, and the different types and forms to be factored in.

6.1 Cultural value

By looking back at my main findings, I specifically come back to the initial question on the cultural value of interactive documentary productions, including their innovative value, I am now attempting at establishing the footprint of an i-doc, as defined by Holden (2006). Holden, as introduced in chapter 1, identifies three types of cultural value:

- ***Intrinsic*** *(esthetic properties, their spiritual significance, their role as purveyors of symbolic meaning, their historic importance, their significance in influencing artistic trends, their authenticity, their integrity, their uniqueness);*

- ***Instrumental*** *(ancillary effects of culture, where culture is used to achieve a social or economic purpose -- captured in output, outcome and impact) and;*

- ***Institutional*** *– how institutions add value.* (Holden, 2006)

Interestingly, these types of cultural value are in echo with the impact expectations exposed in the societal framework (chapter 5) except that they insist on some more specific features such as esthetics, the historical significance and the possible influence on artistic trends, which I did not explore at length, as they did not transpire from or match my empirical analysis.

To answer the footprint question, it is indeed plausible that some i-docs, particularly those reviewed in this thesis, have the intrinsic characteristics creating cultural value. On the instrumental side, which directly relates to the impact conversation, there too, I conclude that despite the financial fragility of i-docs, especially in today's changing environment, they are suited to carrying instrumental cultural value. On the third aspect of cultural value, it must be said that cultural institutions such as Arte and the NFB, but also public libraries and museums have in the past made room for i-docs to help rejuvenate and shape their institutions further, and thereby contribute to repositioning themselves in their respective sectors. Moreover, these institutions add value to i-docs by giving them an institutional support, identity and credibility, not to mention the resources to develop ambitious web-based creations. The institutional cultural value is thus also a given based on my findings.

Taken together, the cultural footprint of an i-doc is much larger than the project itself and its short-term effects on individual users.

6.2 Regimes of value

The discussion throughout this thesis has permitted me to distinguish between types of documentaries. Some are strategic, others are community-focused, others are yet again generalist. Regimes of value (Appadurai, 1986) behind these different documentaries have a basic meaning for what is to be evaluated. Some i-docs are more market driven, others commons-driven, and most are in between. When assessing the impact of a documentary, one should have a thought for the regime of value behind it, and then use the impact criteria developed in chapter 5 to read into the *product*, and the *process*, sequentially. The regime of value on which an i-doc is based cannot determine the larger footprint that the documentary might have, but by identifying the value regime early, the interpretation of quantitative reach outcomes can be thickened (*thick data*, as per Wang, 2013) and the qualitative impacts contextualised accordingly.

Although my own artistic research project developed off a specifically commons-based production logic (Velkova & Jakobsson, 2015), it represents, as argued in the methodology chapter, a typical case of i-doc. This production logic has influenced the product, which, as described in chapter 4, was open in terms of content, format and technology. It has also influenced how we worked together as a team, and engaged in partnerships in a non-profit and collaborative driven fashion. But these regimes of value, as very broad categories and logics, only go that far in understanding what kind of footprint an individual i-doc is leaving behind. This is why the types of impact should be systematically looked at, discussed and evaluated.

In terms of production studies, the regimes of value are useful in broadly orienting both practitioners and theorists. They are furthermore an attempt to describe the media production and communication landscape.

6.3 Towards research-creation production studies

The field of media and communication has seen prolific literature offerings in the last 40 years, with authors like Miège (1989) reframing cultural production, Nancy Fraser (1990) reinterpreting the public sphere and Manuel Castells (2011) describing the advent and affordances of the networked society. I have decribed this, as well as the subfield of production studies in chapter 1.

By engaging beyond the lines of genre and/or media format, researchers looking more specifically at production cultures from a research-creation point-of-view have their work cut out for them. With the advent of new research-creation doctoral programmes within fine arts education institutions such as art and design universities and film schools, research-creation is becoming the latest and fast-growing addition to production studies. Even though most structured training programmes are less than two decades old, there is a growing number of new entrants in the research field. This new injection of practitioners and artists to the field of research is a unique opportunity of empowerment and intellectual growth for the makers of media innovation (who suddenly start adopting research reflexes and standards as part of their work), and a chance for traditional researchers to better ground their observations. It is my understanding that production studies are particularly well-placed to absorb a growing influence from first-hand practitioners, as the field already had practitioners as study subjects. This in turn puts production studies in this unique spot to inform larger scholarship and other disciplines in how to *do* research-creation.

The small research field dedicated to digital storytelling has a contribution to make in the area of production studies, as this thesis exemplifies. My dissertation is only a fragment in that promising subfield of media and communications.

6.4 Contributions to the field of media and communication

If the production studies category within media and communications has a clear case moving forward, what exactly has this thesis contributed to the field of media and communications?

First, it has enriched the small i-doc research field, which after early years of trying to figure out definitions, typologies and characteristics, has matured into a field that is less focused on itself and more interested in universal questions such as impact. The particular field of production studies that I have

stuck to, crosses over to other fields, as argued above, and thereby strengthens the voice of research-creation within media and communications. I believe that my thesis has contributed to highlighting the relevance of the cultural practice of digital documentary making and how stakeholders to the production and circulation process ought to evaluate the societal impact. This unique contribution is meant to inform film and journalism production research by proposing a reframing of the way in which interactive productions are evaluated.

Second, this thesis has contributed to another subfield, that of media innovation research. It did so first and foremost by providing pointers on how media innovation oriented towards societal impact can best be sustained. This should be a welcome complement to the overwhelming amount of studies on technical innovation only, or on profit-driven media innovation, which in a decade obsessed with digital startups, has largely ignored common good media innovations. It is my hope that this humble contribution helps to re-balance and re-energise media innovation studies, at a time when core publication outlets such as the *Journal on Media Innovations* (University of Oslo) are pausing their activities.

Third, and this is probably one of the most important contributions to the field of media and communications, this thesis proposes a unique methodological approach. By building upon research-creation approaches to knowledge-generation, this thesis contributes to bringing the research and the creation in dialogue by combining a thick (auto-)ethnographic description with practice-based documents, and classic scholarly literature with a genuine i-doc production. The fact that theoretical research gets confronted with practice realities at every step of the research-creation process, is what makes this contribution so genuinely grounded. The methodological contribution to media and communications is a lasting one, as it is embedded in a movement of practice-led research blossoming, not just at the Film University Babelsberg *KONRAD WOLF*, but across media, art and film schools internationally.

6.5 Relevance

The relevance of this thesis should be both understood in terms of practice and theory. If I have explained the theoretical relevance above, the relevance of this work for the digital storytelling sector is to help bridge impact expectation discrepancies between actors in the field and thereby contribute to enhancing innovation in future interactive productions. This research endeavour was born out of frustration *vis-à-vis* this gap in expectations, and which has had real-life consequences: original projects not funded, media partners declining offers to release innovative projects, prizes awarded to conventional mainstream media productions instead of honest and more creative i-docs.

I recognise the relevance of this thesis in arguing and revealing the importance of including the makers' perspective when evaluating interactive story projects or products, instead of some proxy or imaginary target audience.

I am furthermore convinced that this thesis can be a useful evidence-based starting point for helping review media policy in Germany. It should serve as a besis to develop solid criteria to assess the rationale for the distribution of public funds. The societal value of i-docs—as creative media practices—goes beyond short-term entertainment. Fuzzy audience numbers cannot be the basis for funding while quality of content and purpose, advancement and exposure of culture are key. This thesis is inverting the lens and asking the jury: *what are the intrinsic contributions of this i-doc project to the cultural mosaic of Germany?* This creative production culture should be recognised and supported, among other with the help of public funds, just like any other recognised cultural good.

6.6 Future research

This starting point, is nevertheless only a grain of sand, and before there is a beach for all media and cultural stakeholders and policymakers to see, more studies are needed, in order to seize the phenomenon of impact in all of its dimensions. I have argued it on the basis of media innovation, but there are several different routes to explore. Although I have stressed the usefulness of multi-methods, including a combination of autoethnography, constructivist grounded theory and document analysis, future research should incorporate quantitative studies and mixed methods approaches to impact, among other for much more fine-grained findings to come to light. Through my own research—which did not benefit from dedicated research funds—I am convinced that resourced research projects will be able to generate detailed evidence of the societal value of interactive forms of storytelling. Beyond expert interviews and participant observation, I believe that future research has much to gain from adopting more tools from the digital humanities arsenal, including open forums for makers, focus groups and netnography (Kozynets, 2015). These techniques could help capture producers' discursive practice at different times during production. This way, the more spontaneous answers, confronted to the opinion of other makers—or other stakeholders for that matter—could potentially help reveal further impact types.

Future studies that are out of touch for an independent researcher, but which could be tackled by a research group versed in cultural economics, for instance, could build upon i-doc empirical evidence, to verify if there was/is a larger significative and sustainable economic impact as a result of large institutions allocating consequential budgets to digital storytelling. The macro-economic type of impact is one area where future research has most to deliver on, as policymakers and public broadcasting decision makers tend to take note once larger economic benefits are documented.

These future studies could build on Jenny Svensson's clear-viewed doctoral work on impact measurement in the cultural sector (Svensson, 2016). Svensson exposes in a detailed fashion how cultural stakeholders (in her case mainly in the field of theatre arts) often run into conflicts over goals and value expectations. She draws on Friedemann Schulz von Thun's value and development square ("*Werte- und Entwicklungsquadrat*") to visualise the different stakeholder visions, as separated in four boxes: 1) societal relevance, 2) artistic autonomy, 3) political control and instrumentalisation of artistic content and 4) making artistic self-purpose absolute (Schulz von Thun, 2007). These, and other useful models, could help detail the larger impact of digital cultural production with and in cultural institutions.

Thinking 'outside the box', we might want to frame i-doc practice in an even more comprehensive framework, such as an ecological one (see Nash, Hight, & Summerhayes, 2014). This could have a lasting influence in how we talk about the effects and impacts of interactive storytelling. David Dufresne for instance talks about "*creatively recycling tools"* (D. Dufresne, personal communication, November 6, 2017) for making i-docs and the importance of documentary and narrative R&D. We might for instance want to go deeper into the technological and esthetic *footprint* (Miles, 2014) of i-docs. Or, we might decide to investigate the footprint as expressed in terms of social interactions or incorporating ecological criteria such as green producing[77] for assessing an i-doc's much larger impact.

[77] For a full discussion on the "emerging phenomenon of 'green filmmaking' in film production, whereby the process of filmmaking is conducted with a view to minimising environmental impact" see Victory (2015).

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6.8 Summary in German

Zusammenfassung

In den letzten zwei Jahrzehnten haben sich *Storyteller* in eine besonders aktive Periode der Innovation begeben. Im Bereich des Dokumentarfilms wurden Webtechnologien entwickelt und kombiniert, um komplexe und multiperspektivische Geschichten zu erzählen. Diese Dissertation untersucht den Synergieeffekt von unabhängigen Autorinnen und Autoren, Designerinnen und Designern sowie von Programmiererinnen und Programmierer auf die Produktion und Verbreitung von interaktiven Dokumentarfilmen. Die Arbeit basiert auf einem wissenschaftlich-gestalterischen Ansatz, der eine empirische Fallstudie von *Field Trip* (2019) beinhaltet - ein 92-minütiger Webdokumentarfilm. Diese wurde von meinem Team und mir in Berlin produziert.

Die Arbeit bezieht sich überdies auf Webdokumentarfilme, die in den letzten zehn Jahren in Kanada und Deutschland produziert wurden. Sie fußt auf zwei begutachteten Zeitschriftenartikeln, die zwischen 2018 und 2020 von mir veröffentlicht wurden, sowie einem Buchkapitel, das in 2021 veröffentlicht wird.

Die Arbeit konzentriert sich auf die Gestaltung eines Webdokumentarfilms aus einer *Production Studies* Perspektive. Sie zeigt die gemeinsamen Merkmale des interaktiven Dokumentarfilms auf und nutzt den analytischen Rahmen der Medieninnovationen (Dogruel, 2014), um die Praxis zu kontextualisieren. Der konzeptionelle Fokus liegt auf dem Begriff des "Impacts" im Bereich des interaktiven *Storytellings*. *Impact* ist ein weit verbreiteter Begriff in der Praxis und Theorie des digitalen *Storytellings*. Er bedeutet für verschiedene Stakeholder im *Storytelling*-Sektor unterschiedliche Dinge, was zu einer Erwartungslücke führt. In dieser Hinsicht wird der Begriff *Impact* in meiner Arbeit kritisch dekonstruiert, problematisiert und diskutiert.

Durch den Einsatz einer *Multi-Method* Forschung, einschließlich *Analytic Autoethnogr*aphy (Anderson, 2006) und *Constructivist Grounded Theory* (Charmaz, 1995) zeigt diese Dissertation eine Reihe von Wirkungsebenen auf. Die Ergebnisse heben die Notwendigkeit hervor, die Wirkungserwartungen, die sich auf die Geschichte beziehen, mit denen, die sich auf den Produktionsprozess beziehen, in Einklang zu bringen. Die Wichtigkeit der Förderung und des Ausbaus einer nachhaltigen Innovationskultur im digitalen *Storytelling* Bereich wird durch diese Erkenntnis auch wissenschaftlich untermauert. Basierend auf der Formulierung eines mehrschichtigen Wirkungsmodells trägt meine Dissertation zu einem verbesserten Verständnis des kulturellen Wertes zeitgenössischer interaktiver *Storytelling*-Praktiken bei.

Appendix

Media files

- The original artistic research project *Field Trip* is accessible here: https://en.fieldtrip.berlin Duration: 92 minutes.

- A full screencast of the artistic research project *Field Trip* (for documentation and storage purposes) is accessible as a separate file (name: 'Field_Trip_Screencast_03_02_21') on an attached flash memory drive. Duration: 97 minutes.

- A short explanatory video introducing the artistic research project *Field Trip*, demonstrating the basic principles and interaction, is accessible as a separate file (name: 'Field_Trip_Basics_03_02_21') on an attached flash memory drive. Duration: 9 minutes.

Interview questionnaire

Frédéric Dubois doctoral dissertation interviews
Film University Babelsberg *KONRAD WOLF*
Potsdam
Interviewee:
Position:
Project:
Interviewed by Frédéric Dubois on:

What is **your project**? (please define it in a few words)

When compared to your usual docs, do you consider it to be part of a **new genre**? Why?

What, in your view, is **the impact of your project**?

What is the **economic and social impact**?

Is your project contributing to **social change**? Why?

What is the **long-term impact** of your project?

Did/do you have the same **expectations of impact** as your maker-colleagues? Why?

What were the **key moments** in production where you thought, we're having impact?

What type of production has this been?

How important is the ***participation in*** the documentary?

How important is the ***empowerment by*** the documentary?

What is the ***relevance to*** democracy?

Is **critical consciousness** a goal of your project?

Was critical consciousness reinforced by the **interactive format** of your project?