About the conservation of cultural landscapes: sustainability or unviability?

A comparative study on the emergent landscape management in heritage sites in mountain regions: the Andes and the Pyrenees.

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by

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To the mountain people.

Abstract

Cultural landscapes have become categories of increasing use in the nominations to the World Heritage, because they provide frameworks for the integration of alternative understandings of heritage into the List. Nevertheless, the concept of cultural landscape takes its roots within a Western naturalist ontology. By assuming this ontology the interpretation of heritage sites is based on the division between nature and culture. The lack of a model of protection designed for the integration of all categories of heritage is evident, with the models used following the culture/nature and tangible/intangible divides.

In order to study this problem, a comparative approach has been used. Two sites from mountain areas have been selected as case studies. The Ordesa and Monte Perdido National Park in Spain has been part of the transnational mixed cultural and natural heritage property in the World Heritage List Pyrenees/Mont Perdu since 1997, shared with France. The Archaeological Park of Ollantaytambo, neighbor to the Sanctuary of Machu Picchu in Peru, is included in the serial and transnational property Qhapaq Ñan/Andean Road System inscribed in the List in 2014. These sites are protected under two different models: the first focused on the *conservation of nature* and the second on the *conservation of the past*. Nevertheless, both sites have been nominated as cultural landscapes based on the presence of Intangible Cultural Heritage (ICH) maintained by agropastoral communities inhabiting them. The focus is to put in question the relevance of the concepts of conservation and sustainability in these contexts and to propose landscape management as an alternative that implies maintenance and at the same time adaptation to change.

The methodological design is based on a qualitative approach. The focus is the analysis of the 'emergent landscape management', defined as a self-organized process coming of the interactions between the most influential actors in landscapes – the state, local communities and visitors -, ultimately leading to synergies between these actors' practices. In order to understand the different perspectives concerning landscape, documents (regarding the protection and management of the sites) and interviews (semi-structured/open-ended) with managers, local population involved in agropastoral traditions, and visitors have been analyzed, complemented with fieldnotes recording the observation of events and everyday life. Complementary cartographic methods were used to map the assets according to each vision.

The results show that, first, the diversity of approaches to the notion of "landscape" entails the lack of precision of the object to be conserved. The definition set in the Operational Guidelines of the 1972 World Heritage Convention presents the concept from different

epistemological perspectives. Contrasted with the criteria under which these sites have been justified as World Heritage Cultural Landscapes, an inherent contradiction is evident between the models of protection and the continuity of the way of life of local communities that represent their heritage value. Second, three landscapes have been identified based upon the model of the emergent landscape management: the landscape as a container; the landscape as habitat; and the landscape as picture. Three sets of maps, corresponding with each group of actors portray the results. Nevertheless, the groups and its understandings are not close. Key actors have been found playing roles in different groups. An overlay of the maps shows the potential for common ground connected by the key actors. Finally, even if these sites represent particular cases, they exemplify the need to reflect upon the inherent contradictions of the current conservation system. In order to develop comprehensive strategies for the viability of cultural landscapes, alternatives for the continuity and autonomy of local communities need to be reflected upon.

Keywords: Cultural Landscapes, Landscape Management, World Heritage, Intangible Cultural Heritage, Conservation, Sustainability, Community Involvement.

Zusammenfassung

Kulturlandschaften sind für zu einer häufig angewandten Kategorie Welterbenominierungen geworden, denn sie bieten ein Rahmenkonzept für die Integration eines alternativen Verständnisses von Erbe in die Welterbeliste. Nichtsdestotrotz ist das Konzept von der Kulturlandschaft in einer westlich naturalistischen Ontologie verwurzelt. Setzt man diese basiert die Interpretation von Kultur- beziehungsweise Ontologie voraus, dann Naturdenkmälern auf der Unterscheidung zwischen Natur und Kultur. Das Fehlen eines Bewahrungskonzepts, welches einheitlich für unterschiedliche Kategorien von Welterbe entworfen worden ist,, ist offensichtlich; während die momentan angewandten Modelle den Trennungen zwischen Kultur/Natur und materiell/immateriell folgen.

Um dieses Problem zu untersuchen, wählt die vorliegende Studie einen komparativen Ansatz. Hierfür wurden zwei Fallbeispiele aus Bergregionen gewählt. Der Nationalpark "Ordesa y Monte Perdido" in Spanien ist seit 1997 Teil einer transnationalen und gemischten Welt-Erbestätte, das bei der UNESCO als Welterbe "Pyrenäen/Mont Perdu" aufgelistet ist und das sich Spanien und Frankreich miteinander teilen. Das archäologische Areal "Ollantaytambo" in Peru, in direkter Nachbarschaft zu Macchu Picchu gelegen, gehört zum seriellen und transnationalen Welterbe "Qhapaq Ñan/Andines Straßensystem", welches 2014 in die Liste aufgenommen wurde. Die Bewahrungskonzepte dieser beiden Welt-Erbestätten folgen zwei unterschiedlichen Modellen: das erste konzentriert sich auf die Erhaltung der Natur, das zweite auf die Bewahrung der Vergangenheit. Dennoch wurden beide Welt-Erbestätten als Kulturlandschaften für das UNESCO Welterbe nominiert, und zwar in der Kategorie immaterielles Kulturerbe', ausschlaggebend hierbei war die Zugehörigkeit zu agropastoralen Volksgruppen, die in diesen Regionen beheimatet sind. Die vorliegende Dissertation stellt die Relevanz der Konzepte von 'Bewahrung' und 'Nachhaltigkeit' in Frage und schlägt stattdessen das Landschaftsmanagement als eine Alternative vor, die gleichzeitig ,Bewahrung' und Anpassung an Veränderungen impliziert.

Das methodische Design der Studie basiert auf einem qualitativen Ansatz. Im Fokus steht hierbei die Analyse des "emergenten Landschaftmanagements", definiert als ein sich selbstorganisierender Prozess, der aus den Interaktionen zwischen den einflussreichsten Akteuren in diesen Landschaften hervorgeht – der Staat, lokale Gemeinschaften und Besucher – und letztlich zu Synergien zwischen den Praktiken dieser Akteure führt. Um diese unterschiedlichen Perspektiven auf Landschaft zu verstehen, wurden Dokumente (bezüglich des

Schutzes und Managements der Kulturdenkmäler) und Interviews (semi-strukturiert, mit offenem Ende) mit Managern, mit der in agropastoralen Traditionen lebenden lokalen Bevölkerung sowie mit Besuchern/Touristen analysiert – und mit Feldnotizen vervollständigt, in welchen Beobachtungen von Ereignissen und dem alltäglichen Leben vor Ort festgehalten wurden. Komplementäre kartografische Methoden kamen zum Einsatz, um die Werte der jeweiligen Sichtweise zu kartieren.

Die Ergebnisse der Untersuchungen zeigen mannigfaltige Ansätze rund um den Begriff "Landschaft". Jedoch hat dies eine Ungenauigkeit des zu bewahrenden Objektes zur Folge. Dies zeigt sich an Hand der Definition, welche in den Richtlinien zur Umsetzung der Welterbekonvention festgelegt wurde. Das Konzept wird aus verschiedenen epistemologischen Perspektiven präsentiert. Stellt man diese Perspektiven den Kriterien gegenüber, mithilfe derer die Zugehörigkeit dieser Landschaften zum Welterbe gerechtfertigt wurde, wird ein inhärenter Widerspruch zwischen den Bewahrungskonzepten und der Kontinuität des Lebensstils lokaler Gemeinschaften, welcher ja den eigentlichen Wert dieser Landschaften als Kulturerbe darstellt, offensichtlich. Zum anderen konnten - ausgehend vom Modell des emergenten Landschaftsmanagements – drei Konzepte von Landschaft identifiziert werden: Die Landschaft als Container, die Landschaft als Lebensraum, und die Landschaft als Bild. Drei Landkartensets, die mit den Akteursgruppen korrespondieren, porträtieren die Ergebnisse. Dennoch: diese Gruppen und ihre Konzepte, sind nicht hermetisch verschlossen. Während der Untersuchung konnten vielmehr bestimmte Schlüsselakteure identifiziert werden, die in verschiedenen Gruppen eine wichtige Rolle spielen. Legt man diese erarbeiteten Landkarten übereinander, so erkennt man dass es gerade durch diese Schlüsselakteure als Verbindungselemente Potenziale gibt, um für die unterschiedlichen Gruppen eine gemeinsame Basis zu finden. Auch wenn es sich bei den in der Dissertation behandelten Kulturdenkmälern letztlich nur um Einzelfälle handelt, zeigt sich anhand ihres Beispiels jedoch, dass es notwendig ist, über die inhärenten Widersprüche des aktuellen Bewahrungssystems zu reflektieren. Um umfassende Strategien für die Existenzfähigkeit kultureller Landschaften zu entwickeln, muss über Alternativen zugunsten der Kontinuität und Autonomie lokaler Gemeinschaften nachgedacht werden.

Schlagworte: Kulturlandschaften, Landschaftsmanagement, Welterbe, Immaterielles Kulturerbe, Bewahrung, Nachhaltigkeit, Einbezug der Lokalbevölkerung

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List of abbreviations

A.C.P. Areas de Conservación Privada (Areas of Private Conservation)

A.P.N. Agente Protector de la Naturaleza (Agent Protector of Nature)

CBD Convention on Biological Diversity

CHN Cultural Heritage of the Nation (Peru)

ECOAN Asociación Ecosistemas Andinos (Association Andean Ecosystems)

ICCROM International Centre for the Study of the Preservation and Restoration of

Cultural Property

ICH Intangible Cultural Heritage

ICOMOS International Council on Monuments and Sites.

INC Instituto Nacional de Cultura (National Institute of Culture, Peru)

IPE Instituo Pirenaico de Ecología (Pyrenean Insitute of Ecology)

IUCN International Union for the Conservation of Nature

NGO Non-governmental organization

OG Operational Guidelines of the 1972 World Heritage Convention

PAO Parque Arqueológico de Ollantaytambo (Archaeological Park of Ollantaytambo)

PNOMP Parque Nacional Ordesa y Monte Perdido (Ordesa and Monte Perdido National

Park)

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

WWF World Wide Fund for Nature

Preface

In the Aragonese Pyrenees, shepherds are becoming rare. In the past, only some 20 to 30 years ago, shepherds used to go to the mountain ports and stay for the season that last from the beginning of June until the end of September. Sleeping in caves, they used to live in the mountains, herding the cattle of several stockbreeders from the same town. These used to visit the shepherd periodically, regenerating community values through this traditional practice. Nowadays, they have been replaced with "electric shepherds": steel fences with electric wires that retain the cattle in a specific area.

During my stay in the Pyrenees, I learnt that in some of the mountain ports, there are no shepherds anymore. The last shepherd of the port of Revilla had to move from the mountain to a nursing home because he turned old, blind and had no family to take care of him. Most of the last generation of shepherds remained single and made no family. Benjamin jumped out of a window of that nursery home. Used to living in nature, Benjamin perhaps did not stand a recluded life in the city. Benjamin was maybe 70 years old when this happened. He was the last one to practice pastoralism in the old ways. Today, almost nobody sleeps in the mountains. When shepherds used to stay, there were no shelters. Now that there are shelters, there are no shepherds to use them.

This paradox summarizes the contradictions and challenge of the conservation practice. At present, the conditions for a more comfortable life exist, nevertheless, the transformation of former conditions, also impedes the continuity of other ways of life. Even though "life in the mountains is tough", this way of life forms communal values, making mountain communities resilient. These essential principles of community are fundamental for sustainability. Yet, they are progressively being replaced on behalf of the development of the values of the market and competition.

Mountain people belong to the human groups that better adapt to changing circumstances. Why, then, are they becoming an "endangered species" as illustrated by the case of Benjamin? This work intends to provide some clues to explore 'outside the box' in the light of a global homogenizing trend that imposes a change that fits all. I believe that diversity is a life value, and the lesson from mountain peoples is that the respect of community values intrinsic to their way of life is crucial for the sustainability.

1 Introduction

1.1 Statement of the problem

The industrialization of economic systems and constant urbanization of the Earth's surface have brought about rapid changes in human inhabited environments (Stilgoe et al. 1984; World Commission on Environment and Development 1987; United Nations 1993; Naveh 1995; Antrop 2005; Berque 2008). Traditional livelihoods have been progressively replaced with modern and urban ways of life that promote the exploitation of natural resources depleting vital ecosystems (Marsh, George Perkins 1864; Raven & Mc Neely, Jeffrey A. 1998). The increasing loss and damage of living habitats due to the continuous expansion of human occupation and transformation of the territory are prompting the disappearance of fauna and flora species, which are of primary importance for human survival (World Commission on Environment and Development 1987; United Nations 1993; UNEP 1993).

Modernization and globalization spread a Western approach based on a dualist ontology whereby humans and nature are distinct and opposed, with human dominion and the way technology is being used consequently altering the possibilities of human life viability (Hornborg 2001; Capra 2004). Changes in weather patterns threaten the continuity of diverse livelihoods (i.e. traditional and modern cultivars, seasonal transhumance, industrial exploitation of natural resources), putting at risk the continuity of life in cities as well as countryside (Houghton et al. 1992; McCarthy 2001; Thomas et al. 2004).

For at least forty years, scientific research and political agendas have been advanced to reverse the effects of the 'environmental crisis' and 'climate change' accelerated by the industrialization process. The benchmark of this development was the United Nations Conference on Human Environment in Stockholm in 1972 (United Nations 1972). Not by coincidence, this was the same year in which the "Convention concerning the protection of World Heritage Cultural and Natural Heritage" (hereafter referred as the 1972 Convention) was adopted by the UNESCO General Assembly. Both initiatives in the context of the United Nations system express the concerns of the international community at the end of the 20th century: the escalating environmental degradation, promoted by industrial and urban development, endangering natural and cultural heritage.

The term sustainable development was coined by the Brundtland Commission, fifteen years later, as the "development that meets the needs of the present without compromising the

ability of future generations to meet their own needs" (World Commission on Environment and Development 1987, chap.2). This concept of development calls upon an intergenerational equity that could be associated to heritage conservation principles. The mission of the 1972 Convention has been to identify, protect and transmit the world heritage among all peoples of the planet in order to conserve and pass on to future generations our common natural and cultural heritage (UNESCO 1972a, p.3, Art. 4). Moreover, it also aimed at raising awareness about the dangers faced by this heritage (UNESCO 1972b, pp.1, Preamble). In both contexts, the major goal is to transmit to future generations what present generations of human communities can access and enjoy.

In this regard, sustainable development has been set as the primary topic in both scientific and political agendas. Sustainability is defined as the essential quality to be fostered in human activities in order to permit the continuation of human communities on Earth. The scientific theory that sustains this concept refers to the ecosystemic approach. From the perspective of living systems theory, Fritjof Capra, American physicist (Capra 1996; Capra 2004) lists the following principles for sustainability: networks interdependence, cycles, use of solar energy, partnership/cooperation, diversity and dynamic balance (Capra 2004, p.230). He states that these principles need to be nurtured and maintained so that human ecosystems can prevail.

Nonetheless, industrialization and modernization have not focused on the regeneration of sustainable land use systems, but rather on the generation of productive and profitable land use systems, provoking impoverishment of soils and exhaustion of resources². Even though it has been found that pre-industrial technology, for instance, in mining, has also been highly polluting (Raab et al. 2008), the modern intensive exploitation of large extents of land for industrial pasturing, monocultures and extraction of natural resources (e.g. mining, oil, gas) accelerates degradation processes. These differ from traditional - pre-industrial - methods conceived for conserving the soil and water resources (e.g. fallow system, diversity of cultivations)³. The general characteristics of industrial land use are large patches and intensive exploitation. By contrast, the characteristics of traditional land uses (or pre-industrial land uses) are diversity, small patches, seasonality and extensive exploitation. These approaches are

¹ In different languages, the word sustainability has different translations and depending on its use, it could be interpreted differently. For instance, in Spanish, the words used are sostenibilidad (from the verb sostener: hold, maintain, support, sustain) and sustentabilidad (from the verb sustentar: support, sustain, back up). In French, the word used is durabilité (from the verb durer: carry on, last, go on). In this work, I refer to the concept as defined in the English language.

² See (Brown 1984; Blaikie & Blaikie 1985; Pimentel 1993; Pimentel et al. 1995)

³ See studies of (Brush & Guillet 1985; Deshmukh 1986; Young et al. 1989; Earls 1991; Brannstrom 2001; Amend, Thora et al. 2008) on how pre-industrial methods of landscape management promoted the conservation of resources.

dissimilar in their understandings of time and space, reflecting expressions of different worldviews. In terms of sustainability, as it has been defined above, the cycles proper of natural processes are not followed by industry-oriented land use systems; rather these systems give priority to lower ratio of time/quantity over quality, and produce enormous quantities of unrecyclable waste.

The diversity of human groups has produced distinct strategies for adapting to different environments. This diversity of strategies is reflected in a diversity of cultural landscapes⁴. Modernization, industrialization and currently globalization are resulting in their homogenization. The industrialization project has qualified as obsolete traditional worldviews⁵ that do not follow the modern industrial timing. These traditional worldviews, which have fostered the diversity of cultural landscapes, follow principles of natural processes⁶ as opposed to those of massive production and speed.

In the international arena, the significance of diversity was first recognized from an environmental perspective as an essential quality that provides resilience in ecosystems⁷. The Convention on Biological Diversity (CBD) was adopted in 1993 as an important outcome of the Rio Summit (UNEP 1993), placing biodiversity as an essential component for the sustainability of human life. The recognition of cultural diversity only arrived after ten years, in three steps with three initiatives: the Proclamation of Masterpieces of the Oral and Intangible Heritage of Humanity from 2001; later replaced by the Convention for the Safeguarding of Intangible Cultural Heritage (UNESCO 2003a); and the Convention for the Protection and Promotion of Cultural Expressions (UNESCO 2005).

The "Convention for the Safeguarding of Intangible Heritage" (hereafter referred as the 2003 Convention) had a significant impact in filling a gap in the 1972 Convention regarding the 'living cultural heritage'. The 2003 Convention mirrors the 1972 Convention in its structure and procedures, with the main difference that the more recent aims to establish parameters for the protection of cultural heritage alternative to Euro-centric principles. Indeed, the 1972 Convention has been continuously criticized for its Western foundations, which give priority to

⁴ If we understand cultural landscapes as the results of interventions of human communities in the environment, from a geographical perspective. The concept is discussed in Chapter 3.

⁵ Traditional model is a supervision of the concept is discussed in Chapter 3.

⁵ Traditional worldviews are worldviews that differ from the worldview raised by the Western Modern Paradigm (Berkes 1999).

⁶ Natural processes as processes not being affected by human technology that respond to the inherent qualities of living systems cyclical processes.

⁷ See works of (Raven & Mc Neely, Jeffrey A. 1998; Capra 1996) about diversity as an important element for resiliency in systems.

the conservation of tangible and monumental testimonies of past and present civilizations as universally valuable (UNESCO 2005). As archaeologist Laurajane Smith recalls:

the World Heritage Convention further institutionalized the nineteenth-century conservation ethic and the 'conserve as found' ethos. As Choay (2001:140) has argued, the European sense of the historical monument as universally significant underwrites this Convention, which inevitably universalizes Western values and systems of thought. (Smith 2006, p.27)

According to Smith (2006), the 1972 Convention is part of a series of international and national documents in which what she calls the Authorized Heritage Discourse (AHD) is reproduced and legitimized in the hands of the "experts". The AHD is founded in "European ideas about conservation, and the nature and meaning of monuments, [that] have become internationally naturalized, so that these principles have become global 'common sense' "(Smith 2006, p.21).

The 2003 Convention has been presented as an intention to move from this Euro-centric understanding of heritage. One of the main aspects⁸ marking the difference between the two conventions relies on the nomination process: the requirement of the identification and support of the community, holder of the Intangible Cultural Heritage (hereafter referred as ICH), in order for this to be nominated and hence properly safeguarded (UNESCO 2010). In this sense, the community has been set as key stakeholder for the definition and protection of heritage⁹, enlarging the scope of the experts' definition of heritage and its values. This also relates to the recent developments in the field of conservation, which stand for the "involvement of local communities" (Albert et al. 2012).

Following the line of enlarging the Western-founded scope of the international practice of conservation, the incorporation of three categories of 'cultural landscapes' to the nomination procedures of the World Heritage List has opened a path for the identification of the links between intangible and tangible heritage as well as cultural and natural heritage. Adopted in 1992 and inaugurated in 1993 with the inscription of Tongariro National Park in New Zealand¹⁰, the cultural landscapes approach has resulted as an interesting instrument for creating

⁸ Other aspects are the existence of a Representative List of the Intangible Cultural Heritage of Humanity, and a List of Intangible Cultural Heritage in Need of Urgent Safeguarding. In the first list, representative Intangible Cultural Heritage from each State Party is inventoried differing from the concept of 'World Heritage' and emphasizing the concept of 'cultural diversity'. The second list calls for international awareness about 'endangered' cultural expressions.

⁹ However, this tool is no yet properly applied, and nominations still tend to have a political connotation, more than a truly bottom-up approach to the recognition of ICH by the communities themselves.

¹⁰ Inscribed first as a mixed cultural and natural World Heritage site in 1990.

cooperation between the 1972 Convention and the 2003 Convention, whereby traditional knowledge and cultural manifestations form part of the shaping of environments and traditional land use systems of Outstanding Universal Value (hereafter referred as OUV) (UNESCO, World Heritage Committee 2011, para.9)¹¹. This classification reasserts the importance of cultural practices in the regeneration of heritage sites and the need to analyze these from an integrative perspective including the social aspects and the biological and ecological aspects implied in the relationship between humans and our environment. Moreover, it reinforces the necessity to respect local traditional knowledge as valid as scientific knowledge when dealing with environments where local communities have a long-dated reciprocal process of shaping and being shaped by these, such as the case of traditional cultural landscapes¹².

The concept of cultural landscapes defined in the context of the 1972 Convention as cultural properties that represent "the combined works of nature and of man and illustrative of the evolution of human society and settlement over time" (UNESCO, World Heritage Committee 2011, para.77), invites holistic studies of the complex relationship between environment, heritage, traditional and scientific knowledge. The relationships between natural and cultural aspects of the environment, need to be studied from a transdisciplinary approach that considers social sciences, natural sciences and local traditional knowledge (Morin 1977; Naveh 1995; Capra 1996; Capra 2004).

The purpose of this dissertation is to explore how the conservation practice is developed in two cultural landscapes of the World Heritage List within the interdisciplinary field of Heritage Studies (Harrison 2010, p.9; Chilton & Mason 2011; Albert 2013). The research question is how to conserve cultural landscapes sustainably, considering their natural and cultural values as well as tangible and intangible heritage, allowing change and respecting the continuity of local cultures.

To explore this question, I develop a comparative study of how landscape management is currently performed in exemplary mountain heritage sites. The study focuses on two parks that have been defined by experts as cultural landscapes, in the context of the 1972 Convention, because agropastoral traditions valuable for the sustainability of the mountain environment are conserved. In this thesis, I question whether these are actually persistent or sustainable.

¹¹ See Rössler's article "Enhancing global heritage conservation: links between the tangible and the intangible"

⁽Rössler 2003) to be informed about the work of UNESCO in the framework of the 1972 and 2003 Conventions and the possibilities for integrating both international instruments through comprehensive heritage conservation projects. ¹² Here I understand a 'traditional cultural landscape' as one where industrialization processes do not have a major role in their formation. See Antrop's article "Why landscapes of the past are important for the future" (Antrop 2005) to understand the concept of what is a traditional cultural landscape and how they represent strategies of landscape management that could be recovered and used in the present.

The countries where these sites are located represent asymmetric regions that have shared ties as colony and Metropole during three centuries¹³: Peru and Spain have developed intensive exchanges since the 16th century when the Kingdom of Spain invaded what at the time was the Inca land. The heart of what has been called the Inca State or Tawantinsuyo was the region of Cusco in the Southwest of modern Peru¹⁴.

The Inca Sacred Valley¹⁵ is known as the most fruitful valley of that region, where the Inca had its recreation states¹⁶. However, what is more important in this area is the large amount of archaeological heritage found, not only from Inca period, but also from earlier periods: these testify the long inhabitation of this cultural landscape (Bauer & Covey 2002). Among the archaeological complexes, the better preserved include the ceremonial centers that lie on the top of the mountains. Made of large stones and showing water canals and impressive stone terraces (commonly called "andenes"), these ceremonial centers were part of a system of adaptation to place, serving as calendar, astronomical observatories, laboratories and storehouses for seeds¹⁷.

Located in the Inca Sacred Valley, the Archaeological Park of Ollantaytambo is part of the transnational serial nomination $Qhapaq\ \tilde{N}an$ (Andean Road System) to the World Heritage List¹⁸ as a cultural landscape. Here, most of the Inca urban structure has been conserved and is still inhabited by native and mestizo people. Moreover, some native groups and peasant communities live in the highlands of this Park, conserving their traditions despite of being progressively integrated into the market system through tourism.

The Ordesa and Monte Perdido National Park is the second National Park in Spain, forming part of the transnational property of Pyrenees/Mont Perdu (France and Spain) in the World Heritage List since 1997. This area holds a tradition of transhumance that is

¹³ The Viceroyalty of Peru was created in November 20th, 1542 as a colony of the Kingdom of Spain. In July 28th 1821 the Independence was declared and the Republic of Peru was created.

¹⁴ See (Murra 1989; Rostworowski de Díez Canseco 1999) (Bauer & Covey 2002) for the discussion on the history and political, economical and social organizations of Inca people, and its relevance for it to be called Empire, State or Kingdom.

Kingdom.

15 The name "Inca Sacred Valley" is not the original name given by Inca people to this land, it is a name adopted in the 1950s for the purpose of tourism development and Inca identity re-affirmation. This name is popular and currently in use even in governmental projects.

currently in use even in governmental projects.

Archaeologists and architects have developed studies on the remains of Inca buildings in the area of Cusco and surroundings. See (Gasparini & Margolies 1980; Protzen 1993; Covey 2006) for the area of the Inca Sacred Valley and especially for their research in Ollantaytambo. They have interpreted these sites as estates, and I only refer at this official interpretation, because the original function of these constructions can only be hypotheses, and it is not the topic of discussion in this research.

¹⁷ A large list of scholars has developed interpretations on these findings. See (Zuidema 1964; Zuidema 1977; Milla Villena 1983; Earls 1989; Earls 1991) for interpretation of *andenes* as seedbanks and Inca structures as calendars.

This nomination is being worked since 2001. Because this nomination comprises the coordination of 6 countries, its was postponed to 2014. When writing this thesis, it was in the process of evaluation by the experts of ICOMOS. It has been recently inscribed to the World Heritage List (21.06.2014).

progressively disappearing. It has been valued for its geological formations of OUV and its importance as a biodiverse area where some native species are under the threat of extinction (ICOMOS & IUCN 1997).

The Aragonese Pyrenees, in which this Park is located, have been an important historical center for the Spanish culture during several periods of time. It has been a center for the resistance to the Muslim conquest and from where the "reconquest" of the Kingdom of Aragon (later Kingdom of Spain) was undertaken (Ubieto 1981). Catholic faith was preserved during the Moorish invasion and it had previously been an area where Celtic culture developed an important botanic knowledge (Villar Perez 2009)¹⁹. Moreover, during the Spanish Civil War (1936-1939) in the area of the Aragonese Pyrenees, the Resistance used the mountains as shelter and base (Jackson 2008). On the other hand, these mountains have been fundamental in the relations between France and Spain, serving as pilgrim, trade and escape routes.

In both regions, the mountains have played a major role in the construction of cultural and national identities. These are now contested areas due to their richness in cultural and natural resources, their potential for tourist activities and the presence of traditional cultures that represent the resistant past, which eventually interrupts development efforts. On the one hand, traditions can be seen as assets, when adopting them as cultural resources that can be exploited as commodities through tourism. However, at the same time, they can also be seen as deficiencies, when trying to develop and modernize the use of the territory in which these traditional cultures live.

The instrument created for protecting cultural and natural heritage is the establishment of protected areas in their different models, including 'national park' and 'archaeological park'. On the one hand, the conservation of cultural assets from the past is the main goal in an archaeological park; and, on the other hand, the conservation of natural assets is the priority in a national park. These management models not only separate nature from culture, but also they separate people from their habitats, restricting their access and banishing their traditional ways of managing their land and resources (Lewis 1996; Escobar 2006; Andrew-Essien & Bisong 2009). Even though these management systems are being reconsidered (Rössler 2012), the criteria used for establishing protected areas do not necessarily fit within the cultural spaces in which they are established. They are implemented as conservation strategies external to the communities traditionally inhabiting these areas. Consequently, conflicts of interests between the state and the local communities break out, opposing the protection of heritage to the

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¹⁹ Unfortunately, most of this knowledge has been lost during the Christianization of the Iberian Peninsula.

customary access to resources. Furthermore, these conflicts have been enlarged to conflicts between states and international organizations dedicated to protecting nature and culture (e.g. WWF, UNESCO, IUCN, Greenpeace, among others).

1.2 Justification for this study

The increasing use of the categories of cultural landscapes in the nominations to the World Heritage list (90 inscriptions in 21 years) calls for reflections on how they impact on the modern foundations of the heritage conservation practice. In involving natural and cultural heritage, as well as implying the presence of intangible cultural heritage, the conservation management of cultural landscapes has become complex. The lack of a specific model for these categories has prompted the need to question the effectiveness of the models created at the end of 19th and beginning of the 20th century, including how far these models actually contribute to the comprehensive conservation of heritage.

Mountain regions have been selected for this study because they conserve particular cultures and its testimonies due to their remoteness and disintegration from modern urban development (Mathieu 2011). Furthermore, mountain systems need special attention because they play an important role for human inhabitation. While only 10% of the world population currently live in mountain areas 40% of the world population live in adjacent watershed areas below (United Nations 1993). This means that half of the human population is affected by mountain regions' environmental degradation.

Agenda 21, the action plan developed during the United Nations Conference on Human Environment and Development held in Rio de Janeiro, Brazil in 1992 (known as the Earth Summit), contains one chapter called "Managing fragile ecosystems: Sustainable Mountain Development" (United Nations 1993, chap.13) devoted to mountain environments. It stresses their role in the global ecosystem and the urgent actions needed for their conservation:

As a major ecosystem representing the complex and interrelated ecology of our planet, mountain regions contribute vitally to the survival of our global ecosystem. (United Nations 1993, p.119)

Moreover, identity and resources management conflicts are arising in these significant mountain environments. In both case studies, there is a dominant culture, ruling through the state, and the culture that inhabits the mountains, as a subaltern culture, under this rule. In the case of the Peruvian Andes, it is clear that different cultures are confronted. The Andean

Quechua culture has withstood five hundred years of subjugation to the Creole culture, inheritor of the Spanish colonial system, which maintains a disdain of native and *mestizo* cultures. In the case of the Aragonese Pyrenees, the confrontation is between the rural and urban cultures, reflecting a generalized case of confrontation spread throughout the Western world. In both situations, subaltern cultures have developed knowledge, promoting diversity that is essential for the adaptation to mountain ecosystems. Nonetheless, this knowledge is constantly being eroded by external economic and political influences.

Paradoxically, in the context of modern conservation practice, local communities have become key actors in the processes of heritage safeguarding. This has been stated in the "5 Cs" strategy promoted since 2007 in the context of the 1972 Convention²⁰. The "5 Cs" stand for credibility, conservation, capacity building, communication, and community (World Heritage Committee 2002). In the case of cultural landscapes, the participation and so-called "involvement" of the local communities have been pointed critical for the sustainability of heritage protection and conservation (UNESCO, ICOMOS 2006). Although projects are being developed to reinforce this through capacity building and raising awareness, it remains unclear how local communities can be integrated in conservation, given that it is a practice that does not result from their everyday activities. The involvement of local communities still results from ideas of integration of locals in the modern conservation practices and not necessarily based on a bottom-up approach (Smith 2006, p.44).

1.3 Objectives, research questions and hypotheses

Fundamentally, my objective is to question the concept of *conservation*, as it has been conceived by the modern practice, in relation to its appropriateness for sites such as cultural landscapes. I start with the assumption that, in order to be effective and viable, the conservation practice needs to be redefined for its application in the management of cultural landscapes. The *will to conserve*, which takes its roots in the Modern Classic Western Paradigm - MCWP²¹ (Berque 2008), objectifies past and nature, extracting them from their historical and environmental contexts, sometimes even isolating them in order to protect them from disappearing. This objectification contradicts the way in which these cultural landscapes have been produced by the people that inhabit them. Accordingly, the *conservation* of cultural

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²⁰ The first "4 Cs" were stated in the Budapest Declaration of 2002 and later on, in 2007, the fifth C for "community" was added.

²¹Augustin Berque, French geographer develops a critique to the *Paradigme Occidentale Moderne Classique* – POMC (Modern Classic Western Paradigm) based on the duality between subject and object conceptualized by Descartes, that implies the division of individual and environment, spirit and body, culture and nature, singular and universal, life and death, and calls for its surpass proposing the theory of *médiance* (Berque 2001).

landscapes involving local communities cannot be put into practice if the concept is not first reflected upon.

The dualist ontology upon which the concept of *conservation* relies has been naturalized across the last two centuries, leading to the primacy of the city as the symbol of civilization and progress. Development perspectives have spread the urban way of life as a model. However, the expansion of this model to the whole planet is unsustainable. This thesis reflects an attempt to demonstrate how the inevitable and ever-increasing loss of heritage, in all its forms, is connected to the expansion of this model. The diversity of cultural landscapes represents alternatives to this hegemonic urban model. Although political systems intensify the development of initiatives for conserving heritage, in its very essence, they imply its transformation.

In this context, some important questions arise:

- 1) How could something as dynamic as a cultural landscape, which is changing constantly due to seasonality, climatic phenomena, human management, as well as by time-related decay and cultural change, be conserved?
- 2) What are the values of a cultural landscape that need to be protected in order to allow its conservation or regeneration?
- 3) How do the models of protection dialogue with local communities?
- 4) Can local communities actually be integrated in 'official' conservation efforts?

In order to develop these questions, I examine the change in cultural landscapes and their values to be conserved by analyzing the landscape management process in these sites. My assumption is that different understandings of landscape can be found in this process, where different actors intervene. These differing understandings lead to different value systems. My hypothesis is that by examining these understandings and their value systems the change can be understood, while common grounds for redefining *conservation* can be found. On the one hand, the study of landscape management shows the perception and understanding of the landscape of these different actors; and on the other hand, it summarizes the practices undertaken by these different actors towards environment, which ultimately lead to the physical reality of the cultural landscape.

In terms of studying the landscape management in these sites, I have defined three sorts of practices based upon the three main groups of intervening actors: the practices of the local communities, the practices of the state and the practices of the visitors that influence the former

two groups. Moreover, there is also the participation of tourism industry, NGOs and international organizations influencing these practices. What I want to define in this investigation is the pattern of these actors' actions on the landscape.

I postulate that the approach to environment and landscape differs for each group of actors. The perception of the environment and landscape proper to local communities – those who inhabit these specific landscapes – might differ from the perception of external agents (the state and visitors). These perceptions need to be understood in order to apprehend how heritage is being valued. Each group has an understanding of the landscape that influences their practices. If these three visions cannot be first recognized and compromised, the purpose of conservation of the cultural landscape would be unsuccessful.

Here, I suggest defining the "baseline" (Ingold 1987) of what has been set as the cultural landscape to be conserved according to the geographical perspective that informs the definition used in the context of the 1972 Convention. This baseline is the result of the work of the people related to the management of the environment in their everyday life: the agropastoralists.

Agropastoralism²² is a mixed practice characterized by agricultural and grazing activities. Essentially, the agricultural practice is based on the planned performance of certain activities that would increase plant food yields, including the sowing of seeds, clearing of forests, weeding, diverting and channeling water and fertilizing the soils²³. On the other hand, pastoralism refers to the practice of herding domestic animals into pastureland in order to feed them, rather than bringing food to them. Agropastoralists combine both practices as means of subsistence. These mixed activities might lead to the practice of transhumance, as is in the case of agropastoralists in the area of the Pyrenees. Transhumance refers to the seasonal movement of the herders with their cattle in order to find suitable grazing lands. This movement is usually between fixed settlements, households and pastures that are used by the agropastoralists each year.

In both sites, agropastoralism has shaped the cultural landscapes during centuries of

²² "Agropastoralism describes the coexistence of both agricultural and grazing activities, although there may be different degrees of integration of these activities, with specific consequences for land use. An economic definition is that agropastoralists derive more than 50% of household gross revenue from farming and 10-50% from livestock (*Swift, ibid*)." (IUCN-WISP, Definitions.)

⁽Swift, ibid)." (IUCN-WISP, Definitions.)

23 Definitions taken from IUCN and "Making a living: agriculture, pastoralism, and agropastoralism" (Bruce, Owen. 2007).

continuous practice (at least 1,000 years²⁴). While the main activity in the Andean mountains has been agriculture, pasturing is also an important activity, especially at higher altitudes (at around 3,500 m.a.s.l. and more), with most people practicing both. On the other hand, the main activity has been pasturing in the case of the Pyrenees. Nonetheless, agriculture has also played an important role in shaping the landscape, even though it is an activity increasingly less practiced in the region studied. Both traditions are composed of cultural practices that have been performed as a mode of production of space (Lefebvre 1974) and have set a "baseline of permanence" (Ingold 1987) for these cultural landscapes. This "baseline" is characterized by a certain land use that is generally composed of patches²⁵ of crops, pastures, forest and villages. However, these cultural landscapes are undergoing processes leading to the change of this baseline. Nevertheless, this baseline has set the values for which these heritage sites are protected.

1.4 Innovation of the research

This research contributes to the development of the field of heritage studies in the area of cultural landscapes in three aspects. First, it points at the issues related to the management of landscape and questioning the appropiateness of the concept of conservation by setting a comparative analysis between two different models of protection. This helps to make evident the current problems of patrimonialization, focused on static approaches to tangible heritage based on the culture/nature divide. Moreover, this comparison extends to two regions that have not been compared in this aspect and where traditions have been connected through the process of colonization.

Second, this thesis opens an interdisciplinary perspective by including and comparing definitions of the concept of landscape from different scientific backgrounds. Starting from the approach of geography, which informs the definition used in the Operational Guidelines of the 1972 Convention (hereafter referred as OG), it is analyzed from different epistemologies. In order to build interdisciplinary studies as required for the field of heritage, it is necessary to understand different approaches in order to generate dialogue. Hence, with methods that are qualitative and informed by a constructivist approach, connected to anthropology and sociology, this research is also informed by environmental sciences discussions, especially in the field of ecology.

²⁴ According to researchers of the IPE (Instituto Pirenaico de Ecología - Pyrenean Institue of Ecology), agropastoralism has prevailed in these mountains for at least 1,000 years and in the case of the Andes, archaeological and anthropological research show at least 5,000 years of agropastoralism in these mountains (e.g. the research on Caral, Peru by archaeologist Ruth Shady (Shady Solís 1997)).

25 Term use in landscape ecology as part of the structure of a landscape.

Finally, this research collects primary data that records a precise moment in the evolution of these landscapes. This data can be later used for further research in the change of landscapes and the impacts of the conservation systems.

1.5 Structure of the thesis

This dissertation contains ten chapters, including the Introduction (Chapter 1) and conclusions (Chapter 10). The first four chapters discuss the grounds for the development of the research, while the last five chapters present the analysis, results and discussion.

In Chapter 1, I present the statement of the problem, the justification for this study, the innovation of the research, as well as the objectives, research questions and hypotheses. Cultural landscapes are paradigmatic in the context of heritage studies, because they illustrate the challenges of the modern conservation practice: adaptation, change, sustainability and comprehensive management of all types of heritage. The comparative analysis of the landscape management in two heritage sites aims to examine their models of protection.

In Chapter 2, I discuss the origins of the modern conservation practice in which the models of protection studied have been founded. I explain how the development of modern conservation takes its roots in the Enlightenment period, based on the division between the protection of the natural heritage and cultural heritage as two separate movements. Cultural landscapes are representative of the trend to develop comprehensive systems where the conservation of nature and the conservation of the past are reconciled.

In Chapter 3, I elaborate upon the conceptual framework of the study, arguing that the concept of landscape entails epistemological problems when intending to study both its biophysical (natural heritage) and socio-cultural (cultural heritage) aspects. The origins of the concept are revised, including how the term is used differently depending on the disciplinary perspective. I present the model used for the analysis of the emergent landscape management as a process in which three groups of actors result as the most influential in the landscape change. This holds the aim of demonstrating that each group obeys a different epistemological understanding of landscape, and that the emergent landscapes in these heritage sites are produced through the interaction between these different epistemologies and the practices derived from them.

In Chapter 4, I explain the methodological approach, methods and materials used in this research. The research follows a qualitative inquiry whose aim is to discover the understanding, practices and value systems used by the three groups of actors towards the landscape.

Chapter 5 establishes a bridge between the theoretical and methodological grounds of the research and the analysis and results. First, I present the criteria under which these sites have been selected to be World Heritage Cultural Landscapes. Second, I introduce the concepts of landscape as container, habitat and picture, as the three landscapes of the three groups of actors in the emergent landscape management. Third, I present the rationale used for the comparative analysis.

In Chapter 6, I describe the landscape of the state based on the analysis of the documents that regulate the management of these protected areas. In Chapter 7, I describe the landscape of agropastoralists through the analysis of interviews and observation. In Chapter 8, I describe the landscape of the visitors based on interviews and observation.

In Chapter 9, I present the interactions and synergies between these three landscapes for each site. I analyze how these produce the emergent landscapes that differ from the baseline under protection. Subsequently, I present the conflicts confronting development and conservation, as well as how they directly relate to the emergent landscape management. Finally, I introduce emergent key stakeholders that connect the three landscapes, which is instrumental for the future of the conservation practice.

Finally, in Chapter 10, I present the conclusions. First, I summarize the findings and results, before discussing the sustainability or unviability of the conservation of cultural landscapes, suggesting new questions for further research. Finally, I develop recommendations for the evolution of the conservation practice in the context of global change.

2 Cultural landscapes: in between the conservation of the past and the conservation of nature

There is no unique body of literature focused on heritage and the topic of cultural landscapes, due to the various disciplines treating these themes. Therefore, it has been necessary to revise different literatures from different disciplines dealing with the topic of heritage, heritage conservation, as well as the specific case of cultural landscapes. The most abundant literature referring to cultural landscapes is related to heritage policy. Significant contributions have been made in the framework of UNESCO Conventions, UNESCO Expert Meetings, as well as a variety of reports, scientific articles, magazines and books having been published on this topic in recent years, focusing on the management of heritage sites²⁶. In this chapter, I provide the background of the development of the modern conservation practice, including how its evolution has advanced to the interest of cultural landscapes as a significant category for heritage protection.

2.1 The modern conservation practices

The development of the conservation practice is inextricably related to modernization and industrialization processes (Logan 2001). It appears that in modern society, what is being destroyed becomes appreciated, or what is in the way of destruction or disappearance raises its value. Simultaneously, traditional ways of life are seen as not profitable, and therefore are progressively eradicated. Nonetheless, these traditional ways of life are what produced the cultural heritage and cultural landscapes that have become valorized. Inevitably, culture and cultural landscapes are in constant processes of change and unlimited permanence cannot be expected. However, the attachment and nostalgia with the past has been a permanent feeling in the development of modernization, generating a *will to conserve* on the side of the progress ideals.

²⁶ Some of important publications on World Heritage Cultural Landscapes and management issues are the World Heritage Papers series n°6, 7 and 26. (Fowler 2003; UNESCO 2003b; Mitchell et al. 2009), "Managing cultural landscapes" edited by Ken Taylor and Jane Lennon (Taylor & Lennon 2012), "Resilience and the Cultural Landscape: Understanding and Managing Change in Human-Shaped Environments" edited by Tobias Plieninger and Claudia Bieling (Plieninger & Bieling 2012), "World Heritage Cultural Landscapes" edited by Luengo and Rössler (Luengo & Rössler 2012) among many others.

The will to conserve has had two different developments in the context of heritage, related to its division into cultural and natural in the foundations of the MCWP. On the one hand, conservation has been associated with the idea of avoiding the decay and restoration of old architectural monuments; and on the other hand, with the control of the use of natural resources and the restoration of damaged ecosystems.

Accordingly, the conservation practice has evolved following the culture/nature divide, triggering the development of cultural and natural heritage as separated practices of conservation, only reconciled in the 1972 Convention. Nonetheless, the 1972 Convention preserves the separation that only converges in the properties declared mixed cultural and natural heritage and now in some of the sites inscribed in the category of cultural landscapes. Summed to the work of UNESCO MAB Program²⁷, these barriers are being revised in order to create new visions and instruments of conservation that would conceive the conservation of cultural and natural heritage in more integrated processes.

The values prioritized by these two lines of practice, the conservation of past and the conservation of nature, are "authenticity" and "integrity", both legitimized in the OG. Nonetheless these values only represent the state practice of conservation. However, as in any other heritage site, it is possible to find diverse set of values in a cultural landscape. In order to conserve democratically, it is necessary to identify the different set of values in the declared cultural landscape. Conservation subsequently needs to be conceived as a practice that allows the regeneration of these values.

However, there are epistemological and theoretical obstacles, set by modern science, that need to be reviewed in order to truly achieve a new approach to conservation that accepts impending change and calls for the interdependence of past and nature.

First, 'landscape' has been studied from different perspectives, depending on whether the focus lies on its biophysical elements or the human components and perception of it. This brings us immediately to the question of the location of the stand viewpoint for studying the conservation of landscape: from one perspective, the focus is on natural heritage; from the other, the focus is on cultural heritage. The separated study of landscape has dissected the links between its cultural and natural components. Moreover, the dissection of these links also has consequences in the distinction between tangible and intangible heritage.

²⁷ UNESCO created in 1971 the Program 'Man and the Biosphere'. This program marks a change from the traditional concept of conservation of natural heritage and ecosystems that supported the isolation of valuable natural landscapes by restricting the access of humans into protected areas, into a concept of conservation where the presence of human communities is promoted as an essential element for the maintenance of valuable resources.

Second, since the foundations of the concepts of *conservation* and *heritage*, as used currently, are inheritances from a Western tradition, they do not fit in every cultural and geographical context.²⁸ This has become more evident through the ratification and subsequent implementation of the 1972 Convention by non-Western states.

The development of the modern understanding of the *conservation of the past* is rooted in Roman civilization, European thought and the Age of Enlightenment (Jokilehto 1999). The development of the *conservation of nature* is rooted in the reflections about the consequences of the Industrial Revolution in Europe and North America in the environment (Holdgate 1996). Nevertheless, alternative visions over *conservation* or what *conservation* could be and that have not been part of these hegemonic discourses, i.e. Enlightenment, Industrial Revolution, Modernity, have existed and still exist in different cultural and geographical contexts.

In the case of the mountain regions, alternative worldviews have developed over time, with these worldviews of mountain peoples having resulted from an autonomous perception over their environment. They are based on a holistic approach towards the inhabition of a place, which implies the *conservation* of what could be understood as cultural and natural heritages, but not as separated and not as an independent issue from their relationship to their environment. They represent a continuous *regeneration* of these ties. However, these worldviews have not been preserved as 'pure' and independent, and have been feed and feedback by cultural exchanges²⁹, modern thought and the relations between cities and rural areas.

Nonetheless, how is *conservation* commonly understood? According to the New Oxford Dictionary of American English, *conservation* means:

The action of conserving something, in particular

- preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, and wildlife.
- preservation, repair, and prevention of deterioration of archaeological, historical, and cultural sites and artifacts.
- prevention of excessive or wasteful use of a resource.

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²⁸ These two concepts –landscape and heritage - are discussed in Chapter 3.

²⁹ In the case of Spain, the Morish invasion of the peninsula that lasted around 800 years has resulted in a strong influence of Arab culture in Spanish culture. In the case of Peru, the Spanish colonization that lasted for almost 300 years resulted in the synchretization of Andean and peninsular traditions.

• Physics the principle by which the total value of a physical quantity (such as energy, mass, or linear or angular momentum) remains constant in a system. (McKean 2005)

From the first and second definitions, the use of the concepts *preservation* and *conservation* seem to be alike, although they were differentiated in both branches of heritage conservation. Essentially, the difference lies in a different vision of how to treat the past understood as History and how to treat Nature.

The third definition is more linked to the approach of environmental management to conservation. The concept of "resource" brings the idea of a utilitarian vision over the environment, stressing its objectification.

Preservation advocates for the protection of historical evidence –e.g. monuments, antiquities, objects, etc.- and nature – translated in the implementation of closed areas where to preserve certain species and ecosystems. In the case of nature, this would mean keeping an "ideal" state where nature has not been affected by human hand. For historical *preservation*, material evidence of the past needs to be protected from decay and natural evolution in order to prevent its loss.

On the other hand, *conservation* is associated with a vision whereby intervention is allowed. In the case of cultural heritage, historical structures can be restored and re-used with the corresponding maintenance. In the case of natural heritage, the guideline would involve managing natural resources in a sustainable way, allowing development. This means the intelligent use of resources by human communities, considering their cycles of renewability.

In this thesis I am not interested in discussing the differences between *preservation* and *conservation*, because it has been treated by several scholars already (Callicott et al. 1999); moreover places untouched by humans are extremely rare, and the strict separation of humans and natural reserves has been proved as not always useful in terms of protection of species and biodiversity³⁰. For the case of historical preservation or conservation, this was also largely discussed during the 18th and 19th centurias, and the focus of this work is not placed in the conservation of architectural structures but in a whole system defined as cultural landscape. Therefore, the focus stresses the developments of the *conservation of the past* and *consevation of nature* as separated practices, as well as the issues this separation entails. My objective is to understand how this division affects the conservation of cultural landscapes.

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³⁰ See the works of IUCN on the topic, especially discussion of Mc Neely, IUCN, and protected areas (Mc Neely, Jeffrey A. & Ness, Gayl 1996).

Both strategies of conservation take root in contradictory perceptions over past and nature. The *conservation of the past* has developed three problems: a "true" History vs. the diversity of narratives of a place, the linear narration of the past vs. the cyclical understanding of Time, and the monumentalization of memory vs. the intangibility of memory. The *conservation of nature* has developed two problems: the fundamental contradiction in the ethics of inhabitation, and the degrees of intervention vs. the untouchability of nature.

First there is the question of the vision of history, the 'official' version vs. folklore, myths and legends. What is the truth of a place, community or nation? How are these intertwined or confronted? Second, there is the question of understanding time, as linear or cyclical. Western thought has evolved from one to the other. Modern History as a science, is the representation of a vision that states a linear idea of time implying periods with a "beginning" and "end", celebrating dates and looking for truth from an objective perception of events. Cyclical visions of time are still present in traditional and rural cultures. The interest is not in one truth and detailed specific narrative, but rather in the values that are being passed through the regeneration of the narrative referring to legends or myths. Accordingly, in one case, the aim of conservation would focus on documents, archives, written sources and specific monuments, archaeological remains and architectural buildings that hold an archival value. From there, following scientific methods, the "truth" could be found. This vision prioritizes tangible heritage. In the second case, the aim would focus on narrative structures to be conserved through their regeneration. Here, what is valuable is the know-how, which implies a whole worldview. This vision prioritizes the *intangible heritage*. Both problems are questioned by critical approaches to the construction of heritage (Non-Western, post-modern and post-colonial theories):

Non-Western conceptualizations of heritage have begun to question the hegemonic dominance of the idea of materiality of heritage, and have come to play an important role in questioning received ideas about it. (Smith 2006, p.54)

The third point is the intangibility of memory. The conservation of monuments and architecture results as an externalization of memory, which will refer to the collective memory. The intention to conserve monuments would then involve turning memory tangible and visible, to construct a group or collective memory. In the case of oral cultures, the collective memory is conserved by its regeneration through the continuous practice of storytelling. Then, in the context of the modern practice of conservation, the problem is who decides which memories

should be conserved. There exists a search for one interpretation that would focus on specific tangible elements that can narrate this perspective over the past. According to Smith (2006),

The monument became 'a witness to history and a work of art' that took on a commemorative role in triggering certain public memories and values, and is a concept that has come to embody a particular European vision of the world. (Smith 2006, p.19)

This construction of the past as heritage and a historical narrative through monumentalization is related to the process of nation-states building. As Smith continues,

The idea that architectural monuments were also something that could principally be appreciated by the educated is also embedded in this conservation philosophy – as it was the professional whose responsibility it was to care for and pass on the aesthetic values that lie at the heart of what it meant to be a 'Modern European'. More specifically, it was only the well-educated who had the necessary cultural literacy to understand grand social and national narratives that were inherent in the fabric of such monuments. (Ibid., p. 21)

An "official" discourse has been prioritized by the elites in power. The historical discourse has been used to legitimize the nation in power. Accordingly, cultural heritage is composed of symbols that promote certain values associated with a power group. Groups in power have created their own criteria to select what should be protected and take as "authentic" because it represents the values that this specific group intends to promote for its continuity in power. This not only touches the case of tangible heritage but also intangible, since some traditional knowledge and cultural practices would be favored as representatives of one nation over others:

In contemporary society the power to control heritage is the power to remake the past in a way that facilitates certain actions or viewpoints in the present. (Harrison 2010, p.154)

Conservation of nature brings also complex issues. The strategies of conservation of nature have emphasized on a utilitarian vision of resources and nature, bringing human needs to the front while leaving other aspects of nature and ecosystems in second place. However, human needs would be defined from a perspective external to the environment. The needs of local communities in the area would not necessarily be considered in the conception of a national park or politics for the conservation of the environment. This vision has only recently changed due to the increasing claims from communities inhabiting the proximities of national parks and other protected natural areas (Disko 2012).

The question of the *conservation of nature* subsequently brings two points to discussion. One is the issue of how to relate to environment, that is an ethical problem, while the second issue is how far humans can intervene in nature and to what extent this is positive or negative for sustainability. In terms of the planet, it is clear that, in whichever position, the planet would follow certain processes that are more-or-less natural, if we understand "natural" as what has no human intervention. With or without human communities, planet Earth will continue its process of transformation, as has been the case for around 4,470 million years.

The development of the *conservation of nature* has relied on the constructed idea of nature as an entity containing humans. This understanding has direct consequences in how human intervenes the environment, namely how the resources of nature are used. Three main approaches to environmental ethics support the conservation of nature from different perspectives: anthropocentrism, ecocentrism and biocentrism. The anthropocentric perspective would focus on the conservation of natural resources as they are useful for humans. The value system is centered on humans needs (recreational, aesthetic, economic, etc.). On the other hand, ecocentrism would focus on the functioning of the ecosystem, by not prioritizing human needs but rather the balance in the system, in order that it is functional. Although this is not a perspective whereby humans are in the center and other living and non-living organisms are considered as valuable as humans, it is based on a scientific, and therefore human, perception over the environment. Finally, the biocentrism perspective would also give same value to all living and non-living beings, albeit not focusing on their importance in the ecosystem as a whole, but rather on the equal value of every individual of any species. The conservation of nature has been guided by anthropocentrism in its first conservation attempts. However, it has since turned into ecocentrism and biocentrism, especially since the 1970s with the development of ecological activism. On the other hand, other non-Western cultures have developed econcentric or biocentric approaches in their environmental ethics, and they have enriched the global ethical discussion concerning the relationship between humans and the environment. Nevertheless, whichever approach is taken, they will all be results of the human perception, since all such approaches rely on a discussion among human communities.

Either one or the other, cultural or natural, heritage is in constant construction and change; therefore, it is impossible to keep it in an unaffected manner. However, the *will to conserve* intends to go against the disappearing fate of heritage. *Conservation* intends to stop the process of degradation and the eventual disappearing of heritage, although the awareness of the need of conservation only appears when heritage is already disappearing. This results in a paradox when the ideas of progress and change are part of the foundations of modern society

and deeply influence people's ways of life, as well as directly or indirectly affecting the relationship between humans and their environments. Is the aim of the heritage conservation practice to fight this principle of change by selecting and maintaining some part of life independent from this process? For this, it is necessary to state what is heritage and how it relates to the people who are holders of the heritage. This is discussed in Chapter 3. In the next section, I discuss how the development of these two branches of conservation has resulted in the current classifications of heritage.

2.2 Classifying heritage: culture and nature, tangible and intangible

The conceptualization of heritage has been focused on a classification based on the traditional categories of culture and nature, developed in philosophy and sciences. These categories originating from the development of Western sciences have become paradigmatic in the way of representing the world. As a result of the separation between humans and nature, human seen as subject and nature as object, the protection of artificial goods and man-made structures has been classified as cultural heritage while what has been understood as natural environments, not affected by humans, have been classified as natural heritage.

The protection of heritage has been developed independently from locality to locality, since remote times. According to Jokilehto (1999), efforts to protect cultural heritage date back at least to the time of Roman emperor Theodoric the Great around the 5th century. However, in terms of the *conservation of nature*, it could be said that legal protection was only developed in Western civilization as a result of Industrialization and the late awareness of its effects in the environment.³¹

Accordingly, the practice of heritage protection is founded on the objectification of both culture and nature. Nature objectified needs to be protected from pollution, over-exploitation and exhaustion by humans. Culture objectified becomes its artifacts: buildings, objects, enlarged to knowledge, know-how, traditional techniques, which need to be protected from the harshness of time and societies' evolution. Therefore, the *conservation of nature* and the *conservation of the past* are means that objectify abstract constructs that cannot be universally defined. However, Western thought has intended to establish a universal concept of heritage.

these could be renewed.

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³¹ Nonetheless, it has already been researched how different cultures outside Europe, and even in the rural contexts of Europe, have developed land use systems and worldviews that promote the conservation of natural resources in different ways (e.g. taboos and sacralization of specific places), controlling their use and exploitation in a manner that

According to Logan:

the concept of 'heritage', or a concern for the past, is said to have emerged in the eighteenth and nineteenth centuries from a raft of ideas and ideologies that are referred to as 'modernity'. (Logan 2001, p.52)

Conservation is inextricably linked to modernity, and consequently it takes its roots in this specific context and worldview. Modernity marks the change from traditional cultures towards industrialization, urbanization and capitalism. Although the idea of protecting and preserving inheritance and cultural significant objects has a much longer history, the current conceptions used for defining "heritage" were developed in the 18th and 19th centuries, and further consolidated in the 20th century, when several legal instruments were created nationally and internationally.

Before becoming a worldwide movement, as reflected in the 1972 Convention, the ideas of conserving cultural heritage started to be implemented in national legislations. The modern protection of cultural heritage officially started in England with the "Ancient Monuments Protection Act" of 1882 (Logan 2001).

During the 18th and 19th centuries, there was a rediscovery of Greek and Roman art and architecture, considered the heritage of the entire Western civilization, understood as a "universal" culture. Greece and Rome were perceived as the foundations of civilization; therefore, the representations of the ideal for the new order of the world that was overcoming feudalism and wars, into a new configuration of nation-states, symbolically marked by the French Revolution. Subsequently, Greece and Rome became the representations of democracy and civilization against barbarism. At this point, the discourses of progress and development that will play an important role in the management of the mountain regions with which I deal have taken their roots:

The inclusive and universal nature of the concept of civilization meant that anybody, be it a nation or a single individual, could carry the seed of civilization inside and the more civilized had to see that all obstacles for this seed to flourish were removed. This idea of an unfolding of inherent traits, itself the original meaning of developing (from the French *desvelopper* = unfold), was characteristic of the age of Enlightenment. (Lepenies 2008, p.219)

Later in the 20th century, several international documents concerning the protection of

cultural heritage were created, such as the Athens Charter³², Venice Charter³³, the 1972 Convention, the Nara Document on Authenticity³⁴, and the 2003 Convention. Notable national instruments include the Burra Charter of Australia (1979/2009), the Canadian Register of Historic Places, the Law for the protection Cultural Properties of Japan (1950), the UK National Monuments Record and English Heritage (1983), and the National Register of Historic Places of the United States (1966). These have been models for later modifications and implementations of new approaches to international documents.

The evolution of the paradigms in the *conservation of the past* are found in these documents, where we can detect how cultural heritage initially referred to archaeological remains, emblematically represented by Greek and Roman inheritance, largely consisting in monuments and statues (Athens Charter, 1932 and Venice Charter, 1964). The main concern lay in the restoration of "historical monuments" (ICOMOS 1965), including which methods would be the most effective and ethically correct for maintaining paintings, sculptures and buildings.

The "Carta del Restauro" known as the Athens Charter, established seven main resolutions that formed the grounds for the future 1972 Convention. It established the need for international organizations to take care of heritage, restoration and an international community of experts allowing the transfer of technologies. Moreover, it called for a legislation to be developed at the national level in all countries, as well as the need to define the modern techniques and material that could be used for restoration. Furthermore, it also set out the need for a zoning (which was later established as a system of core areas and buffer zones) necessary for the conservation of sites, divided into "historical sites" and "surrounding areas" (ICIC 1932). The Venice Charter, signed thirty-two years later, followed similar debates yet pointed out the idea of recognizing ancient monuments as a "common heritage", and introduced the importance of "authenticity" as the major value of historical evidence. In article 1 of the Venice Charter, it is stated that,

The concept of a historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development or a historic event. This applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing time. (ICOMOS 1965)

³⁴ The Nara Document on Authenticity was signed in 1994.

³² The Athens Charter was signed in 1932.

³³ The Venice Charter was signed in 1964.

Here, ideas of conservation start to be expanded from art and architectural works to "urban or rural setting", as well as from "great works of art" to "more modest works of the past", considering both as significant, and the latter as having acquired their legitimization as heritage due to their historical value.

However, most importantly, both documents call for an international consensus in questions of what and how to conserve. The origins of these concerns are centered in a Western European tradition, mainly discussed in Italy, France, England and Germany (as the former Prussian Empire). However, with the increasing ratification of the 1972 Convention by non-Western nations, this discussion later moved from the Western-centered perspective towards the inclusion of Eastern visions, bringing up the conflicts encountered in the strict conservation principles conceived in Europe, based upon "authenticity" as the main value for historical evidence.

"The Nara Document on Authenticity" signed in 1994, brought the necessity to expand ideas of heritage, as well as linking tangible heritage to intangible heritage. The most known example illustrating this Eastern vision towards heritage is the case of the "Ise Jingu" in Japan. This complex of shrines is entirely rebuilt every 20 years, following the shintoist tradition. The layout and design are maintained, although the materials are renewed – mainly wood – with each piece recreated in the same manner that was elaborated around 1,500 years ago. In the shintoist vision, it is not important to preserve and maintain the same piece of wood; rather, the importance relies on the conservation of the know-how – techniques of building – through its continuous practice. Here, tangible heritage becomes an instrument for tradition to be passed on from generation to generation.

Japan is said to be the first country to pass a legal protection for the Intangible Cultural Heritage:

Such protection is referred to: "art and skill employed in drama, music and applied arts, and other intangible cultural products, which possess a high historical and/or artistic value in and for this country". The same law also defines the concept of 'folk-cultural properties', consisting of: "manners and customs related to food, clothing and housing, to occupations, religious faiths, festivals, etc., to folk-entertainments and clothes, implements, houses and other objects used therefore, which are indispensable for the understanding of changes in our people's modes of life". (Japanese Law for Protection of Cultural Properties, 1998, Chapter 1) (Jokilehto 2006, pp.5–6)

Then, in 2003, the Convention for the Safeguarding of Intangible Cultural Heritage was passed. From this, it is possible to perceive that changes in the focus of *conservation of the past* have been updated to a *conservation of the presence of the past in the present*, reflected in the traditional knowledge, which has mostly been conserved in Eastern cultures, aboriginal and native cultures in different continents that have a colonial past related to the European Empires (Australia, South America, South-East Asia.).

Like Jokilehto states, "all heritage of humanity has its intangible dimension, whether a work of art, a historic building, a historic town, or a cultural landscape." (Jokilehto 2006, p.5)

Although ICH is implied in every cultural manifestation and therefore in every tangible cultural heritage, there has been a need to point out its importance, since the efforts for the *conservation of the past* had been focused on material heritage. ICH has been defined in the article 2 of the 2003 Convention as:

the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. (UNESCO 2003a)

According to the 2003 Convention, ICH is manifested in the following domains: (a) oral traditions and expressions, including language as a vehicle for the intangible cultural heritage; (b) performing arts; (c) social practices, rituals and festive events; (d) knowledge and practices concerning nature and the universe; (e) traditional craftsmanship (UNESCO 2010). All such manifestations correspond to a knowledge that has been constantly regenerated in everyday life. However, ICH calls for alternative narratives to the nation-states historical narratives. It opens the understanding of heritage to native and indigenous groups, minorities and other groups that are not necessarily identified with the hegemonic interpretation of the past, generally promoted by nation-states.

In terms of this Convention,

'Safeguarding' means measures aimed at ensuring the viability of the intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and non-formal education, as well as the revitalization of the various aspects of such heritage. (UNESCO 2010)

The discussion between *conserving* and *safeguarding* has again come into question because ICH cannot be conserved or restored like an architectural building. *Conservation* is understood as referring to material heritage, hence the use of safeguarding instead for the immaterial. The concept of safeguarding implies an active process in hands of the holders of the ICH.

The discussion of ICH returns the discussion to people and protected areas. Is the presence of human communities positive or negative? Since the ICH also considers "knowledge and practices concerning nature and the environment", the importance of the people who traditionally inhabit certain areas is crucial for their sustainability. However, this was not the vision of the movements that promoted the *conservation of nature* in the 19th century.

The benchmark of the *conservation of nature* occurred during the second half of the 19th century with the inauguration of the first national park in the United States, Yellowstone in 1872. In this case, the conservation of natural heritage has been connected to the construction of a national identity. The motivation for creating the first national park in Yellowstone was led by the intention to conserve the place for its aesthetic characteristics, as well as for a State appropriation of the resources present in that area: the native groups inhabiting this area, which was said to be untouched and natural, were displaced to Indian Reserves, placing the control of the land into the hands of the state.

A century later, the Convention for the Protection of World Natural and Cultural Heritage appears as the emblematic instrument where Cultural Heritage and Natural Heritage have been defined internationally. Introducing the concept of "Outstanding Universal Value", the document defines cultural heritage, in the article 1, as:

monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view. (UNESCO 1972b, p.2)

Subsequently, in article 2, natural heritage is defined as:

formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty. (UNESCO 1972b, p.2)

Cultural heritage definition has its foundations in Archaeology and Architecture, while natural heritage is defined by Biology, Ecology and Geology. It separates what is man-made as cultural heritage, and nature-made as natural heritage, where man has no intervention in its formation. This comes from the very conception of the document: the natural heritage part was developed by IUCN³⁵ and the cultural heritage part was developed by ICOMOS³⁶ (von Droste 2011, p.29), clearly accentuating the culture/nature divide.

Even though the World Charter for Nature, signed by the United Nations in 1982, defines mankind as "part of nature" and culture as being "rooted in nature", pointing the interdependence of culture and nature, the division persists:

- (a) Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients,
- (b) Civilization is rooted in nature, which has shaped human culture and influenced all artistic and scientific achievement, and living in harmony with nature gives man the best opportunities for the development of his creativity, and for rest and recreation. (United Nations 1982)

³⁶ ICOMOS: International Council on Monuments and Sites.

³⁵ IUCN: International Union for the Conservation of Nature.

These conventions and charters aim to promote international cooperation by setting basic definitions and guidelines to be developed by each country, incorporating them in their national legal systems. This basis permits comparing and following similar procedures for establishing policies and taking conservation measures.

However, many discussions have been raised concerning the applicability of the 1972 Convention in different cultural contexts during the last 20 years. As previously explained, the intangibility of cultural heritage, not considered in this Convention, became a crucial lack that had to be rectified by the creation of a new Convention. Moreover, the inclusion of categories for heritage protection that involve more than cultural and natural, and specially those involving the use of heritage by local communities – e.g. cultural landscapes, historic urban landscapes, heritage routes - brings about the need for re-assessing ideas of the *conservation of nature* and the *conservation of the past* conceived two centuries ago. As Jokilehto explains, other aspects have been recognized since the creation of the instruments of conservation of cultural heritage, such as diversity and traditional knowledge, which lead to contradictions in the implementation of the Western paradigms of conservation in non-Western contexts.

In the introduction to his book "A History of Architectural Conservation" (Jokilehto 1999), he states,

Such confrontation has become particularly critical when trying to apply conservation principles in communities still respecting pre-industrial traditions, but also in urban and rural areas in general, where the control of change and the regeneration of values have taken an important role with the preservation of physical remains. Against this new background, one can well ask if the conservation movement, as it evolved from the eighteenth century, cannot be considered as concluded, and whether modern conservation should not be redefined in reference to the environmental sustainability of social and economic development within the overall cultural and ecological situation on earth. (Jokilehto 1999, p.19)

Current conservation concepts need to be re-assessed in order to include worldviews of the particular settings that have been declared National or World Heritage. The categories of cultural landscapes are part of this reflection.

2.3 Separating Nature from Culture: categories and models of protection

Categories of heritage sites and models of protection have been created for the two types of heritage: natural or cultural. In the context of natural heritage, the term "protected area" has been used for defining them. In the context of cultural heritage, there is no general naming for all the types of heritage sites.

Protected areas have been created delimiting a certain space, defined through certain criteria, and whereby certain restrictions and specific regulations, aiming to conserve an ecosystem's "integrity"37, are applied, limiting or avoiding the participation of human communities in these ecosystems. This points to the main difference between the models of conservation of natural and cultural heritage. Protected areas are generally not inhabited or the use of the area by human communities has been restricted. In the case of cultural heritage, many of the sites are still inhabited or in use, which makes more complex to halt the decay implied in its constant use.

Internationally, IUCN and ICOMOS have defined a certain number of categories. These international organisms have adapted national categories and models from the countries that developed earlier conservation strategies – e.g. United States, France, Germany, England – into "universal" categories and models that are now applied in every region of the world.

These categories are determined by the corresponding state, through the institution in charge of managing the heritage of the Nation, either natural or cultural. The regulations and definitions of boundaries come from a top-down approach to the territorial management. Sometimes, the heritage determined by the state and its experts do not correspond with the features or elements of the environment that local groups value, although sometimes they do. Some features that are appreciated by local groups could be the intended target for exploitation or urban/industrial development by state regulations. Nevertheless, the regulations are generated from an external perspective to the territory and the people who inhabit it.

According to IUCN, a protected area is "a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the longterm conservation of nature with associated ecosystem services and cultural values" (Dudley 2008). Therefore, a protected area should not exclude the cultural components within it.

³⁷ The concept of integrity refers to wholeness, whereby all the elements essential for the functioning of the ecosystem need to be present in order to avoid its loss. The term has been conceived in the context of conservation of nature, however, it is now also used in the vocabulary of cultural heritage protection.

The most commonly found models of protected areas are the national park, the nature reserve, the wilderness area, the wildlife management area and the landscape protected area, as well as recent bottom-up approaches such as community conserved areas (Dudley 2008). IUCN has created categories for the management of protected areas, which are internationally acknowledged and are listed in Box 1.

The primary objective of these guidelines is to adjust human intervention in relation to nature (Dudley 2008, p.4). One of the most important issues in the *conservation of nature* is the control of the human impact in nature. Category I implies less human intervention and Category VI implies a much more important human intervention. Nature is translated as natural resources implying its *use* and *management*. As Heyd points out, the measures taken to conserve nature might transform it into something that stops being 'natural' and what was meant to be conserved:

The argument is that true (wild) nature must be 'free', but once an area is designated as a park or reserve, it is fenced in, the large animals living in it are suppressed, and the whole area generally tends to come under intense observation and management. Presumably these measures are taken in order to protect the area from external incursions and to maintain the ecological 'balance' of the ecosystem, but, in the process, the area loses some of the original qualities it is conserved for. (Heyd 2007, p.88)

1. Category I: a) Strict nature reserve and b) Wilderness area

This category implies an strict protection and no human intervention is allowed, except the research work of scientists.

2. Category II: National Park

The objective is the ecosystem conservation and protection, it allows the access of visitors to limited areas where nature can be appreciated, but never touched.

3. Category III: Natural Monument

The objective is the conservation of natural features of outstanding beauty, and this could be accessed by vistors into restricted zoning.

4. Category IV: Habitat/species management area

Here there is a need of an active management in order to provide the ideal conditions for certain species to be regenerated.

5. Category V: Protected landscape/seascape

The aim is to conserve the landscape or the seascape with means of recreation, so the purpose is to be opened to the public and they imply the presence of human communities living in the surrounding areas.

6. Category VI: Managed resource protected landscape

Here the aim is to promote the sustainable use of natural resources.

Box 1: Categories for the management of protected areas. Source: IUCN.

Accordingly, the *conservation of nature* and its models of protection transform the habitats, originally aimed to be conserved. It is 'natural' that humans, as other species, enjoy from the services of their habitats. The question lies not in the separation of humans from natural spaces for conservation, but rather in rethinking its relation to the environment and the use of its resources.

On the other hand, ICOMOS has worked on defining cultural heritage categories in the OG. The main categories of cultural heritage in this Convention are monuments, group of buildings and sites. However, there are more specific categories within this basic definition of World Cultural Heritage, including cultural routes, historic centers, historic urban landscapes and cultural landscapes. However, this may not represent a model of protection. In this work, the focus is placed on the model of the archaeological park, one of the most traditional categories of cultural heritage protection. The model of the archaeological park has evolved from the protection of archaeological remains, as buildings, or part of buildings into the protection of large areas where different structures are found from different periods, including contemporary urban environments.

In its article 1, the "European Convention on the protection of the archaeological heritage" signed in Valetta in 1992, defines archaeological heritage as:

all remains and objects and any other traces of mankind from past epochs: I. the preservation and study of which help to retrace the history of mankind and its relation with the natural environment; II. for which excavations or discoveries and other methods of research into mankind and the related environment are the main sources of information; III. which are located in any area within the jurisdiction of the Parties. The archaeological heritage shall include structures, constructions, groups of buildings, developed sites, moveable objects, monuments of other kinds as well as their context, whether situated on land or under water.

There are two interesting points in this definition: first that the archaeological heritage is important "to retrace the history of mankind and its relation with the natural environment"; and second, that it also includes "their context". Accordingly, archaeological heritage needs to be understood in a historical and physical environment, implying the importance of the natural environment in which it is located and the cultural landscape that has been formed and might still be evolving. This finally connects to the idea that any archaeological park or archaeological heritage is part of a cultural landscape.

This definition shows how the protection of cultural heritage has followed the tendency to expand from a focal point in a specific building to a larger area involving the criterion of integrity.

The interest for protecting more than single monuments or buildings has a long story, having been developed by some of the theorists and practitioners of conservation and restoration in the 18th and 19th centuries. In the writings of John Ruskin, there was a clear concern for the development of urban areas and the industrialization of rural areas. In his view, these were menacing historical cores of settlements and rural landscapes. This also responds to an increased appreciation for rural landscapes, picturesquesness and especially mountain landscapes, which were also seen as traces of the past.

Max Dvorak (1874-1921), who was responsible for the inventory of Austrian artistic and architectural patrimony, promoted the conservation of nature and environment in his "Katechismus der Denkmalpflege" of 1916 through a movement called *Heimatschutz* (Jokilehto 1999, p.219). *Heimatschutz* brings the idea of the importance of the conservation of home (Heimat) as a habitat, considering both cultural and natural heritage. Although this concept was later used by the Nazi Party in the 1930s, shifting to a nationalist and racist understanding, the concept itself seems to not only consider the environment as nature that needs to be protected, but as a whole with the cultural relations implied in the inhabitation of nature. From this movement of conservation developed in Austria comes the first clear intention to protect landscape: the Prussian Landscape Protection Act in 1902, (Law Against the Disfigurement of Exceptionally Scenic Areas—*Verunstaltungsgesetz*). Despite mainly addressing the proliferation of advertising and focusing on the aesthetic aspects of landscape, it still backs the importance of landscape as scenery and identity.

Jokilehto explains,

The concept of aiming at the conservation of the whole field of cultural heritage was shared also by others such as Adolf Loos (1870-1933), one of the promoters of the modern movement in architecture, in his article of 1907 (Loos, 1919). According to this concept, heritage was conceived as extending from monuments to historic areas, and from significant natural features to whole landscapes, and it became the foundation for the conservation policy of the Austrian administration. (Jokilehto 1999, p.219)

The integration of more than monuments and architecture into the understanding of cultural heritage is a step towards the protection of cultural landscapes when including

"significant natural features to whole landscapes", within which the importance of the natural context is recognized as the 'container' of cultural heritage.

The presence of the Mixed Cultural and Natural Heritage in the 1972 Convention brought about the need to reconsider a category that could involve both natural and cultural heritage in one property (Cleere 1995). Mixed Cultural and Natural Heritage are defined as properties that "satisfy a part or the whole of the definitions of both cultural and natural heritage laid out in Articles 1 and 2 of the Convention." (UNESCO, World Heritage Committee 2011, para.46). This means that these properties contain heritage of OUV, for both types, natural and cultural.

The concept of OUV introduced in the 1972 Convention refers to,

cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole. The Committee defines the criteria for the inscription of properties on the World Heritage List. (UNESCO, World Heritage Committee 2011, para.49)

OUV has also been criticized as a Western concept that gives priority to scientific and aesthetical values that generate a canon, a list of sites, whereby selected heritage appears significant for the whole humanity. OUV is based on ten criteria, listed in Box 2.

Although the list of criteria intends to provide scientific validity to the selection of World Heritage to enter the List, it remains subjective and dependent on the interests of the State Party who nominates a property, as well as the Committee's possible understanding of the value of a property. Besides, advisory bodies (IUCN and ICOMOS) regulate this process by presenting a scientific evaluation of each nominated property. Nevertheless, it remains as an evaluation made from the perspective of the worldview of Western science.

The evolution of the implementation of the 1972 Convention has enabled the inclusion of cultural landscapes as a category of cultural heritage. Nevertheless, many of the sites already on the list could also be considered cultural landscapes, or are in fact cultural landscapes and scientifically could be named cultural landscapes. However, the designation relies on the fulfillment of OUV criteria. Accordingly, the question that emerges is what does it mean to be a cultural landscape with OUV?

- (i) represent a masterpiece of human creative genius;
- (ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- (iv) be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- (v) be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change:
- (vi) be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance.
- (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- (vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- (viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- (ix) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- (x) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation.

Box 2: The ten criteria of the Outstanding Universal Value. Source: (UNESCO, World Heritage Committee 2011).

3 Conceptual Framework

Landscapes refuse to be disciplined. They make a mockery of the oppositions that we create between time (History) and space (Geography), or between nature (Science) and culture (Social Anthropology).³⁸

Cultural landscapes, and the concept of landscape are complex and difficult to define. They imply the study of the past, the place, the nature and the culture, thus different approaches have been developed depending on the different disciplines studying it. As the central concepts in this research, in this chapter, I first present a necessary revision of definitions and disciplinary approaches that are later used as tools for analyzing the understanding of landscape in heritage sites. Second, I explain the landscape values and how the definition of values of the cultural landscapes as heritage sites comes from an external approach to these. Moreover, I explain how these values could differ from those that local communities assign to the sites, and how this generates an inherent conflict in the conservation practice. Finally, I expose the conceptual model of the emergent lanscape management used in the analysis of the heritage sites selected as case studies. This model affirms the emergence of landscapes that have not been previously planned, through the combination of actions of the different actors in the landscape.

3.1 The landscape as object of study

We see what we have learned to look at. 39

The present research focuses on the study of landscape and the fundamental questions related to its conservation as heritage. Although a single discipline dedicated to landscape does not formally exist, landscape is the unit of study of diverse disciplines such as Geography or Ecology, including many different branches of such disciplines, such as Landscape Ecology or Human geography. However, the same definition is not used across all disciplines.

According to Antrop (Antrop 2006), three groups of sciences can be recognized that deal with the topic of landscape. One such group is the natural sciences, where Landscape Ecology (Antrop 2000; Naveh 1995; Naveh 2000) has a leading role and Biology and Ecology

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³⁸ Cited in (Massey 2006, p.3).

³⁹ Author's translation of French: "On voit ce qu'on a appris à regarder." (Philippe Descola in his seminar at the Collège de France, 2012).

can be considered as the main influences in its development.

On the other hand, the human sciences, notably Geography have developed important investigations on the matter. In the beginning of the 20th century Otto Schlüter assigned to landscape the role of unit of analysis of the discipline, and this idea was later developed by Carl O. Sauer through the concept of cultural landscape (Sauer 1925). Subsequently, landscape has been studied from different branches of Geography, such as Human Geography (Rowntree 1996; Mitchell 2002; Fouberg et al. 2009; Rubenstein 2010), Cultural Geography (Cosgrove 1978; Cosgrove & Jackson 1987; Anderson & Gale 1992; Mitchell 2000), as well as different branches of History, such as historical geography (Lambert 1971; Baker & Biger 2006; Baker & Gregory 2011) and historical ecology (Crumley 1994; Balée 2003). Moreover, landscape studies have been developed from the humanistic and semiotic approach (Nash 1997; Tarasti 2000; Jaworski & Thurlow 2010), and the Anthropology and Ethnology perspectives that have been developed in branches such as ecological anthropology (Rappaport 1979 a; Rappaport 1979 b; Rappaport 1999), and ethnobiology (Posey et al. 1990; Heckler 2009; Zanotti et al. 2010).

Finally, we find the third group, the applied sciences: landscape design, landscape architecture and landscape planning. Their perspective is more pragmatic and based on elaborating upon plans and actions to be executed on landscapes –design, architecture and planning - that would eventually lead to the change of the landscape and its ecological processes and dynamics (Hackett 1971; Treib 1994; McHarg 1995; Simonds 1998; Marsh 2010).

Among these disciplines, bridges are established whereby information is shared from one to the other, as in the case of landscape ecology establishing a bridge between the natural sciences and the applied sciences. Given the major aim of landscape ecology to clarify the relationships between human activities and the landscape dynamics, the findings in this discipline can be applied in design and planning in order to conceive land uses proper to the ecological dynamics of landscapes (Klopatek & Gardner 1999; Tress 2006).

In the field of Heritage Studies, landscape is approached from these three perspectives, with the aim of studying and finding alternatives for conserving its natural and cultural values. In this field, there has traditionally been a division between what is the conservation of 'natural landscape' – the conservation of species and natural features based on the Conservation biology approach (Soulé & Wilcox 1980; Fiedler & Jain 1992; Hunter & Gibbs 2007; Dyke 2008) - and the conservation of the built environment – the conservation of historical structures, designed

gardens, parks, and also historical centers, cityscapes, etc., based on Historic Preservation (Sullebarger & Fitch 1989; Fitch 1990). The concept of cultural landscape intends to establish a bridge between the conservation of nature to the conservation of the past. Furthermore, the formal recognition of ICH as a category for heritage safeguarding (UNESCO 2003a) has introduced the necessity to identify the cultural values associated to landscape and the traditional knowledge related to the conservation and management of heritage sites (cultural or natural), placing landscape as the heritage category where links between tangible and intangible heritage are found.

The development of environmental sciences has tended to see human activities as a major cause of disturbance⁴⁰ in ecosystems (Grigg & Dollar 1990; Mensing et al. 1998; Benedetti-Cecchi et al. 2001; Byers 2002; Peres et al. 2006). Therefore, environmental conservation has been led by the idea that human agents and their activities should be controlled and even eradicated from valuable natural environments in order to conserve natural resources, biodiversity and endangered species (Mc Neely, Jeffrey A. & Ness, Gayl 1996). This idea was based on the principles of Conservation biology and Conservation sciences, whose focus is to protect biological diversity of plants and animals from the extinction triggered by human activities (Raven & Mc Neely, Jeffrey A. 1998). In this context, natural landscape is understood as the landscape that has not been artificially constructed or altered by human physical interventions (Rowntree 1996).

However, this understanding of the relationship between human communities and the natural landscape has shifted with the acknowledgement of cultures that have preserved specific knowledge related to their environment, known as traditional knowledge, 41 which has been found as important as scientific knowledge for the sustainability and conservation of these places (UNEP 1993).

See, Gary P. Nabhan [et al.]⁴², (...), "Papago Influences on Habitat and Biotic Diversity: Quitovac Oasis Ethnoecology," (...), for example, reports that, with respect

⁴⁰ Term used in Ecology to designate a temporary change in average environmental conditions that causes a

pronounced change in an ecosystem (Rykiel 1985).

41 Traditional knowledge has been recognized as part of Intangible Cultural Heritage in the Convention for the Safeguarding of Intangible Cultural Heritage (UNESCO 2003a, p.2 para. 1 and 2). According to (Berkes 1999) traditional knowledge is accumulated over generations and represents a worldview different from the dominant Western scientific worldview. Western scientific worldview is based on the principles that things have a clear explanation and that with enough research it is possible to resolve any problem. Contrary to this, traditional knowledge is not about accumulating knowledge to solve problems. An integration of spiritual and moral

components for understanding the world is needed.

42 Quoted "(...) Gary P. Nabhan [et al.]⁴², (...) A. M. Rea, K. L. Reichardt, E. Mellink, and C. F. Hutchinson, "Papago Influences on Habitat and Biotic Diversity: Quitovac Oasis Ethnoecology," Journal of Ethnobiology, Vol. 2, No. 2 (1982), 124-143 (...)".

to two oases on either side of the U.S.-Mexican border, the one on the Mexican side, still used for agriculture, had greater biodiversity than the one on the U.S. side, managed as a people-excluding nature reserve. (Heyd 2007, p.96)

From this kind of findings, the traditional paradigm of protection of nature has shifted to increasingly consider the importance of human practices in the management of natural resources.

Nowadays, the concept of conservation of 'cultural landscapes', in contrast to the conservation of 'natural landscapes', would apply to the conservation of built or cultivated environment, as well as to natural landscapes that have associated meanings to human communities (UNESCO, World Heritage Committee 2011, p.86 para. 10 (iii)). Particularly in the field of Heritage Studies, this concept is based on the positive view over the interaction between human communities and their environments (UNESCO, World Heritage Committee 2011, p.86 para. 9). Furthermore, involving local communities in the protection and creation of strategies to conserve their environments has been encouraged through several declarations, projects and initiatives in the context of the World Heritage (UNESCO, ICOMOS 2006, p.3 para. 12 and 13). Accordingly, the research on the management of cultural landscapes relates to the discussion on how to involve local communities in conservation practices. In this respect, local understandings of heritage and, in this case, landscape, need to be revised.

Western thought has evolved towards the separation of 'Humans' and 'Nature' originated in the ontological dichotomy between mind and matter developed by Descartes, which set the roots of the Enlightenment project (Descartes 1986). This understanding has led to the perception of the world as a reality outside human mind and body, to the one that we humans have to relate, to know, to study, to intervene, and even to dominate. This conceptual separation supports the idea that 'environment' is a reality that surrounds us, as human minds, and when it is called 'natural', it means that it has not been affected by human action. This division brings about the opposition between a 'natural landscape', 'wilderness', concept developed by Americans in the 19th century, a 'natural environment', untouched by civilization, and a 'cultural landscape', urban and rural environments, that have been worked and transformed by human action.

Until the middle of the last century, the deterministic approach stating that human cultures are shaped by the environment has dominated the sciences (Ratzel 1898; Huntington 2001). With the findings in biology, chemistry, microbiology and physics, as well as the development of ecology, it has not only been found that cultures are not determined by the

environment, but that human cultures can have a strong impact on the transformation of their environments (Marsh, George Perkins 1864; Sauer 1925; Naveh 1995; Lowenthal, David 2003), causing dramatic changes such as the idea of a 'climate change' induced by human activities (World Commission on Environment and Development 1987; Hannah et al. 2002). In this sense, the interaction between different components of an ecosystem, of which human communities form part, are essential for the formation and transformation of the environment (Capra 1996).

3.1.1 Overview of the concept of landscape

The term 'landscape' has a long history, and was already used in the Netherlands in the 13th century, where 'lantschap' referred in the colloquial language to "an administrative entity, a certain area, or was used as a synonym for land and one's native country" (Tress & Tress 2001). Moreover, it also referred to a region or territory in other Germanic languages. In the 16th century the word 'landscape' started to be associated with arts through the development of landscape painting, prompting the emergence of the perceptual meaning of landscape. This definition has been spread, with the common definition of landscape at present suggesting that "all the visible features of an area of countryside or land, often considered in terms of their aesthetic appeal" are landscape (New Oxford American Dictionary 2005).

On the other hand, in the scientific area, the term landscape has been associated with nature studies, with Alexander von Humboldt defining 'natural landscape' as the "total character of a region" during the 19th century (Antrop 2006). It became the center of study for geographers and thereafter developed to other associations, such as the ecological, which points out its biophysical aspects from a systemic view, or the semiotic and historical, which focuses more on the intangible values assigned to landscape and the social construction of its meaning for different groups of people (Greider & Garkovich 1994; Demeritt 2002).

From the ecological perspective,

a landscape is not necessarily defined by its size; rather, it is defined by an interacting mosaic of elements (e.g., ecosystems) relevant to some phenomenon under consideration (at any scale). Thus, a landscape is an area of land (at any scale) containing an interesting pattern that affects and is affected by an ecological process of interest (McGarigal 2010).

From the social perspective,

landscapes are the symbolic environments created by human acts of conferring meaning to nature and the environment, of giving the environment definition and form from a particular angle of vision and through a special filter of values and beliefs. Every landscape is a symbolic environment. These landscapes reflect our self-definitions that are grounded in culture.(Greider & Garkovich 1994)

Thus landscape is generally divided between a tangible existence and an intangible construct existing in the mind of social or cultural groups. Hence, this variety of understandings makes the object of scientific study complex. While it is physically defined as a pattern, it also represents a symbolic environment where human communities inhabit, interpret and intervene in that pattern. Accordingly, this pattern, transformed into a symbolic environment when objectified or observed by a subject that is not part of the human community inhabiting it, is transformed into a representation such as the landscape painting of the 16th century. Nonetheless, these already represent three different ways to analyze the landscape.

On the other hand, the concept of 'cultural landscape' has its origins as an academic term in Germany, used by geographer Otto Schlüter in the early 20th century. He defined two forms of Landscape (*Landschaft*): the Natural Landscape (*Urlandschaft*) referring to that existing before any human intervention, and the Cultural Landscape (*Kulturlandschaft*), created by human culture, stating that Geography should trace the changes from one to the other. Later on, Carl O. Sauer stated the distinction between natural landscape and cultural landscape: natural landscape is composed of geologic, climatic and vegetation factors that produce the surface, while cultural landscape is created from the natural landscape by the action of a cultural group. "Culture is the agent, the natural area is the medium, the cultural landscape is the result" (Sauer 1925). This definition stresses the action of cultural practices in the transformation of landscape.

According to the geographical approach, 'natural landscape' and 'cultural landscape' are differentiated by the presence or lack of intervention by human communities. Other living communities besides human are considered part of the natural processes in landscape, even though these may have strong impacts on the development of a pattern. When considering the impacts of communities other than human as 'natural', the difference is that a 'cultural landscape' reflects a land use. However, only degrees of intervention can distance the natural from the cultural, when a clear distinction has been blurred. In the context of the World Heritage Convention,

the experts meetings [also] stressed the importance of living cultural landscapes embodying past ways of life and having continuing relevance today. They also affirmed the nature – culture continuum, as untouched nature no longer exists. (Rössler 2007, p.32)

Hence, it is first necessary to clarify certain concepts that are implied in the discussion of the conservation of cultural landscapes. There are two concepts that will be treated throughout this paper: heritage and landscape. Fundamentally, these concepts are linked to the discussion of dichotomic pairs: tradition and modernity, conservation and change, culture and nature, natural landscape and cultural landscape. Furthermore, confusions between environment, landscape and heritage need to be clarified, given that some of these concepts can be used interchangeably. However, this lack of clarity leads to an epistemological confusion that complicates the analysis by enlarging its scope. Environment, landscape and heritage have edges where they juxtaposed and areas where they overlap; depending on the context they are used, they may correspond to similar ideas. This can be found in the literature of conservationists in the field of nature conservation, environmental crisis and climate change. However, as explained by philosopher Alain Roger⁴³ the confusion between landscape and environment has led to the reduction of the notion of landscape to a scientific – geological, biological and ecological – dimension. Moreover, environment and landscape have undergone processes of patrimonialization that have converted them in heritage.

In the following section, I elaborate upon a distinction between these concepts in order to frame the methodological approach. However, in terms of defining the concepts we would need to recur to one and another, because in some cases what is necessary to state is the difference between them, more than close definitions.

3.1.2 Approaches to landscape

The first group of concepts to define are **landscape**, **cultural landscape** and **natural landscape**. First, I summarize the approaches to the concept of landscape, based on the classification exposed by French anthropologist Philippe Descola, in the seminar of his Chair *Anthopologie de la Nature* (Anthropology of Nature) "The forms of the landscape" at the

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⁴³ In his book entitled "Court traité du paysage" ("Short treatise on landscape"), he dedicates the chapter "Le paysage et l'environnement" ("Landscape and environment") to discuss the distinction (or lack of it) between these two concepts (Roger 1997, chap.VII).

Collège de France⁴⁴. He refers to philosopher Jean Marc Besse⁴⁵ who defines five approaches (or 'entrance doors') to landscape:

- [1] The approach of Art Historians, who define landscape as a cultural and social representation with an aesthetic dimension. Landscape results from the relationship between humans and their environment, mediated through a mental and cultural grid. The paragon of this definition is the model of landscape painting.
- [2] The approach of Human Geographers, Historians and Archaeologists, who see the landscape as a territory fabricated, inhabited and transformed by humans. From this approach, the interest would be to uncover and clarify human activities on the territory through the marks and imprints left through time. The landscape can be described as a territory shaped by practices and through social action based on factors that combine physical determinations, cultural habitudes, production systems, technical choices, habitat forms, etc. The landscape here is thus an extension from and reflection of a society, differentiating it from others.
- [3] The approach of Earth Sciences, such as Physical Geography, Geology, Pedology, Climatology or Ecology, which see the landscape as a systemic complex that articulates natural and cultural elements in an objective wholeness. The landscape as a physical object becomes a unit of analysis characterized by a certain scale. Here, landscape exists independently from the gaze. First the natural landscape exists, and then, the cultural landscape comes over it. The interest is to analyze how the natural landscape determines the cultural landscape, or how the cultural landscape accommodates the natural landscape.
- [4] The phenomenological approach whereby landscape is a subjective apprehension. Landscape is a space of sensitive experience, and this definition is used in Anthropology and Archaeology.
- [5] The approach of landscape architects and planners, who see landscape as a site or context for a project. Landscape is an object that can be modified and arranged according to the will of the planner.

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⁴⁴ Seminar entitled in French: "Les formes du paysage", from January to May 2012, resume from January to May 2013 and expected to be resumed in 2014. The lectures are available in the website of the Chair http://www.college-de-france.fr/site/philippe-descola/

⁴⁵ BESSE J.-M., 2009, Le goût du monde. Exercices de paysage, Actes Sud/ENSP, 230 pp.

In the context of conservation practices, depending upon whether the principles of the conservation of nature or conservation of the past are being followed, the landscape would be approached from one of these positions. These approaches help us throughout this study to understand from which perspective landscape is being defined in relation to the management of the heritage sites studied.

3.1.3 Landscape: cultural or natural?

The distinction between **cultural landscape** and **natural landscape** is linked to the approaches [3], [4] and [5] previously exposed. As we can read in the following paragraph, the general definition of **cultural landscapes** as a category of protection in the OG is supported by the distinction responding to the approach of Geography (both Human and Physical):

Cultural landscapes are cultural properties and represent the "combined works of nature and of man" designated in Article 1 of the Convention. They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal. (UNESCO, World Heritage Committee 2011, para.47)

From this definition, **cultural landscapes** result from the relationship between human societies and the natural environments where they have developed. The fact of being "combined works of nature and man" is what legitimizes cultural landscapes as cultural heritage⁴⁶. Moreover, from this definition, it can be deduced that the difference between natural landscape and cultural landscape would be that the **natural landscape** has not been intervened by human societies and could be equal to the "natural environment" previously mentioned. However, before engaging with the definition of the "natural landscape", I proceed with the analysis of the definition of **cultural landscapes** in the OG. In the Annex 3 of the OG, three categories of cultural landscapes are defined, with three different approaches to the concept used:

(i) The most easily identifiable is the clearly defined landscape designed and created intentionally by man. This embraces garden and parkland landscapes constructed for

⁴⁶ The phrase "combined works of nature and man" is used for the general definition of a "site" under the definition of "cultural heritage" in the text of the Convention (UNESCO 1972a, p.2, Article 1).

aesthetic reasons which are often (but not always) associated with religious or other monumental buildings and ensembles.⁴⁷

This definition illustrates approach [5], whereby the [natural] landscape is the site, namely the context of the cultural landscape as a project.

- (ii) The second category is the **organically evolved landscape**. This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub-categories:
- a relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are, however, still visible in material form.
- a continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.

This definition corresponds to a Human Geography and Archaeology approaches when it is highlighted that "significant distinguishing features" need to be "visible in material form" and the "significant material evidence of its evolution" present.

(iii) The final category is the **associative cultural landscape**. The inscription of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent.

This third category of cultural landscapes reflects a phenomenological definition of landscape, related to approach [4]. It values a "natural environment" according to the meaning that certain cultural group has assigned to it, transforming it into a cultural landscape. However, a distinction between a landscape and a cultural landscape starts to become ambiguous. In this case, understanding the value of the landscape relies more on the cultural group and "intangible" associations. The "tangibility" of the cultural values enters into question, involving the discussion concerning ICH and enlarging the application of the category in a way that determining what could be declared as cultural landscape becomes inclusive.

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⁴⁷ (UNESCO, World Heritage Committee 2011, para.10, Annex 3) Text in bold in all the definitions of categories correspond to the original text.

From this revision, I conclude that the definition of **cultural landscapes**, in the context of the 1972 Convention, involves almost all the possible meanings and approaches to the concept of landscape, connected to a material perspective over it, as **tangible heritage**. Nonetheless the inclusion of the category of "associative cultural landscape" renders the idea of an "intangible" landscape (albeit embedded in a tangible one). All these categories imply the approach [1], whereby landscape is interpreted from an external perspective, transforming it in a representation and valuing it from aesthetics.

The inclusion of the category of **cultural landscapes** emphasizes the distinction between natural landscapes as natural heritage and sites that do not enjoy the "virginity" of natural heritage. On the contrary, these become valuable due to the interventions generated through the symbiosis between man and nature. The definition of **natural heritage** in the Convention seems to refer to a definition of **natural landscape**:

For the purposes of this Convention, the following shall be considered as "natural heritage":

natural features consisting of **physical** and **biological formations** or groups of such formations, which are of outstanding universal value **from the aesthetic or scientific point of view**;

geological and physiographical formations and **precisely delineated areas** which constitute the habitat of threatened species of animals and plants of outstanding universal value **from the point of view of science or conservation**;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.⁴⁸

"Natural features", "biological formations", "geographical and physiographical formations", "natural sites", and "precisely delineated natural areas", all refer to a perception of "nature" through an aesthetic lens. Nature is interpreted as natural landscapes so it can become heritage. Natural landscapes delineate the reserve areas containing the natural heritage.

I highlighted the perspectives established to value what could become natural heritage in order to observe from which standpoint it has been described: "from the aesthetic or scientific point of view", "from the point of view of science or conservation", "from the point of view of science, conservation or natural beauty".

⁴⁸ (UNESCO 1972a, p.3, Article 2) Text in bold and underlined is from the author.

The first and third perspectives combine the interest from aesthetics and natural sciences. This is linked to the passage of **landscape** from the realm of art into the realm of naturalists scientists during the 18th and 19th centuries (Roger 1997, chap.V), which has profoundly influenced the conservation movement and society's concerns about nature. Accordingly, this definition obeys to approaches [1] and [3] that see landscape as representation and scientific object.

The second definition of natural heritage from "the scientific and conservationist perspective" sees landscape as "geographical and physiographical formations" that constitute the habitat of threatened species (both fauna and flora). Here it is possible to observe the transformation of the landscape into habitat and ecosystem, derived from the influence of Biology and Ecology in the conservation of nature. Landscape becomes the context in which species live, and here, the confusion between landscape and environment appears.

Consequently, the approach to landscape of the modern conservation practices represented by the 1972 Convention, is broad and inclusive, rendering its scientific analysis complex. The stated definition of a cultural landscape cannot be useful for the analysis of the landscape management, since as I have explained, it combines all the possible epistemological approaches to landscape.

In the context of heritage conservation, the confusion between cultural landscape and natural landscape, and just landscape, is enlarged with the confusion between **landscape**, **environment** and **nature** as detected in the definition of natural heritage. Accordingly, these are the next group of concepts to discuss.

Nature needs to be studied together with its dichotomic pair: culture. There has been a long discussion about culture and nature, including their validity in different cultural contexts. The discussion of this paper is not centered on the deconstruction of the concepts of culture and nature. Nonetheless, it is necessary to clarify that I understand both **culture** and **nature** as social constructions enrooted in a naturalist dualist ontology, fundamentally conceived from a Western scientific perspective and as an operational model that divides the world between what belongs to the category of human productions as distinct from the non-humans phenomena. I do not intend to provide a definition of what **culture** is, but only as a means to qualify what is produced by human groups that share a similar worldview and understanding of the world. **Nature** is then a category corresponding to what is non-human and qualifies products, processes and phenomena non-triggered (at least in a direct manner) by humans. Nevertheless, nature is

not an entity *per se*, even though it can be understood as an entity or entities in some cultural contexts.

The concept of environment has been largely exploited in the literature of Biology and Ecology influencing conservation sciences. **Environment**, as British anthropologist and human ecologist Tim Ingold puts it, can only be defined in relation to some being or beings⁴⁹. He defines the environment for an individual organism as composed by three constituents: the non-living or abiotic world, the world of other species, and the world of conspecifics, providing the surrounded individual of a set of possibilities and not of an established system *per se*. Each individual or group of individuals would arrange these possibilities in a different manner, and he offers the example of a tree: "for example a tree affords movement to a squirrel, but places of rest to a bird" (Ingold 1987, p.2). Landscape is not equivalent to environment. As a concept, landscape relates to aesthetics, and environment directs to natural sciences, especially Biology and Ecology (Roger 1997, chap.VII). The environment differs from the landscape in the sense that it has no value assigned *per se*. Nevertheless, the intrinsic value of environment is being claimed in the context of environmental protection studies and policies. On the other hand, the landscape implies a value system and an interpretation from the observer(s) regarding a certain environment.

Accordingly, as environment and landscape have been patrimonialized through the process of awareness of the damages that human activity has generated to species of plants, animals and their habitats, the distinction between these two concepts has become blurred. As explicated by Alain Roger, ecological values that do not belong to landscape are being assigned to it (Roger 1997, p.136): namely, the aesthetic irreductibility of landscape cannot afford to be reduced to a scientific object of study. The landscape values (aesthetic, cultural, symbolic) and the ecological values are being mixed in the conceptualization of the protection and conservation of nature, environment and landscapes. This has been the essential problem encountered in this investigation. I found the need to open the perspective of ecology regarding landscape, in order to include its sociological and cultural dimensions. However, there is an epistemological barrier that makes the reduction of the concept of landscape impossible, and that does not allow to analyze it using one single complex and holistic definition. Consequently, my focus is on identifying the diversity of understandings of this concept regarding its conservation in heritage sites.

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⁴⁹ In the introduction to "The appropiation of nature" (Ingold 1987, p.2), Ingold cites Gibson, as how environment cannot be detached from an individual or a group to which context is: "No animal, as Gibson puts it, 'could exist without an environment surrounding it. Equally... an environment implies an animal (or at least an organism) to be surrounded' (1979:8)."

A similar situation emerges with the concepts of heritage and culture. Culture is irreductible and heritage is only a selection of culture. However, both concepts can be confused, with culture been absorbed by heritage. Culture and nature are irreductible social constructions that, objectified through a patrimonialization process, become cultural and natural heritage.

Furthermore, heritage is confused with tradition, and traditions are said to be invented (Hobsbawm & Ranger 1992). Again, it is a matter of distinguishing concepts more than precisely defining them. According to Florido Corral (2012), **tradition** as defined by Koeckel,

is constituted by cultural models, practices and artifacts that are transmitted through time and space, ways of doing, thinking and relating to each other that keep being appropriated, in the use, for new generations; while heritage refers to the reappropriation of (some of) those cultural models, through different channels from the ones to which this tradition was transmitted. Through patrimonialization, tradition is alienated, it passes to experts' hands for de-contextualized uses regarding its original references.⁵⁰

Tradition is then a fluid process in constant recreation and transformation whereas heritage is a selection from that process. In the process of patrimonialization, in which this selection is developed, "the experts" identify and chose samples that are constituent parts of tradition(s) and establish them as representative of some intended product (e.g. a certain culture, national identity, or indigenous identity). Indeed, heritage is also understood as this process by some scholars⁵¹.

Tradition is opposed to modernity insofar modernity implies progress, change and transformations separating the present and future from the past. While tradition connects people to the past - a continuity of what the ancestors, grandparents or parents used to do, the way they used to do it and the place they used to be - modernity detaches this link. Accordingly, the process of patrimonialization - the identification of heritage and the conservation practice entailed in this process - is inextricably linked to modernity, insofar it intends to "safe" some samples from transformative processes.

In this framework, **cultural landscapes**, as cultural heritage, appear as a way of patrimonializing the relationship between humans and the environment. However, what would

⁵⁰ Author's translation from Spanish. (Florido del Corral 2012, p.135)

⁵¹ See for example (Kirshenblatt-Gimblett 1995; Smith 2006; Harrison 2010).

it mean to conserve this relationship? What would it mean to conserve a landscape (cultural or natural)?

3.2 Landscape values

The question that emerges when thinking about the conservation of cultural landscapes is which landscape does society want to conserve?

There are several actors in a **heritage site/landscape/environment**, with each group of actors holding different perceptions over the landscape. Consequently, the values they would intend to conserve in the **landscape/environment** may not be the same for all the groups.

Conservation is inextricably linked to the understanding of values (Avrami et al. 2000). The 'official' practice of conservation is founded in the identification places/objects/traditions with certain value, and the decision of conserving some of the places/objects/traditions over others. This practice is subsequently based on the definition of certain criteria of interest of the entity behind, usually a governmental agency. The values prioritized in legal frameworks are given by actors that are not directly involved in the landscape/environment regeneration. The communities living in the landscape/environment are those who ultimately have a direct impact. However, there is an 'official' practice of conservation regulated by the state, and local practices, which are probably not legally institutionalized, yet regulate the use of resources and the treatment of the past. Local practices are not necessarily structured in an independent body of knowledge since they form part of holistic conceptualizations constructed in the everyday life and consolidated in traditional institutions

If conservation implies a social practice aimed at maintaining values embodied in landscapes, it is necessary to identify the values in relation to the communities that have a direct effect in the landscape/environment. Are the values given by experts significant for them? Are there other values not necessarily categorized as cultural or natural? Inhabitants of heritage sites can be the holders of these and other values, and their maintenance and reproduction is dependent on how they relate to an archaeological remain, as well as a festivity or a forest. Moreover, the understanding of these values could be in processes of regeneration, adaptation or transformation depending on socio-economic environments.

3.2.1 Authenticity and Integrity

The Burra Charter, the Australian instrument of heritage conservation principles⁵², states that the aim of conservation is to retain the 'cultural significance', meaning the cultural heritage value. Cultural values are subsequently defined as the "beliefs which are important to a cultural group, including but not limited to political, religious, spiritual and moral beliefs." (Australia ICOMOS 1999). Nevertheless, it is not implied that there would be only one cultural group in one heritage site, and furthermore, if there are different cultural groups, that these would use the same criteria to value. Accordingly, how different are the values assigned by the local communities compared to those assigned by states? Are these also different from those assigned by the visitors? Do states, local communities and visitors represent homogenous groups? Or do the values differ according to the types of actors in each group? Moreover, what are the criteria for establishing these scales of values?

The *conservation of the past* has focused on the quality of the object⁵³ being preserved. The quality would be related to the characteristic of "authenticity". "Authenticity", which has become a controversial concept in the context of Heritage Studies,

means the credibility or truthfulness of the surviving evidence and knowledge of the **cultural heritage value** of a **place.** Relevant evidence includes form and design, substance and **fabric**, technology and craftsmanship, location and surroundings, context and **setting**, **use** and function, traditions, spiritual essence, and sense of place, and includes **tangible** and **intangible values**. Assessment of **authenticity** is based on identification and analysis of relevant evidence and knowledge, and respect for its cultural context. ⁵⁴

In practice, this concept refers to the truthfulness of the sources of information about the past, these being part of heritage, which depends the reliability of its scientific reconstruction. In modern conservation practice, "authenticity" is what legitimizes the cultural value, as it is based upon the "authenticity" of its values that any heritage object, building or place can be protected.

In the "Nara Document of Authenticity", the most recent international normative document, "authenticity" is placed at the core of the conservation of cultural heritage:

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⁵² This instrument has been influential in the international arena in terms of cultural heritage conservation.

⁵³ Object in general not as an artefact.

Definition of the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value (ICOMOS New Zealand 2010, p.9). Text in bold is from the author.

Conservation of cultural heritage in all its forms and historical periods is rooted in the values attributed to the heritage. Our ability to understand these values depends, in part, on the degree to which information sources about these values may be understood as credible or truthful. Knowledge and understanding of these sources of information, in relation to original and subsequent characteristics of the cultural heritage, and their meaning, is a requisite basis for assessing all aspects of authenticity.⁵⁵

The sources that prove the value of a certain cultural heritage are described like in the Venice Charter:

Depending on the nature of the cultural heritage, its cultural context, and its evolution through time, authenticity judgments may be linked to the worth of a great variety of sources of information. Aspects of the sources may include **form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors**. The use of these sources permits elaboration of the specific artistic, historic, social, and scientific dimensions of the cultural heritage being examined. ⁵⁶

However, the evaluation of the "authenticity" of these sources is in the hands of experts (architect conservators, archaeologists, geologists, art historians, among other professions connected to the conservation practice), determining whether these are "truthful" and original. The foundations of these criteria appear as essentialist and restricting the fluidity of tradition. The Nara Document intends to give flexibility to the concept of "authenticity" denoted as Western and Euro-centric. The contribution of the Nara Document is the inclusion of other value systems, understanding that values might differ from culture to culture, and even within the same culture:

All judgments about values attributed to cultural properties as well as the credibility of related information sources may differ from culture to culture, and even within the same culture. It is thus not possible to base judgments of values and authenticity within fixed criteria. On the contrary, the respect due to all cultures requires that heritage properties must considered and judged within the cultural contexts to which they belong.⁵⁷

Nevertheless, these documents only norm the practice of conservation carried out by the state. Because, the representatives in the framework of the 1972 Convention are State Parties,

⁵⁵ Text in bold is from the author.

⁵⁶ Ibid, para.13. (Lemaire & Stovel 1994, para.13) Text in bold is from the author.

⁵⁷ Ibid, para. 11. (Lemaire & Stovel 1994, para.11)

the complexity of heritage values from other actors is not necessarily considered. However, differing value systems are found at the local level.

On the other hand, the *conservation of nature* calls for a scientific and objective definition of values. It has been based on quantitative values of heritage: the number of species preserved, the population that the species retains, etc. Essentially, the objective of the *conservation of nature* is centered on the maintenance of the quantitiy of species and individuals of that species. The most valuable heritage would be a species that is rare. The more rare the species is, in terms of geographical presence or number of individuals, the more valuable it would be. This means that greater efforts would be deployed to prevent its disappearance. Nonetheless, science could also be perceived as representing a certain worldview, or culture, based on the MCWP, which has its own set of values, sometimes matching and sometimes not matching the values of the societies to which the heritage relates.

The *conservation of nature* focuses these quantitative values in the need to conserve the "integrity" of a landscape. Despite having recently been extended, in the context of the 1972 Convention to all properties (cultural or natural or mixed cultural and natural)⁵⁸, "integrity" is characterized as being a concept related to quantitative values.

Integrity is a measure of the **wholeness and intactness** of the natural and/or cultural heritage and its attributes. Examining the conditions of integrity, therefore requires assessing the extent to which the property: a) includes **all elements necessary** to express its Outstanding Universal Value; b) is of **adequate size** to ensure the complete representation of the features and processes which convey the property's significance; c) suffers from adverse effects of development and/or neglect. (UNESCO, World Heritage Committee 2011, para.88)⁵⁹

Accordingly, the wholeness would be measured based on the presence of all the elements determined as being part of what is considered the value of the heritage site. In the case of the natural criteria, it has been clearly defined how integrity should be assessed, and it is possible to analyze it through the use of quantitative scientific methods. In paragraph 90 of the OG, it is stated that "for all properties nominated under criteria (vii) - (x), biophysical

⁵⁹ Text in bold is from the author.

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⁵⁸ "For properties nominated under [cultural] criteria (i) to (vi), the physical fabric of the property and/or its significant features should be in good condition, and the impact of deterioration processes controlled. A significant proportion of the elements necessary to convey the totality of the value conveyed by the property should be included. Relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained."(UNESCO, World Heritage Committee 2011, para.89)

processes and landform features should be relatively intact."⁶⁰ Therefore, the focus lies in the physical properties of the landscape, which can be determined through expert research. Moreover, the same paragraph continues:

However, it is recognized that no area is totally pristine and that all natural areas are in a dynamic state, and to some extent involve contact with people. Human activities, including those of traditional societies and local communities, often occur in natural areas. These activities may be consistent with the Outstanding Universal Value of the area where they are ecologically sustainable. (UNESCO, World Heritage Committee 2011, para.90)

Here, the issue concerning the human intervention and human relation to the environment appears. Contrary to older paradigms, human activities are not necessarily seen as negative and are acknowledged as occurring in natural areas. Moreover, they could be permitted inasmuch that they can be consistent to the "value" of the property.

If one retains the distinction between a cultural landscape and natural landscape, both refer to quantitative and qualitative values. Moreover, the aesthetic component is primordial in the value of landscapes, whether natural or cultural. In the set of criteria for the 1972 Convention, one criterion refers to this value in natural heritage. The criterion (vii) serves for justifying OUV when the place contains "superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance." (UNESCO, World Heritage Committee 2011, para.77) Even though aesthetics illustrate a subjective and arbitrary criterion, this has been established as a "universal" criterion for defining the value of a site.

Hence, the problem still relies on having several epistemologies related to these value systems. Therefore, integrating diverse value systems is the central challenge of the conservation practice.

3.2.2 Sources and landscape capital

The viability of the conservation of cultural landscapes could not imply the conservation of the whole system in a situation of permanent equilibrium. While society interests change, some essential elements cannot be neglected. According to Berry (Berry

The criteria for inscribing a site in the World Heritage List consist in ten (see Box 2) and these are, from the (i) to (vi) related to cultural values and from (vii) to (x) to natural values. Text in bold is from the author.

1978), these essential elements are the **sources**. Following the dualist ontology, the sources can be cultural – traditional knowledge - or natural – elements of the environment -:

In all of these [agricultural] systems a fundamental principle must be the protection of the source: the seed, the food species, the soil, the breeding stock, the old and the wise, the keepers of memories, the records. (Berry 1978, p.47)

The concept of **sources** comes from a geographical perspective of landscape, and can be applied to cultural landscapes. Each culture, civilization or human society has created a system of protection for managing these sources in order to maintain them. Systems of protection could have been developed through complex spiritual understandings of the world, which could be connected to religious practices, or through political systems, ruled by law and special policies for controlling the access to the sources. These sources would be fundamental values for conservation, which do not imply cultural relativism, because they are essential for human communities' survival.

The practices of agropastoral communities in the mountains are representative of systems of protection of the sources. Fundamental practices are the regeneration of seeds, the maintenance of the soil, the arrangement and control of spaces for cattle, the respect for elderly (grandparents) and the renewal of traditional knowledge. Although these are not official systems of conservation, they work as such.

The structures present in the **landscape/environment** testify the existence of a knowledge and system of protection of sources. This knowledge includes a worldview, a relationship with the environment and all the technical developments of the cultural group that produced these structures. These structures that define the cultural landscape – still from a geographical approach – are the disposition of fields, hedges, pastures, irrigation canals, terraces and ranches that result as testimonies of past, which are currently used in some cases, and form part of the local practices and the history of a place. Over time, these structures become what Brookfield has called the **landscape capital** (Brookfield 2001). The landscape capital is continuously used by agropastoralists as an inheritance from their ancestors who adapted the land for its use. They represent the history of adaptation to these environments and become instruments for the regeneration of life in them. The continuous use of the landscape capital can be understood as a practice of heritage conservation that has been passed from past generations to the present, and the ones that conform the value of a cultural landscape (Erickson 1999, pp.636–7).

Nonetheless, these structures are protected by the state due to their historical value, with their access possibly restricted for local communities who have learned how to use and manage them across generations. The selection of this landscape capital as heritage extracts it from its traditional use transforming it in symbol from the past in the face of progress. The idea of progress considers past technologies obsolete and not profitable, thus, promoting their discontinuation and subsequent upkeep as samples and historical proofs of "evolution". For the agropastoral culture, the landscape capital represents a cultural continuity.

This relates to the confrontation of different perceptions of time. As discussed by Alois Riegl the linear vision of History brings different values from Eastern or other native cultures of colonized countries where time has traditionally been understood as circular or spiral. However, this is inherently contradictory to modern conservation. Georg Dehio, art historian who contributed to the development of modern conservation in Germany, argues that conservation is contradictory to the liberal economic system. As I have previously discussed, the development of modern conservation is linked to the process of nation-state building, which is also connected to the development of liberal economic systems. Applied to the context of cultural landscapes, the economic system marked by industrialization has transformed land in machines of production, in a process that goes against conserving cultural landscapes. The landscape capital is neglected and replaced by modern technology. In the chapter, "Les animaux-machines" (Animal-machines), Berque finds the source of this contradiction in the globalized adoption of the Western dualist ontology:

Despite the recent questioning that we resume under the expression of environmentalism, our civilization still relies largely on a dualist ontology. It's under this basis that the modern economy and technologies work on. Successively, and whichever was their culture of origin, the different countries of the world have unconsciously adopted this ontology by adopting the models of development of the modernity. ⁶¹

In the mountains, the full implementation of the models of development of modernity has not been possible. The use of machinery has been challenging due to the nature of the terrain. For instance, tractors cannot function over strong slopes. Consequently, the loss of this inheritance (the sources and the landscape capital) has been less rapid in the mountains and in some cases the landscape capital is being conserved because it is still in use. Hence, the continuous use of heritage might bring its sustainable conservation, implying its continuous adaptation.

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⁶¹ Author's translation from text in French. (Berque 1996, pp.24–25)

3.3 Landscape management

3.3.1 The landscape thinking and the thinking of the landscape

Berque presents two approaches to landscape that could be associated with two ways of managing it. He distinguishes between the landscaping thinking (pensée paysagère) and the thinking of landscape (pensée du paysage). The former defines the relationship to landscape of the cultural groups that do not deal with the concept of landscape as such, while the latter relates to the cultural groups that manage and reflect upon this concept (Western Europe, China)⁶². These 'thinkings' are useful to characterize the difference between the approach of the state and that of the local communities. In the case of the thinking of landscape, there is the need for a word to define the object:

A thinking of (a thinking on the subject of) landscape, is a thinking that gives itself the landscape as an object. A reflection on the landscape. In order to exist, this, it is necessary to be capable of represent oneself by a word that allows to make it an object of thinking. A noeme of noese, would say the philosophy. Sure, one can feel things through other means than words, but for *thinking* them really, words are needed. This is what is manifested in Europe during the Renaissance: it starts to exist a thinking of landscape.⁶³

This thinking of the landscape is related to the emergence of the landscape painting and the use of the word 'landscape' for defining a view, a representation of what is external to us. It is an illustration of the retreat of the modern subject. On the other hand, the landscaping thinking does not need words:

A thinking of the landscaping type, on the contrary, does not demand words necessarily. The prove is that in Europe, from the first populations coming from Africa until the Renaissance, we have lived in such a landscaping manner that it has left us admirable landscapes, and this in the absence of any thinking of landscape. People arranged landscapes with a certain taste; anyway, we have the objective trace, material of such a taste, and we can only infer that these people thought - because they were not less sapiens than we are- in such a way that they did beautiful landscapes. They did things

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⁶² Berque has developed a theory about the origins of the landscape that he situates in China in the 5th century, and in Western civilization, in the 16th century. He postulates that other cultures apart from these could have a concept of landscape but for this they have to fulfill the following criteria: 1. A literature (oral or written) that celebrates the beauty of the places (including the toponymy related to the beauty of a place); 2. Flower gardens; 3. An architecture designed for enjoying a beautiful view; 4. Paintings representing the environment; 5. One or two words for saying "landscape"; 6. An explicit reflection about the "landscape". (Berque, *La pensée paysagère*, 2007, pp 46).

⁶³ Author's translation from text in French. (Berque 2008, p.8)

like Mont Saint-Michel, Vézelay, Rousillon, the vineyards of Bourgogne, Rocamadour, etc. Shortly, they prove in the evidence of a landscaping thinking.⁶⁴

The landscaping thinking results from the interaction between human communities and their environment, without passing by a process of distancing. Accordingly, landscape thinking conserves the unbroken relationship, where the space lived is the space worked. In the mountains, this work involves agricultural production and maintenance of pastureland. The landscape thinking is associated with the ecological functioning and complementarity between human communities and the environment. Moreover, it is based on an organic work with the environment.

The landscaping thinking is associated with pre-industrial cultures, when landscape, as defined by Berque did not exist. Therefore the question of Berque highlights the contradiction between the thinking of landscape as a reflection about it, while generating more damage to it:

The more we think about landscape, and the more we massacre it.

We can certainly admit – it is a widespread point of vue – that we get worried about landscape inasmuch it is menaced. The same thing is valuable for the environment. It is from the English Industrial Revolution that date, more or less nearly, the first concerns followed by the first measures of landscape protection, and that is clearly because the industrial civilization – ours – is opposing the quality of landscapes. We have only to see what is happening in China. But noting this relation does not solve the problem: how is it that our ancestors, who were not concerned about landscape, have benefit from such a remarkable landscaping thinking, and that us, that are crammed with a thinking of landscape, are so flagrantly devoid? ⁶⁵

Why is that the modern society, which reflects on landscape, studies landscape, designs landscape and appreciates landscape, produces unhealthy landscapes and destroys those that are considered beautiful and valuable, thus generating the need for their protection?

3.3.2 Actors in the landscape management

Depending on the understanding of the landscape/environment, this would lead to a different system of values over it. The actors participating in the process of landscape management use different understandings entailing different approaches to the landscape. One

⁶⁴ Author's translation from text in French.(Bergue 2008, p.8)

⁶⁵ Author's translation from the text in French. (Berque 2008, p.9)

single definition of landscape, choosing one approach to it, might not involve all the values related to the cultural landscape as heritage site.

The concept of **landscape management** has been developed with the advances in landscape ecology and planning, mainly focusing on the management of land use for the conservation of some species of animals and plants. Thus, landscape management is a concept built up in the context of the *conservation of nature*, whereby landscape is understood as a systemic complex. As discussed in the previous sections, it is in the context of landscape ecology and general ecology that the concepts of landscape and environment are used interchangeably. Accordingly, landscape management could also be confused with environmental management.

Landscape management is conceived from a planning perspective that combines the approaches [2], [3] and [5]. It refers to the "action to ensure the regular upkeep of a landscape within a perspective of sustainable development so as to guide and harmonize changes which are brought about by social, economic and environmental processes". (Council of Europe 2000) This understanding of the landscape management refers to an action based on a purpose that has been specifically planned in order to achieve the objectives stated in a 'management plan'. Because landscape is defined in ecology as a pattern, a landscape management plan should involve a land use plan and the definitions of certain regulations, guidelines, strategies and activities developed in order to achieve or, at least, lead to the achievement of the land use plan established.

In landscape ecology, land use "is characterized by the arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it. Definition of land use in this way establishes a direct link between land cover and the actions of people in their environment." (Di Gregorio & Jansen 2000). Land cover refers to the description of vegetation and soil, which is in the surface, similar to what Carl O. Sauer defined as 'natural landscape' (Sauer 1925). Therefore, land use is what transforms that surface into a cultural landscape. Moreover, people's arrangements, activities and inputs would compose the landscape management strategies.

Nevertheless, landscape management and landscape management plans are poorly implemented at the scale of heritage sites. In the case studies with which I deal, there is no formal or official landscape management strategy established in terms of landscape management, as previously defined. In order to develop **landscape management** as defined in the European Landscape Convention, landscape needs be understood from the approach [3],

considering landscape a as systemic complex not focused only in human activities (like in approach [2]) but rather all the living organisms in network relations.

Landscape management presumes the use and arrangement of the resources of the environment as objects. It presumes a relationship with landscape as equal to environment, within which its symbolic nature is not necessarily acknowledged. The focus is placed on the tangible aspects of landscape that can be quantified. However, this definition is not useful for the purpose of my study, because my interest lies in the human management of the environment, which implies symbolic and not only utilitarian appreciations of it. Thus, I propose to redefine landscape management as the body of practices that relate to the organization of the environment. This organization can refer to tangible and intangible elements and considering diverse understandings of the landscape.

For analyzing the landscape management, the approach to landscape that determines each group of actors' values need to be identified. Depending on the approach the elements would be managed in a certain manner, with a certain purpose and motivation. This means that there is an expected result in every action undertaken. Subsequently, practices are set in relation to these elements and based on the purpose established to achieve a certain result. Nonetheless, these actions are not coordinated among groups of actors. Hence, I postulate the existence of what I call an **emergent landscape management**, as a continuous process of interaction between actors and the environment producing these different landscapes. 'Emergence' refers to the appearance of characteristics in a system that cannot be predicted by analyzing its components. The emergence appears as result of the interactions in networks, and represents the creativity of living systems. This **emergent landscape management** is dynamic in nature, and I analyze it from an external perception of what is actually occurring in the everyday interaction between the different social actors, institutions and ecosystems. I define it as a phenomenon that emerges through the interrelations between the practices of the most influential social actors and institutions in these heritage sites.

In the heritage sites studied, three groups of actors are relevant in the landscape management: the state, the local agropastoral communities and the visitors. The first and second groups have direct impact on the landscape management, while the third group has indirect impact. For each group of actors, there is a different way to understand the landscape, which means, that there are - at least - three different ways to understand the landscape. However, these are not necessarily consistent or not contradictory among them.

The relevant three social groups interacting in the **emergent landscape management** are:

- 1. The local communities (that inhabit these places) producing a "living landscape", the space in which the community lives. In this approach, there is not a conceptual understanding of the landscape for its modification. The shaping of the landscape is continuously performed through cultural practices. Their approach is related to the 'landscape thinking', which modifies landscape without a conscious reflection about it as an aesthetic external reality.
- 2. The state as an external actor that regards landscape as resources and applies certain policies in order to profit from these resources, whether natural or cultural. There is not a conceptual understanding of the landscape for its modification. The shaping of the landscape is performed through political pratices, which could be policies applied to local communities' activities (subsidies, land-titling, etc.) or those applied to the protected areas by legislation (Cultural-Natural Heritage/Ministry of Environment/Ministry of Culture/Ministry of Agriculture). The first political practice is the declaration of a site as state property and cultural or natural heritage of the Nation, while the second is the definition and application of the protected area's boundaries.
- **3.** The visitors, who have indirect impact on the landscape, when the state or the community base their practices on the representation they want to offer to them. There is a conceptual understanding of the landscape, yet there is no direct modification. The impact is indirect through the aesthetic appreciation of the landscape. If visitors give priority to certain aspects of landscape over others, the state and communities will receive that feedback for their practices.

These three main groups of actors follow two characteristics:

- They act on three different scales: the practices of local communities act at a local scale in the micro-watersheds; the practices of the state act at a regional level in the specific parks and in other protected areas under the same regulations; the practices of the visitors act at both local and regional scales because they consume in the specific parks and the surrounding or similar protected areas.
- They have three levels of impact: the local communities have a direct impact in the inhabited places by creating the "living landscape"; the state has a large-scale direct impact; and the visitors have indirect impacts through their influence in the practices of the state and the local communities.

The practices of these three groups overlap in heritage sites. Furthermore, these groups are not homogenous; rather the groups are heterogenous and overlapping. The **emergent landscape management** (see Figure 1) is subsequently composed by what the state policies establish to protect the heritage sites and their cultural landscapes (e.g. park regulations, Water Law, Agricultural Law, subsidies), together with the intervention of everyday practices of the communities inhabiting them. State's and visitors' influences are external but have consequences in terms of how local people relate to their environment, by following directives of the state and by adapting needs and products to the tourist market.

In the context of these two World Heritage cultural landscapes, UNESCO appears as an important institution to be considered in the framework of external actors. Both sites are connected to the 1972 Convention and its OG. On the other hand they form part of a transnational property, and thus there are some existing monitoring and management patterns that have to be followed in the context of international agreements. National law and regulations are not necessary equivalent to those established in the international agreements; therefore, contradictions might sometimes appear between international and national interests.

In the context of tourism, external investors (external to the local communities) also have an impact upon the landscape. These can be national or international investors that buy the land of local communities in order to develop tourist complexes.

International agreements, as well as tourism investors, do not consider specificities related to the place when acting over the landscape. The same rules are applied to all cultural landscapes and similar criteria are followed by a mountain tourism investment. These international agreements and investment criteria and their consequence for landscape management, reflect the background of the emergent landscape management.

Each of these visions over landscape is supported by a different epistemology, leading to the contention over the values in the heritage sites. In terms of landscape management, it leads to different strategies that could be confronted, especially in the case of the state and the local communities.

By realizing that an inherent conflict in the conservation of heritage sites lies in the different understanding of the landscape according to different groups of actors, I decided not to provide a close definition of landscape, but rather attempt to understand from which perspectives each group of actors has understood and acted over it. The analysis of these three

perceptions sheds lights on the issues that need to be dealt when intending to conserve a heritage site as cultural landscape.

Finally, the different visions of landscapes clarify the diversity of baselines for conservation. Hence, these baselines do not represent a unique homogenous vision of what needs to be conserved. Nevertheless the interest lies in identifying common grounds. Is it possible to define values for a landscape that could be managed by considering the interests of the different groups of actors?

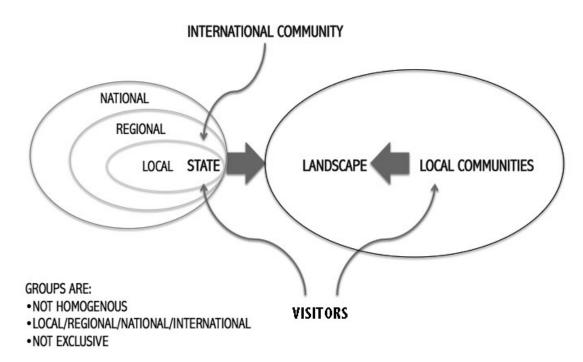


Figure 1: Conceptual model of the emergent landscape management.

4 Material and methods

The unit of analysis in this study is the landscape management, described in Chapter 3 (cf. p.71) as an emergent process. For understanding this process, I have chosen to analyze the approaches over the landscape used by the different actors involved. How do these groups of actors understand the landscape? What is significant/valuable in the landscape for each group of actors? Are these values overlapping or very different? To explore this topic, a qualitative methodology is used, focusing on the analysis of texts, framed in a comparative approach to case studies.

4.1 Comparative case study approach

The interest in comparing two sites in the World Heritage List is founded in the need to revise the models of protection established during the 19th and 20th centuries, which have followed approaches based on partial understandings of heritage. Due to the current processes transforming the conservation practice to more comprehensive and holistic understandings of heritage, it is necessary to move forward accordingly in the legal systems.

These case studies correspond to sites that contain all the types of heritage defined in the 'official' practice as cultural, natural, and intangible. However, one is protected for its 'outstanding' natural heritage as a national park, and the other for its 'outstanding' cultural heritage as an archaeological park. Traditions related to agropastoralism persist in both sites, corresponding to their ICH.

As explained in Chapter 1, both sites are located in significant mountain regions, although they represent two different situations in the context of globalization. As a member of the European Union, Spain is following a trend of de-industrialization. The Aragonese Pyrenees is a depressed area, only reactivated by tourism. On the other hand, the Inca Sacred Valley is an area that has never been intensively industrialized. While the industrialization of agriculture and stockbreeding has been progressive, traditional agriculture is still practiced by peasant communities. However, the strongest economic activity at present is tourism. Therefore, the PNOMP could represent the situation of a Western industrialized country, and the PAO the situation in a developing post-colonial country.

In the next section, I provide some general information about the sites, describing their socio-cultural and economical contexts. The following information has influenced the way in which the sites have been approached in the fieldwork, and particularly in terms of the sampling of relevant respondents.

4.1.1 Ollantaytambo Archaeological Park (PAO)

This park covers an area of 348.00 km², more than half of the district of Ollantaytambo (see Figure 2). It is located in one of the major tourist centers in the country, the Inca Sacred Valley, between Cusco city and Macchu Picchu town, in the Southeastern Andes of Peru (see Figure 3). The urban center, the core of the PAO, is known as the "living Inca town" due to the continual inhabitation of the Inca urban structures. The majority of the park's population inhabit the urban center of Ollantaytambo located on the right bank of the Urubamba River, while some small villages and hamlets are located around Patacancha River and Urubamba River. Nonetheless, most of the people living inside the park are not aware of the extent of the protected area. This is explained due to the main archaeological remains, called the "Fortress", located in the Northwestern side of the town, being enclosed and requiring an entrance fee. The rest of the park is open and free to access, thus giving the impression that it is not part of the protected area.

As an archaeological park, the values and criteria for the conservation of the PAO are based on the relevance of the archaeological structures as cultural heritage. As a cultural landscape, the area contains significant habitats for the region's ecological balance, such as lakes, riverbanks, forests ravines, meadows and agricultural land.

The PAO is regulated through cultural policies. Until 2009, the National Institute of Culture was in charge of the inventory, protection, conservation and management of the National Cultural Heritage of Peru. However, these tasks have since been reassigned, following the creation of the Ministry of Culture; the Institute has been absorbed by the Ministry and the process of restructuration has not yet been concluded. The central offices of the Institute of Culture for the region of Cusco, now the Ministry of Culture, are located in the city of Cusco, 80 km from Ollantaytambo. The PAO is managed by the Chief of the Park, whose office is located in the "Fortress", also referred as "the Monument". Although the area of the Park is larger than the PNOMP, the PAO counts with reduced personnel, working in the maintenance, conservation and monitoring of the site.

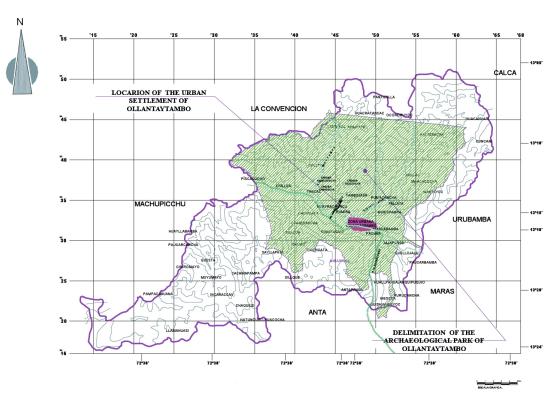


Figure 2: Area of the Archaeological Park of Ollantaytambo (green hatch) in reference to the district (purple line). Source: INC & Municipality of Ollantaytambo, *Management Plan*, 2006.

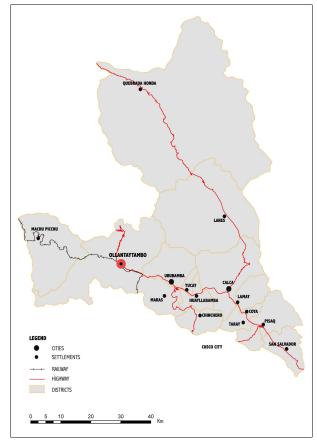


Figure 3: Location of Ollantaytambo in the Urubamba river watershed.

In 1911, Hiram Bingham arrived at Machu Picchu. During this expedition, he also conducted research in Ollantaytambo, where his base was located⁶⁶. At this time, access to these parts of the Valley was difficult, and thus little impact of modernization was evident in this village. Around 1940, after the declaration of Macchu Picchu, Ollantaymbo and other Inca ruins as Monuments and National Cultural Heritage of Peru, access to the area had already been more intense, with the railway having been constructed and the processes of rural-urban migration started. The park was inaugurated in 1983, and Ollantaytambo has since become a major tourist attraction. Urban development and the modernization of ways of life are having strong impacts on this heritage site.

The socio-political and economical context in the country and region play an important role in the changes that are being generated in the landscape of the PAO. The relationship between heritage conservation, development and tourism is not only transforming the area of Ollantaytambo, but also the whole Inca Sacred Valley. This area has several governance problems due to the current conflicting interests. Owing to its proximity to the Sanctuary of Machu Picchu and the large amount of archaeological heritage, this is the first tourist area of the whole country. Two million tourists visit Machu Picchu every year, passing through Ollantaytambo train station, with the majority of them also visiting the archaeological parks of the Inca Sacred Valley (Pisaq, Chinchero and Ollantaytambo being the most frequented). The Inca Sacred Valley is a "gold mine", and is being progressively invaded by tourist facilities and agencies of all kinds. Moreover, the unplanned and chaotic urban development in riverbanks and agricultural fields has already had terrible consequences due to the frequent flooding of the Vilcanota-Urubamba River and its affluents during the rainy season (October to March). Population is growing in the urban centers, mainly Urubamba, a town 30 km. from Ollantaytambo that works as the node of the Valley, and the main connection to Cusco city.

Several issues in the Inca Sacred Valley were to be solved by the Vilcanota River Rehabilitation Project, funded by the World Bank and managed by the Ministry of Commerce and Tourism. Moreover, since the Inca Sacred Valley was declared Cultural Heritage of the Nation in 2006, a Master Plan for the whole valley has been worked and recently put under consultation. One of the main topics that needed to be developed in the Master Plan is the construction regulations and organization of future urban development in relation to the heritage sites. At the local level, there are two main topics of discussions in Ollantaytambo itself: the

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⁶⁶ At the beginning of the last century, when Hiram Bingham was exploring the region of Cusco and especially, the area of the Urubamba river valley, he was settled in the town of Ollantaytambo, in the *Casa Horno* (Oven House), a famous residence of colonial style with foundations of Inca architecture, located in the neighborhood of Qosqo Ayllu. Later, this house became the Site Museum of the PAO. Currently it is close.

construction of the alternative road and the relocation of the train station, which are discussed in Chapter 9.

- 1857 Ollantaytambo district was created.
- 1911 Hiram Bingham explores the Inca Sacred Valley, he found Macchu Picchu.
- **1929** Historical monuments declared State Property. Ollantaytambo was declared National Monument together with Machu Picchu and Sacsayhuaman, as archaeological sites.
- 1983 Ollantaytambo Archaeological Park created as Cultural Heritage of the Nation.
- **2006** Inca Sacred Valley declared Cultural Heritage of the Nation, PAO forms part of this declaration.
- **2014** World Heritage cultural landscape Qhapaq Ñan (Andean Road System) shared property with Argentina, Bolivia, Chile, Colombia and Ecuador.

Box 3: Timeline of the patrimonialization process of the Archaeological Park of Ollantaytambo, Peru.

4.1.2 Ordesa and Monte Perdido National Park (PNOMP)

This Park covers an area of 156.08 km² and is located in the province of Huesca in the Autonome Commune of Aragon, in the central Spanish Pyrenees. It shares the title of World Heritage cultural landscape with a part of the Pyrenees National Park in France (see Figure 4). Although the Park has no human occupation, it is surrounded by small towns and the local population utilizes areas of the park as pastures for their livestock. This protected area has been established due to its natural values, particularly related to its geological features and the endemic species of fauna and flora. Nevertheless, it was stated in the declaration of the site as part of the World Heritage list as a cultural landscape where traditional pastoral culture is found as a valuable feature of the property. Here, we also find a variety of habitats, including meadows, riverbanks, forests, caves and gullies.

The national park is regulated through the system corresponding to the protection of natural heritage. This is in charge of the Ministry of Agriculture and the Environment, as the central institution. In 2006, the management of the PNOMP was transferred to the Autonomous Community of Aragon, although it remains part of the National Network of National Parks. The structure of the management of the park comprises three sectors: Public use, Conservation and Infrastructure. The director of the park is the highest authority in the decision-making process, even though there is a consultative organism, named the "Patronato" (Board), which is composed of representatives for the groups that are affected and affect the area of the park. The offices of the park are located in the city of Huesca, around 100 km. from the protected area.

At the local level, the monitoring organization is in charge of the Chief of the Guards. There are three offices in the field: Torla, where the Interpretation Centre is located; Escalona, the base of the Chief of the Guards; and Bielsa. There are three information points during the high season (in summer) and holidays, in Tella, Escuain and Pineta. Each of these information points also has a specific exhibition for the interest that can be found in that particular part of the park (e.g. the cavern of the bear in Tella, the "quebrantahuesos" - Gypaetus barbatus - in Escuain).

The PNOMP was inaugurated at the beginning of the 20th century. During this time, aesthetical values inspired the need for its protection as a natural landscape and its importance as the habitat of the Pyrenean ibex (*Capra pyrenaica pyrenaica*), commonly known as "burcardo", an endemic species of these mountains. However, this species is already extinct, with the last individual having died in 2000.

1918 Creation of the Ordesa National Park (4,100 ha) to protect the Pyrenean ibex extinct since 2000.

1966 Creation of the Viñamala National Hunting Reserve (51,396 ha) adjacent to the west side of the National Park.

1977 Declaration as UNESCO Biosphere Reserve Ordesa-Viñamala (MAB program) to the National Park and the Hunting Reserve together.

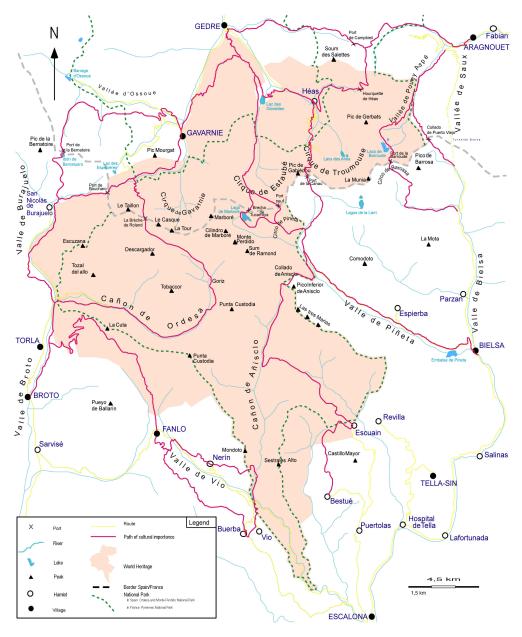
1982 Enlargement of the National Park to include four Valleys: Anisclo, Ordesa, Pineta, Escuain (15,608 ha).

1988 National Park established as a Special Protection under the EU Birds Directive and received the Council of Europe Diploma category A, renewed in 1993.

1997 World Heritage cultural landscape, transnational property Pyrenees/Mont Perdu shared with France (15,039 ha of the French Pyrenees National Park).

Box 4: Timeline of the patrimonialization process of Ordesa and Monte Perdido National Park, Spain.

During the 1940s, the Spanish government determined policies for industrialization that affected the societies of the Pyrenees, generating the depopulation of the mountains. During the 1980s, a project for a hydroelectric plant jeopardized the integrity of the Anisclo canyon, one of southern watersheds of Mount Perdu (called "*Tres Serols*" by Spaniards). The national park was enlarged in 1982, in order to protect this natural landscape, adopting its current configuration in which the Anisclo, Pineta and Escuain Valleys were added to the Ordesa Valley (the original protected area).



Sources: Carte Géographisme, 2000 - Rando Editions n°24 au 1 : 50 000ème, 2000. Conception: Pierre Poussard, ARPE, 2001

Figure 4: Area of the Ordesa and Monte Perdido National Park in relation to the World Heritage property shared with France. (Source: Association Mont Perdu Patrimoine Mondiale)

When the Biosphere Reserve was declared, the national park had not yet been enlarged. Therefore, the Anisclo, Pineta and Escuain Valleys do not form part of the Biosphere Reserve at present. There is currently discussion about the extension of the Biosphere Reserve to include the whole national park as it is delimited today, also integrating the Area of socio-economic influence.

The socio-political and economical context in Spain plays a fundamental role in the perception of the landscape and the future of agropastoralism in the area. At the time of this

research, Spain is undergoing a critical moment, with a high unemployment rate, debilitated political system and economic crisis, particularly felt in the urban centers. In the Pyrenees, as one of the respondents stated, people are used to crisis, given that stockbreeding and farming activities are subject to climate, political and economic instabilities. Consequently, the current crisis is affecting the area, although not as much as in the urban centers. By contrast, urban people are re-thinking about inhabiting these rural areas again, as an alternative. On the other hand, the main activity affected by the crisis is tourism. The PNOMP usually receives a large amount of national tourism; however, with the country's economic problems, fewer Spanish tourists have been received in the PNOMP over the past two years.

4.2 Access to the field and interview sampling

The fieldwork has been developed in two phases. First, an exploratory phase was undertaken in both sites in 2011, before a second phase of research and interviews was completed in 2012. Even though one of the sites was already familiar to the researcher due to previous investigation works (Ishizawa 2008; Ishizawa 2009), the same rationale has been used in both parks. Nevertheless, this has been adapted according to the groups studied and the context in each site.

During the exploratory phase, ten days were spent in the PAO and 7 days in the PNOMP. The most important finding in the PNOMP during this phase was that the agropastoral activities were no longer 'traditional' and that the type of livestock breeding has changed significantly in the last 50 years. The cattle are generally composed of cows and not so much of sheep or goats, as was traditionally the case. Agriculture has been progressively abandoned for at least 50 years, although permanent inhabitants maintain the tradition of the home orchards. Contrary to what has been stated in the nomination file for the inclusion of this site in the World Heritage list, traditional transhumance and agropastoralism are no longer practiced. In the exploratory phase in the PAO, it has been found that evangelistic groups are frequenting the Patacancha watershed to preach the Gospel and promote alcohol abstinence in recent years. This has led to the change of the majority of the population in this watershed, from Catholic faith to Evangelism. Consequently, traditional religious feasts and festivals where the preparation and drinking of alcoholic beverages were practiced are no longer celebrated. This situation has generated a conflict between the maintenance of the traditional Andean practices related to Catholicism (e.g. the tradition of the "pago a la tierra" - payment to the Earth - at the beginning of the agricultural calendar in August) and the total cessation of these practices, because they are not mentioned in the Gospel. Hence, a new process of evangelization is directly affecting the safeguarding of the ICH of these communities. These findings have affected the following steps of the research.

The second phase involved eight weeks in the PAO (April and May 2012) and four weeks in the PNOMP (July and August 2012). The difference in timeframes relates to the degree of difficulty in accessing respondents, as well as data availability. The PNOMP has been widely studied. Hence, the research could be built on previous findings from different disciplinary backgrounds, and essentially research generated in the Pyrenean Institute of Ecology (IPE). On the other hand, the PAO has been primarily researched from the archaeological perspective. However, research in this area is not as structured as in the case of the PNOMP. There is a lack of quantitative data and access to data is also restrained. Moreover, the access to respondents has a high degree of difficulty due to the infrastructural and geographical constraints (lack of roads and high altitude). Thus, more time was needed in the PAO.

Experiencing life in the towns and villages of these sites was fundamental to understand the pace of the places, as well as how inhabitants relate to their environment. Although the fieldworks were short from an ethnographic perspective, they coincided with important events in both places.

In the case of the fieldwork in the PAO, it was planned to participate in the festivity of the "Cruz Velacuy", which was thought to be the most significant due to its proximity to the great harvest of maize. However, it was found in the field that the most important festivity in the town of Ollantaytambo is the "Fiesta del Señor de Choquequilca" (Festivity of the Lord of Choquequilca), which is scheduled for the last week of May. Unfortunately, I could not attend the festivity, but I could accompany its preparation. Another celebration that was attended was the "Fiesta de San Isidro Labrador" (Festivity of San Isidro, the farmer), which is also related to the agricultural calendar.

In the case of the fieldwork in the PNOMP, it was planned to participate in the "Paso a Francia" (Passing to France), which is an important event in the context of the pastoral tradition that has been transformed into stockbreeding. This event takes place at the end of July and involves moving the cattle from the spring pastures of the Mancomunidad de Broto into the summer pastures in France. This tradition has been performed for more than 400 years, since times when the borders between modern Spain and France did not exist as they do now. It corresponds to a treaty made between two valleys: the valley of Broto and the valley of Bareges. By participating in this event, it was possible to talk with the stockbreeders and understand how

this tradition is important for the maintenance of good relations between Spanish and French stockbreeders. In the context of the World Heritage, this event was identified as a salient cultural practice to be safeguarded.

The sampling rationale is based on the model of the emergent landscape management. I divided the population in the three groups previously mentioned: the representatives of the state, the representatives of the local communities and the representatives of the visitors.

The state group is represented by the administration of the heritage sites. The management has a different structural organization in each site, and the representatives of the vision of the state regarding the landscape in relation to the specific sites have been the managers ("Director" in the case of the PNOMP) or chiefs ("Jefe" in the case of the PAO) of the heritage sites and the guiding documents to their protection, conservation and management. These documents served as primary data, because they directly reflect the official understanding of the state towards landscape and the conservation of heritage. The laws passed for protecting heritage and the management plans for the sites have also been analyzed as representative of this vision. The documents included in the analysis are listed in Annex1.

The representatives of the state landscape management approach in the PAO are the Chief of the Archaeological Park of Ollantaytambo, the Director of the Urban Development Division in the Municipality of Ollantaytambo and the anthropologist of the Archaeological Park of Ollantaytambo in charge of the research and inventory of the ICH. This role is new in the Park, with the anthropologist only entering into office in May 2012, while the fieldwork in the PAO was being developed.

During the course of this research, two Chiefs were interviewed. However, only the interview with the current chief has been taken into account for the data analysis, although the information provided by the previous chief has also served as background information. Chiefs in the PAO change continuously, usually only remaining in office for approximately one year, due to the permanently arising conflicts regarding the constructions in zones with archaeological commitment, specially in the urban center and its surroundings.

The representatives of the state landscape management approach in the PNOMP are the Director of the Ordesa and Monte Perdido National Park and the Director of the Conservation Department of the Ordesa and Monte Perdido National Park. The director has now been serving for 20 months (started in January 2012). During the course of this research, two directors were interviewed. The previous director served since 2006 and had a close relationship with the

inhabitants of the area. He was instrumental for the selection of samples among the stockbreeding community of the PNOMP.

The social organization differs between the two sites. However, from the experience of the fieldwork, it was noticed that most of the people know each other in both sites. In the case of the PNOMP, the people function in relation to their municipalities, called "ayuntamientos" in Spanish, and have a close relationship among the inhabitants of the different towns within the so-called Area of socio-economic influence. Most of them know each other, because the villages only count an average of two active houses or "casas". Moreover, the Association of Stockbreeders of the National Park and the network of Park Guards and Guards of the Hunting Reserve generate links among these municipalities and the people. Furthermore, the inhabitants of one village have traditionally assisted the festivals of the different villages in the area (included villages that are not specifically associated to the PNOMP). In the case of the PAO, it is organized as Peasant Communities, and Associations that are a similar model to the Peasant Community. The "Peasant Community" could only be differentiated because it takes its roots in the native communities, called "ayllus" in Quechua, from pre-colonial times. Associations were formed during the Agrarian Reform in 1969, and they follow similar statutes as the peasant communities, although they are commercial-oriented.

With a focus on the formation of the agropastoral landscape in the sites, the samples were taken from people who had been or are still performing agropastoral practices. The samples were chosen using snowball sampling.

The PAO has been divided into ten territorial units according to the Management Plan of 2006 (see Figure 5). The units selected for this study are the areas of the UT1 (the urban core) and the UT5 (the highlands where ICH is safeguarded). In the case of the PAO, two main sources for contacting the relevant farmers and stockbreeders were used: the Municipality of Ollantaytambo and the Association of Living Incas ("Asociación de Incas vivientes"). Due to instability of the role of the Chief of the Park, in this case study it was more adequate to contact the relevant respondents through the local authorities of the Municipality, who are inhabitants of Ollantaytambo and know the people. In order to contact the communities from the highlands, it was necessary to find the proper gatekeeper, because peasant communities are used to being consulted by foreign researchers, NGOs and sometimes corporations that do not clarify their role, work, leading peasants to feel cheated on occasions. Therefore, it was necessary to "enter" these communities as an independent researcher, yet known or recognized by persons who the community trust. From outside the communities, there are two actors who the peasants respect: on the one hand, the authorities of the Municipality; and on the other hand, the teachers who

work in the rural schools. The communities of the highlands were contacted through the Association of Living Incas from the school of Patacancha. Teachers in this school have been working in the inventorying and conservation of the ICH of the "wayruros" (name given to the people that live in these highlands) for more than eight years. The Association of Living Incas is an initiative of high school students and their teachers to create a network of young people from these peasant communities that conserve their traditions, and at the same time, promote rural tourism development. Through the connection with this Association, it was possible to experience life in the highlands of the Patacancha watershed. Fourteen respondents were interviewed as part of the group of local communities.

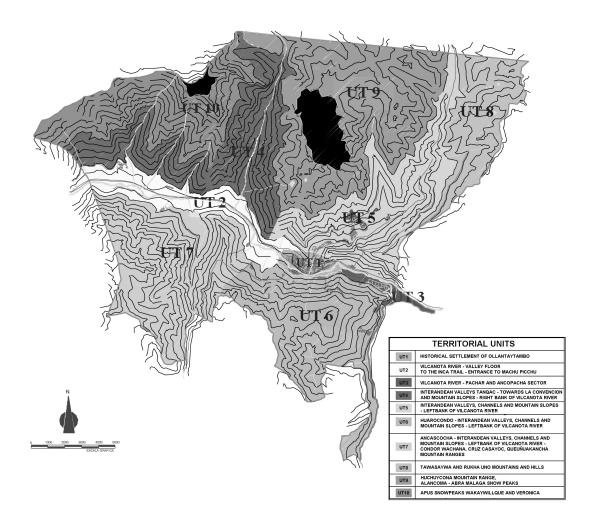


Figure 5: Territorial units in the Archaeological Park of Ollantaytambo. Source: INC & Municipality of Ollantaytambo, *Management Plan*, 2006.

In the case of the PNOMP, the National Park is divided in three zones: the Nucleus ("Núcleo"), the Protection Peripherial Zone ("Zona Periférica de Protección") and the Area of socio-economic influence ("Area de influencia"). The Nucleus does not contain any settlement, while there are three small villages (almost abandoned) in the Peripheric and Protection Zone,

namely Escuain, Sercue and Nerin. The Area of socio-economic influence comprises all the settlements located inside the municipalities affected by the park; these are: Torla, Fanlo, Puertolas, Tella-Sin, Bielsa and Broto. Escuain, Sercue and Nerin have been re-inhabited, but only in the high tourist season to provide visitors with accommodation or services (bar). In Escuain, there is an information center of the park. Sercue was abandoned until recently, and Nerin is a very small village with a bar and where a famous artisan lives. I sustained a conversation with the artisan of Nerin during the first visit to the PNOMP in August 2011, which serves as background information.

The village that has historically had a major influence in its development by the park is Torla. This is because Torla is the door to the Ordesa Valley, the first area to be declared national park in 1918. The area where Monte Perdido is encountered is the municipality of Fanlo, where the last transhumant shepherds live. The areas of Broto and Bielsa were not part of this survey because no relevant respondent was found in this area. Moreover, only a small part of Broto's territory is included in the park.

Two main sources were used for contacting the relevant stockbreeders: the administration of the park (first director interviewed during the exploratory phase) and the IPE (researchers in contact with stockbreeders). The approach to the local communities of stockbreeders has subsequently been established from these two perspectives, political and scientific. The population in this area is the smallest in the whole Pyrenean mountains. The Comarca de Sobrarbe (Sobrarbe Region) is the least populated with 7,812 inhabitants and a density of 3.55 inh./km². The settlements in the Area of socio-economic influence of the park have been abandoned in many cases, or only count one or two families living permanently. The Association of Stockbreeders of the park is an important network that is represented in the "Patronato" of the PNOMP and many of the stockbreeders have worked as Guards in the PNOMP or the Viñemala Hunting Reserve. Twelve respondents were interviewed as representative of the local communities.

For the visitors' vision, the samples were selected randomly in open spaces of the towns. Because visitors are generally in a hurry, or do not want to be disturbed, the researcher only interviewed those persons who were found in a resting or transit situation.

In the case of the PAO, the interviews were undertaken in the urban center, in two locations that are hubs for the visitors: the Plaza de Armas and the train station. Informal conversations and observation was developed in other parts of the town and during the trekkings in the area. Six people were interviewed, including couples in two cases. In the case of the

PNOMP, the interviews were undertaken in the town of Torla, the most touristic place of the Area of socio-economic influence of the PNOMP. Informal conversations and observation were developed in other towns, as well as during the trekkings and visits inside the park. Seven people were interviewed, although in three cases they were in couples: in the plaza of the Church that is a "*mirador*" (viewpoint), in the plaza of the municipality and at the town's bus stop.

The visitors' vision is complemented by interviews with the workers in the tourist offices, the town of Torla for the PNOMP and the town of Ollantaytambo for the PAO. From these interviews, the interests of visitors consulting these offices is clarified as well as what is offered from the part of local authorities representing the state vision over the cultural landscape.

4.3 Data collection and data processing

The data collection has been developed in the most similar manner possible across the two cases studies. However, some specific contextual factors for each place also influenced in the process.

It is important to clarify that, unlike the Pyrenees, the Andes mountains is a region mostly populated by indigenous or *mestizos* speaking Quechua and its local or regional derivations. The cultural difference is very noticeable and therefore it was necessary for the fieldwork to use different strategies in the process of data collection in order to acquire the required information. For instance, it was more difficult to ask the questions directly in the case of the peasant communities in the PAO, and thus the interviews were longer and covered different topics in order to treat the themes needed for the research.

For each case study, some events or circumstances were defined as influential in the conservation of the cultural landscape; consequently, the discussion of these topical issues was included in the interviews. However, both sites have different levels of protection and the implementation of the protective measures was effective to differing degrees. Questions had to be adapted depending on the context, as well as the model of conservation.

During the interviews, the researcher allowed the respondents expand upon their thoughts in the topics of their interest, whilst also guiding this to the relevant themes. The interviews lasted between forty minutes and three hours, depending on the context and the time

that the respondent could give. However, all the basic questions were asked during the shorter interviews. Interviews were recorded in most cases and transcribed by the researcher. In two cases, one in the PAO and another in the PNOMP, respondents did not agree to be recorded. Hence, the data provided in these two interviews was reported through notes (FSH in the PAO and P in the PNOMP). The documents and transcripts are all in Spanish language, and have been subsequently translated to English by the researcher to present the results.

Respondents have been made anonymous. Only in the case of the state respondents are their positions referred to in the report by using their roles, because it is relevant in order to understand their vision concerning the implementation of the conservation of the landscape. In the case of the local communities, the respondents have been codified according to the activities they perform: farming (F); stockbreeding (S); tourism services, including restaurants and hotels, (T); hunting (H); guard or work in the Park (P); mayor (M); President of a Peasant Community (C); and President of the Peasant Ronda (R). When they perform several of these activities, the letters have been accumulated, and, if the combination has been repeated, they have been numbered. The town of origin is mentioned in the list of respondents, since it reflects the way in which they perceive the landscape and how they have lived its processes of change. In the case of the visitors, a simple (V) has been used representing their group, before subsequently being numbered. The country of origin is stated in the list of respondents, which can also reflect how they perceive the landscape visited and how they approach the visited place. The list of respondents can be found in Annex 2.

The themes that have been established as the conceptual categories for this research are: the landscape values, the landscape management and the landscape conservation. The instruments for data collection were designed in order to explore these categories with the respondents, according to their previously defined group. These instruments were three semi-structured and open-ended interviews (see Annex 3). For each group, the interview was oriented to understand the perception concerning the landscape as heritage, as well as identifying the priorities for conservation or the significant places. However, a different instrument was used for each group, in order to adapt it to the respondent's language and cultural background.

The interviews with members of the local communities covered the same themes in both sites (see Annex 3, Box 6). They were set in the context of their work, in a public space (plaza of the village), or in a bar or cafe. The researcher tried as much as possible not to interrupt the respondents' work, and at the same time, to perceive their relation to the landscape by being in open spaces, accompanying their working tasks and where they also could identify the elements of the landscape that are important for the community and give their appreciation of it. Initially,

the design of the fieldwork was oriented to a cultural mapping of the significant places for the local communities. This meant accompanying the respondents to the places they considered significant within their landscapes, in order to map them and understand the locals' perception in relation to their place. Unfortunately, the cultural mapping could not be achieved due to the difficulty of embarking people constantly occupied in the tasks of agriculture and stockbreeding. Developing the project with such as method would have needed a longer fieldwork with more resources. Consequently, only in the cases when it was possible to accompany the respondents in their tasks and their walkabouts, the georeferencing of the sites was possible through the use of a GPS (Garmin e-Trex).

Every agropastoralist interviewed had a personal history, although unfortunately it was impossible to go in depth due to the time constraints. Nonetheless, the accounts and narrations they made of their lives and how this related to the process of change has been fundamental in understanding how the cultural landscapes have evolved.

The questions posed to the visitors were related to their stay and the places they liked the most in their visit to these specific sites (see Annex 3, Box 7). There was also an interest in ascertaining whether the visitors made a difference between the cultural and natural landscape, and if they appreciated the landscape due to its natural or cultural values. Tourist practices were observed in the important nodes of the towns and in the visitors' itineraries. This observation served to complement the understanding of the visitors' vision through interviews.

4.4 Data analysis

The data analysis focuses on the primary data collected through interviews in the field. In the case of the perception of the state, the analysis extends to the corresponding documents that normalize the conservation of the cultural landscape in the sites.

The documents, interview transcripts, fieldwork notes and diaries have been processed as primary data through text analysis, using the themes and categories previously defined in the conceptual framework and integrating the codes that have been encountered as emerging from the data. The software Atlas.ti 9 was used to organize the coding of the texts.

The themes considered in the analysis are the landscape values (the values needing protection); the landscape management (establishment of boundaries and the criteria for definition); ownership (public, private: locals or estate owners); activities permitted in the area;

and the landscape conservation (administrative and political issues, role of government agencies, municipalities, etc., and monitoring measures).

The first theme to be analyzed was the landscape values (see Annex 6 and 7). The aim was to identify the places or elements in the landscape that were appreciated, in need of protection or conservation, creating maps where this information is presented and compared through their georeferencing.

The respondents' answers regarding this theme have been extracted in order to map their locations mentioned. In some cases, exact locations were not mentioned but rather general ideas. In order to map the sites, I used cartographic methods (GPS and GIS data and software), geographically connecting the qualitative data provided by respondents (Steinberg & Steinberg 2005, chap.5).

The analysis and results are qualitative in nature, because the data collection was not designed as a survey questionnaire but rather as an open-ended semi-structured interview (Schensul & LeCompte 1999). Accordingly, the respondents could elaborate upon their opinions without being strictly guided, as about what they understood to be important in the landscape. In this way, the data gathered cannot be generalized but represents different perspectives.

The transcripts of the interviews were analyzed in order to extract the information about: (1) the places mentioned by the respondents; (2) the specific places qualified as important, significant or valuable; and (3) the relationship to places mentioned. Owing to the focus on gaining a perception of the landscape and how they relate to it, the context and comments related to the places mentioned has also been extracted. In the same process, the places that have been stated as priority of conservation and more valuable by the Management Plans of the sites have also been listed.

In order to cross check the analysis and results, as well as visually illustrating the study, I have used photography and maps. While photography is not the main source of analysis for this study, it is used as an instrument of validation and illustration of the analysis and results. Moreover, it serves to illustrate the contexts in question. Events and landscapes were photographed. Trekkings in both parks were undertaken and photographed. By following local communities' paths and visitors' itineraries, it was possible to complement the interviews to the space and attitudes of inhabitants and tourists. Some pictures were collected from previous years in both sites, which served to compare and observe the changes of the landscape in the

protected areas during the 20th century. Maps were created by the researcher using Quantum GIS based on data acquired from the Vilcanota Project Management for the PAO, as well as the PNOMP Direction. Other maps have been taken from the documents guiding the management of the sites and the relevant literature, with the sources stated in each case. Moreover, the sources of the photographs that were not taken by the author are also specified in each case.

In the case of the historical sources, the literature selected has been the most recognized in the area, by inhabitants and researchers. Since the focus of this research is not to find out historical accuracy, but the perception from the actors in the sites, the historical information has only been used for contextualising the study areas. Historical archives were not consulted.

In order to process the data, several coding methods have been used. As described in (Saldana 2013), for a first cycle of coding, the codes used correspond to: Attribute coding, In Vivo coding, Descriptive coding, Values coding, Versus coding, Narrative coding and Causation coding. In the second cycle coding process of the data, I utilized the following coding methods: Pattern coding, Axial coding, Theoretical coding. The codes were defined according to the categories or themes previously mentioned: landscape values, landscape management and landscape conservation.

The aim of the coding was to first define the perception of the landscape for each group, which led to the definition of certain practices that I interpreted as landscape management. By understanding these, the patterns for the landscape conservation process are clarified, presented as the emergent landscape management. Subsequently, the similarities and differences occurring or entailed by the different models of conservation have been identified (see Matrix of codes in Annex 4).

5 Three landscapes

This chapter functions as a bridge between the theoretical framework and the empirical analysis and results. In the previous chapters, the theoretical and conceptual backgrounds on the conservation of landscapes have been discussed. Landscape is understood, in the conservation context, as an external perception concerning the environment. This is linked to the objectification of the world (Berque 2008) and can have several interpretations according to the subject that objectifies the environment (Antrop 2006; Besse 2009). Despite different approaches that define it in different ways (Besse 2009), the concept takes its roots in a dissassociation between the observer and its environment, characteristic of a naturalist ontology (Descola & Pálsson 2001; Descola 2005). Establishing one single operational definition of landscape is difficult, because the aim of adapting the concept into an integrative approach to environment requires overcoming a dualistic understanding of the world. Even if the concept of landscape is being used as unifier of natural and cultural aspects of environment, a holistic approach is unreachable when the foundations are set on the culture/nature divide. Moreover, the concept of landscape cannot be used in the same way in every cultural context, because the ontological foundations of the relationship with environment might differ in nature according to the cultural context. Different understandings of the landscape generate different approaches to its management or possible vision of conservation. Furthermore, different approaches not only appear in different cultural contexts, but also in one single context, such as the case of a heritage site.

In the first part of this chapter, I analyze the statements of OUV of both sites in order to clarify the baseline for their 'official' conservation. I examine the criteria used for the evaluation of these sites as cultural landscapes. In the second part, I introduce the results of this research, whereby three landscapes have been found as participating in the process of the emergent landscape management. Finally, the categories for the comparison of these three perspectives are explained.

5.1 Criteria as World Heritage Cultural Landscapes

As the term has been defined in the context of the 1972 Convention, it relates to values that are not necessarily based on how people living in the landscape perceive their environment.

The three categories based their object of protection on different understandings of what landscape is (cf. p. 56). These are representations of landscape:

- the first category refers to design and an artialization *in situ* of the environment (Roger 1997). The artialization *in situ* means the transformation of environment into a landscape passing by a process of becoming art through human action. This category corresponds to approach [1];
- the second category refers to a land use, connected to approach [2]; and
- the third category refers to a subjective perception, connected to approach [4].

In order to become a World Heritage site, every site first needs to be protected by the State Party that nominates it and fulfil the criteria of OUV. For these sites, the criteria used can be consulted in Annex 5. In the case of the Pyrenees/Mont Perdu World Heritage site, both Ordesa and Monte Perdido in Spain and the Pyrenees in France are national parks. However, the area determined as World Heritage site (covering the entire Spanish Park and only a part of the French Park) has been nominated as a cultural landscape. The justification has been two-fold, representing tangible and intangible heritage. The statement of OUV affirms that the agropastoral tradition has been preserved as a living historical testimony in this area of the Pyrenees:

This outstanding mountain landscape, which spans the contemporary national borders of France and Spain, is centered around the peak of Mount Perdu, a calcareous massif that rises to 3,352 m. The site, with a total area of 30,639 ha, includes two of Europe's largest and deepest canyons on the Spanish side and three major cirque walls on the more abrupt northern slopes with France, classic presentations of these geological landforms. The site is also a pastoral landscape reflecting an agricultural way of life that was once widespread in the upland regions of Europe but now survives only in this part of the Pyrenees. Thus it provides exceptional insights into past European society through its landscape of villages, farms, fields, upland pastures and mountain roads. (UNESCO & World Heritage Committee 1998, p.39) 67

This statement is based on approach [2] defined by Besse. The way of life produced a landscape from which past activity can be uncovered and interpreted through the study of these traces left by human practices. What were the criteria used for this nomination if both parks are protected as natural heritage? The criteria clarify how the site has been valued, and in this way it can be deduced how the landscape is perceived and valued by the experts:

⁶⁷ Text in bold and underlined is from the author.

The Committee inscribed the site under natural criteria (vii) and (viii). The calcareous massif of the Mount Perdu displays classic geological landforms, including deep canyons and spectacular cirque walls. It is also an outstanding scenic landscape with meadows, lakes, caves and forests on mountain slopes. In addition, the area is of high interest to science and conservation. Concerning cultural values, the Committee inscribed the property on the basis of criteria (iii), (iv) and (v): The Pyrenees-Mont Perdu area between France and Spain is an outstanding cultural landscape which combines scenic beauty with a socio-economic structure that has its roots in the past and illustrates a mountain way of life that has become rare in Europe. (Ibid.)

Criteria (vii) and (viii) correspond to natural values. Criterion (vii) reads that the site should "contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance". Namely, approaches [1] and [3], a combination of the aesthetic representation of the landscape and the geological interest that, as explained above, represent the roots of the conservation of nature: spectacular natural formations appreciated because of their beauty.

Criterion (viii) corresponds to sites that are "outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features". Here, the focus is clearly scientific and relates to approach [3].

Criterion (iii) applies to sites that "bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared", referring to approach [2]. Criterion (iv) is appropriate for sites that are "an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history", referring to approach [5]. Criterion (v) is used for sites that represent "an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change", referring to approach [2].

Accordingly, it is a testimony of cultural tradition (terraces, stockbreeders, towns, land use), a landscape illustrating significant stage in human history (agropastoral), and conserves a traditional land use representative of a culture vulnerable under the impact of irreversible change (terraces, agropastoral landscape, agropastoralism).

Conclusively, each criterion used refers to different approaches to landscape. Essentially, in this case we find approach [1] (once), [2] (in two criteria), [3] (in two criteria) and [5] (once). Thus, how could these values be conserved in a unique management structure if coming from different methodological perspectives?

In the case of the Archaeological Park of Ollantaytambo, the model of protection obeys the idea of *conservation of the past*, focusing on the protection of the material remains of the cultures that have consecutively inhabited this place, emphasizing the values of Inca cultural remains. Nonetheless, the justification for including this site in the serial nomination of the Qhapaq Ñan to the World Heritage List relied on the evidence of segments of the path in the route Ollantaytambo-Lares, and the presence of the traditional way of life of Andean communities in the Patacancha watershed⁶⁸. Many sites (more than 200) are part of this serial and transnational nomination, and its description and the criteria used attempt to comprehensively describe the values of the Qhapaq Ñan as a system:

Qhapaq Ñan, the Andean Road System, is a cultural itinerary that constitutes a unique physical accomplishment of the utmost importance to the history of humanity and of the continent of South America.

The construction of Qhapaq Ñan gave rise to an extraordinary road network, planned and laid as a permanent tract through one of the world's most broken and extreme geographical terrains, where the world's greatest biological diversity, coupled with great cultural diversity, is to be found. The roads were used by armies, whole population groups that often amounted to more than 40,000 persons and a large number of llama caravans, transporting goods and raw materials.

In addition to the distance covered by that extensive road system, the sheer scale and the quality of the road, built to link the snow-capped mountain range of the Andes, at an altitude of more than 6,000 meters high, to the coast, running through hot rainforests, fertile valleys and absolute deserts, are most outstanding. (...)

The exceptional feature of this great engineering feat is that its legacy is still physically, functionally and symbolically relevant to Andean peoples today.⁶⁹

The most relevant statement for this study is the claim that this heritage "is still physically, functionally and symbolically relevant to Andean peoples today", affirming the existence of a living heritage that is related to the Andean worldview and the continuous use of this system. It continues in the contribution of Peru to the Qhapaq Ñan:

⁶⁸ Personal communication with people in charge of the nomination.

⁶⁹ Source: http://whc.unesco.org/en/tentativelists/5547 (World Heritage Center.) Text in bold is from the author.

Currently, some Peruvian peoples continue to use the Qhapaq Ñan as a communication system, keeping it in service physically and functionally, with the use of Andean technology and traditions based on reciprocal and complementary systems characteristic of Inca society and the Andean world. 70

This means that the significance of this site as a cultural landscape relies on the ongoing traditions of the people who live there, interpreted as ICH. However, this site is managed as an Archaeological Park. Accordingly, how is the ICH included in the management, and how can this be safeguarded in order to maintain the claimed OUV of the cultural landscape?

The criteria that justify the OUV of the site correspond to cultural criteria. How are they connected to the five approaches to landscape? Although the justification of value according to the set of criteria established by the OG does not directly relate to the landscape (not using the specific word in every case), the criteria should justify that this series of heritage sites corresponds to a cultural landscape. The road system is an ensemble and essentially an intervention in the landscape, as understood from approach [5]. However, other approaches can be inferred from the value system used. I start with the justification of the first criterion:

Criterion (i): The outstanding aspects of this road network are the routes and building techniques used to cover one of the planet's most complex mountain systems. The construction of this network represents the synthesis of cultural development in South America. The Qhapaq Ñan Andean Road and some of the pre-Hispanic sites inscribed have been located and admired since the sixteenth century by many chroniclers, explorers and travelers who traversed this major engineering work of the pre-Inca and Inca eras.⁷¹

This criterion is connected to approach [5] of landscape design and planning. The value is represented by the tangible remains of "routes and building techniques" in what is seen as a difficult "natural landscape". The value relies on the "major engineering work" in relation to the complexity of the environment where it is encountered.

Criterion (ii): The features and archaeological evidence of the Andean Road network reflect a dynamic exchange of values, the use of architectural elements and political structures existing in the pre-Inca and Inca eras, such as the maintenance of strategic

⁷¹ Ibid. Text in bold is from the author.

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⁷⁰ Ibid., point 2 "Contribution from Peru to Outstanding Universal Value of the Serial international nomination".

lines related to production and land occupancy in different altitude tiers, through the use of an agricultural system known as "vertical control".⁷²

Here, the justification and value relies on the marks in the landscape that relate to approach [2], which, due to the component of design implied, is in association to approach [5] of landscape architects. Nevertheless, the consideration of "political structures" used also implies an immaterial value related to the state management of the territory.

Criterion (iii): The Inca stood amidst this panorama, their most notable achievement perhaps being that of having discovered **the specificities of each of these peoples** and applying a **very strict system of organization** enabling the exchange of social, political and economic values among them in the pre-Inca and Inca eras.⁷³

The value here is justified as remains, from an archaeological perspective, from which it is possible to interpret how the territory was managed by Inca people. Thus, the approach assigned is [2], with the signs and marks of a civilization that formed the landscape have been conserved.

Criterion (iv): The road network has characteristic features in its different architectural elements, in terms of its walls, roads, steps, roadside ditches, sewage pipes, drains, etc., with construction methods that vary adapting to progression and region. To this must be added the construction of a state infrastructure with standardized architectural elements for the control, protection and management of the area and use of the products of the mountains, coast and Amazonia. The archaeological sites selected portray this magnificent infrastructure: administrative and political centers, resting places (inns), cairns, chasquiwasis (resting places for messengers), military fortresses used in wars caused by the expansion of the Inca Empire (Tawantinsuyu), silos, ushnus (ceremonial platforms), earth mounds and petroglyphs, with a diverse landscape associated with natural elements: mountains, lakes, jungles and flora and fauna showing how populations coexisted with their natural environment.⁷⁴

The value here depends on the tangible heritage, the architectural structures built and conserved in connection to the natural landscape. The approach used combines the perspective of Geography, approach [2], as well as approach [5] of planners and [4] in relation of how the Andean culture relates to the environment.

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⁷² Ibid. Text in bold is from the author.

 $^{^{73}}$ Ibid. Text in bold is from the author.

⁷⁴ Ibid. Text in bold is from the author.

Criterion (v): The road system reflects the interrelation of communities with their geographical and natural environment such as mountains, lakes and water. The altitude of the network varies from 28 meters to 6,700 meters encompassing coastal areas, plains, plateaus, ridges and valleys. The road and architectural infrastructure works maintain a relationship with the surrounding landscape such as water resources, mountains, lakes, etc.⁷⁵

This value is linked to the landscape as defined by approach [2] and [5].

Criterion (vi): It connects living communities which still use the Road and keep it in their memory. Through language and oral tradition, it lives on as part of their world view and it is indirectly associated with ancestral traditions and techniques passed on from generation to generation. The respect and appropriate use of the different elements of nature: hills, water, animals and plants, create a world which nourishes part of their knowledge and wisdom in their desire to establish harmony, a balance between human beings and the natural environment.

Finally, the last criterion used refers to the understanding of approach [4] insofar it alludes to the traditional knowledge (ICH) associated with the road system, still maintained by the communities living next to the road.

Again, the criteria used combine different understanding of landscape. Approach [2] is used in four criteria, approach [4] in two criteria, and approach [5] in four criteria. Nonetheless, it is clear that the main value is that of a system that is still materially evident in the environment, and the system as a strategy of managent in a challeging territory. Essentially, it could be deduced that the criteria established are linked to various disciplines, namely Architecture, Archaeology, Anthropology and Geography.

In the Archaeological Park of Ollantaytambo, there are some remains of the road system to which the "Fortress" was linked through other architectural structures such as Pumamarca and Marcacocha, located in the Patacancha river ravine. Moreover, peasant communities of this watershed are said to be inheritors of the Inca and holders of the tradition, which comes from pre-Hispanic times. Based on this, the "authenticity" of the cultural landscape is justified:

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⁷⁵ Ibid.

Today cultural traditions allow the communication system to continue being functional in terms of exchange of production, symbolic practices and the persistence of Andean cosmovision.⁷⁶

While this issue will be discussed later in Chapters 7 and 9, it is important to clarify that one important aspect for the authenticity of this cultural heritage is that of continuously being used; namely, the cultural landscape is evolving and connected to ongoing traditional practices. Indeed, it is in relation to this point that both sites have converged. The agropastoral traditions (despite not being explicitly mentioned as agropastoral in the case of the Qhapaq Ñan) are supposed to be maintained, with their maintenance legitimizing these sites as cultural landscapes with OUV. Nonetheless, how are these criteria connected to the management of the sites? Moreover, what are the perspectives concerning landscape of the actors in the emergent landscape management?

5.2 Three landscapes

Three landscapes have been found in the heritage sites studied:

- 1. The landscape of the state, which would follow a combination of the approach of the physical/human geographer and the planner (approaches [2], [3] and [5]).
- 2. The landscape of the agropastoralist (representing the local communities active in terms of tradition and environmental management), whose impacts in the landscape are perceived from an external view that corresponds to the landscape of the human geographer and the ecologist (approaches [2] and [3]), yet is not properly apprehend as 'landscape' from the perception of the agropastoralist.
- **3.** The landscape of the visitor, which is the landscape of representation, the approach of art history (approach [1]), applied to these rural settings contemplated as living testimonies of the past.

I propose to characterize these three worldviews encountered as follows:

- a. Landscape as a container, produced by the state practices.
- **b.** Landscape as habitat, produced by the local communities' practices.

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⁷⁶ Source: http://whc.unesco.org/en/tentativelists/5547 (World Heritage Center).

c. Landscape as picture, produced by the visitors' practices.

The three landscapes refer to the idea that not only one physical entity defined as landscape exists as such that these groups of actors regard from different viewpoints. Each worldview results in a landscape and corresponds to a way of constructing landscape. Thus, these three worldviews encountered in the heritage sites generate the complexities of the emergent landscape management.

The following three chapters present these landscapes in order to demonstrate the elements that play a role in the emergent landscape management of the sites. Chapters 6, 7 and 8 contain the analysis for each worldview, with the case studies serving to illustrate these worldviews in the context of the *conservation of the past* (the PAO) and the *conservation of nature* (the PNOMP). I establish how landscape is understood (or whether there is not a precise understanding of it) for each worldview, including the practices of the previously defined actors related to the landscape management. The values assigned to the landscape are subsequently clarified, making it possible to analyze their interrelations and dialogs in the emergent landscape management (Chapter 9). Certain elements are valued depending on the landscape, and have consequences in their conservation and management.

5.3 Categories for comparison

The common categories used for this analysis are the understanding of the landscape, the values and the practices that correspond to the landscape management for each landscape. Some sub-categories appear within these categories, such as property, management plans and conservation. These categories are summarized in the mesh of categories for comparison in Figure 6, which integrates the categories of comparison for both sites. These categories function in two directions. In a vertical direction, there are comparisons inside each site for the three landscapes referred to by each group of actors: state, local communities and visitors. Understandings, values and practices are compared between the three landscapes in each site. In a horizontal direction, the sites are compared within each landscape as they function within the different models of protection of heritage.

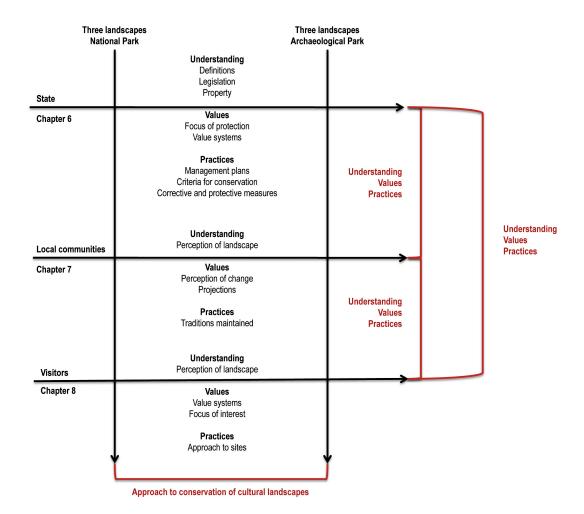


Figure 6: Mesh of categories of comparison

6 Landscape as a container

According to the Oxford Dictionary, a container is "an object for holding or transporting something". Synonyms include receptacle, repository or box. The understanding of the landscape as a container implies the objectification of the environment, which becomes a collection of things, representing resources, distinct elements that can be used for a purpose defined by the human community. This approach depends on anthropocentrism, which in turn depends on a naturalist and dualistic ontology where human is distinct from the environment that has been interpreted as 'nature'. In terms of conservation, this would mean that both the past and nature have passed a process of patrimonialization.

This worldview can be associated to the *thinking of landscape* (cf. p. 71). The landscape as *container* comes about from a territorial perspective founded in approach [2] (cf. p. 56). **Landscape is used as a synonym for territory.** This understanding of landscape refers to the original connotation of the word (cf. Chapter 3, p. 50), *landschap* from the Netherlands. At that point, the term was associated with an administrative piece of territory or land, from which a person was originary. When the state approaches the landscape as territory, it is searching to exploit its resources (cultural and natural). It relies on an aesthetic appreciation of environment, as well as a utilitarian vision over it, with the purpose of extracting what is profitable. The conservation of landscape is subsequently related to the intention to conserve the aesthetic value of the environment, as well as to control the management of natural resources.

The understanding of landscape as a territory results in the denomination of its elements as cultural goods, cultural resources, resources, and natural resources, vocabulary used in the legal documents that establish the regulations for these heritage sites. This terminology brings about the perception of environment as a composition of parts that need to be ordered and controlled. Its parts are distinctive and have a meaning in the context of their potential use.

The processes that characterize the state approach to landscape are **territorialization** and **patrimonialization**. Generally, territorialization has been associated with natural heritage, and patrimonialization with cultural heritage. Nonetheless, both processes are connected among and within the construction of nation-states and national identities. An expert eye gives value to certain aspects that are found in that certain area, voiding it from the context of its quotidian. The area is modeled as a territory that has certain features, which also serve to construct an identity for the region and its inhabitants. After the definition of certain vocation for the

designated territory, if the territory has special features that are considered in need of protection, it becomes patrimonialized. Patrimonialization is a process of objectification of culture for uses that transcend the sense of the cultural practices that serve it as a support (Florido del Corral 2012). In this process, "experts" identify and select elements of tradition in order to transform them in heritage, through which the elements are extracted from their context. Applied to nature, the declaration of a place as 'a protected area' 'closes' the place and its relations to the human communities in and around this place, with the site becoming property of the state.

The cultures that do not leave a strong impact on landscape (a visible landscape capital) are left aside from this process or, in some cases, are displaced from their territories (e.g. Yellowstone National Park). Furthermore, the landscape capital value is interpreted from a European perspective, in the sense that it is based and formed through the understanding of the European rural landscape, whereby other types of cultural landscapes cannot be decipher by these experts (mainly geographers, ecologists and archaeologists). Certain elements of the environment, views and events are selected as representative and turned into national (local, international) heritage. Subsequently, there are regulations that forbid specific interventions and uses inside the boundaries of a national park or an archaeological park. In both cases, the boundaries of the parks interrupt organic natural and cultural processes normally sustained by the local population and their customary practices.

In the process of territorialization, landscapes are classified and normalized depending on their geographical characteristics and the resources they count upon, through policies determining how to manage that certain area. These policies are generally part of a land use plan, which defines the zoning for different uses and activities. Moreover, according to the territory, other policies such as incentives or subsidies for the maintenance of certain activities are given to people so they can pursue them. The patrimonialization process is part of territorialization when the certain area is defined as valuable or significant for the nation-state. Once a site has been declared National Heritage, the degrees of intervention over the site are regulated by the state, allowing national and external investments to participate. Thus, the management of the cultural landscape is strongly influenced by these rules ordered by the state.

The state does not have a defined strategy of landscape management; rather, it is through laws and policies that it will have an impact on the transformation of the **landscape/environment**. The practices of the state, defined as the policies and regulations developed by the state agencies, on the one hand intend to ensure the conservation of the natural and built environment, and on the other hand have an impact on the practices of the local communities and visitors.

In the context of heritage sites, the state applies laws that declare landscapes as state property by making them Cultural or Natural Heritage of the respective Nation. As the first step in the patrimonialization of a landscape, this entails the change in the relationship to the place for those people who inhabit it. Changes occur in the access to the site and the customary practices for the use of resources. Moreover, tourism is encouraged, changing the site's predominant economic activities by increasing the development of tourist services. Nonetheless, the process of change and its impact will depend on the model of protection applied, as well as the protective and corrective measures established. This differs according to whether the process belongs to the patrimonialization of the past (the archaeological park) or the patrimonialization of nature (the national park).

I postulate that there is confusion between the concepts of environment, landscape and nature in the state approach to landscape. This, based on the approaches [2] and [3], deprives territories from local cultural and social associations in order to be managed. Local people, as part of the territory, are as well objectified and treated as elements of the landscape.

In this chapter, this approach is illustrated though the study of these two park systems. The understanding of the landscape for the state is elucidated through the analysis of the documents used in the context of conservation of these heritage sites and complemented by interviews to the relevant persons in charge of the implementation of these legal instruments. By revising the definitions of landscape, nature and cultural landscape as understood in the corresponding documents regulating the archaeological park and the national park, some incongruities that later on influence in the management of the sites become apparent.

6.1 Models of protection

The models of protection of cultural and natural heritage obey national legislations. Some countries developed early systems for natural heritage protection, such as the US, UK, Germany or Spain, and for cultural heritage protection, like in Italy, France and the UK. These systems are those that have then been adopted as models for the global practice of conservation, specified by organizations such as the IUCN for the conservation of natural heritage, and ICOMOS for the conservation of cultural heritage. Furthermore, these definitions and models have been those adopted in the 1972 Convention, becoming examples for other countries ratifying this Convention that did not develop original systems for heritage protection. The legal

instruments developed at national levels follow international recommendations, declarations and conventions that are adapted according to national legislations.

"Archaeological monument" and "National Park" are among the first models used for heritage conservation. The "Archaeological monument" has since been expanded to the concept of "Archaeological Park", with the importance of monuments' surroundings having been increasingly considered as part of their "authenticity" (ICOMOS 1965) and as buffers for the core of a heritage site. Moreover, archaeological remains are generally spread in large areas, with not only the visible remains investigated but also the surroundings, given that they can contain more uncovered structures, objects and materials. Subsequently, the archaeological park becomes a research center.

The state approach to conservation is fundamentally based on the scientific developments of the 19th century. The principles for the *conservation of the past* have been based on theories of restoration that were developed in Europe during the 17th to 19th centuries, which were connected to the creation of symbols in processes of nation-states' building. Essentially, the theory of the *conservation of the past* has evolved from a vision of restoration of specific meaningful buildings to a nation-state in a specific moment, to a vision where not only the building is important in terms of being conserved, but also its surroundings and the cultural associations given by societies historically linked to these sites. This is how local communities have started to play a significant role in conservation discourses, both for nature and culture. The presence of human settlements within and around heritage sites has been a persistent issue to be treated. Whereas human communities were precluded from heritage areas in the origins of conservation as a modern practice, the current perception about these communities has shifted, with their knowledge having been recognized as instrumental for the conservation of heritage places, and particularly those protected for their natural heritage.

On the other hand, the principles for the *conservation of nature* have been based on the theories of conservation biology developed in the 19th and 20th centuries. The development of ecology and ecosystems theory has changed the understanding from the idea of a 'pristine nature' to that of a dynamic and complex environment in which humans can have positive, as opposed to solely negative, impacts.

Ashworth postulates the existence of two paradigms of the conservation practice. While he discusses these paradigms in the context of the *conservation of the past*, it could also apply to the *conservation of nature*: the preservation paradigm and the heritage paradigm. The former is the traditional practice originating in the 19th century and the latter is connected to the

development of heritage as a commodity, via capitalism and marketing. In his thesis, the focus of the former is to *preserve* the past, and the latter to *use* the past. Unlike the preservation paradigm whereby the selection of the past is based on "authenticity",

the criteria for heritage selection are sought not in the intrinsic qualities of the forms but in the contemporary uses made of these: they are extrinsic and derived from various political, social or economic benefits assumed to ensue from the process of heritage product creation (Ashworth 1997, p.98).

The 'official' practice that assumed the value over heritage as being intrinsic has shifted to the external assignation of values related to socio-economic and political contexts. Furthermore,

selection is thus determined by the market. The focus of attention is not the object but the use, and especially the nature of the relationship between the modern user and the preserved past." (Ashworth 1997, p.99)

In the context of the *conservation of nature*, Callicot postulated a distinction between two schools: compositionalism and functionalism (Callicott et al. 1999). The former is associated with the idea that human and nature are separated, and the latter that humans are part of nature. In one case, when humans are seen as separated from nature, the idea of conservation sustains the need to preserve it intact. In the other case, when humans are part of nature, they interact with other living beings, intervening in nature and using its resources.

Although the concept of *use* is not applied in the same manner by these authors, what seems linked and relevant is that the notion of heritage passes from being an inherent value of objects/places/traditions whose focus was tangibility to external given values that integrate heritage in economical processes.

The models of national park and archaeological park have been created in times when conservation was approached from a compositionalist approach to natural heritage that implied its enclosure and the preservation paradigm to cultural heritage. The classification of cultural landscapes responds to the change in the conservation practice towards the heritage paradigm and the functionalist approach, as a means for developing the regions where heritage is found. Heritage are assets in the market, heritage has become a commodity. Moreover, it is in this sense that [cultural] landscapes have also become commodities. Thus, the process of patrimonialization runs parallel to a process of commodification. In the case of the landscape,

which cannot be a movable commodity, the patrimonialization process implies a territorial contestation and subsequently unleashes certain conflicts that could mine the conservation efforts. Nonetheless, I postulate that this contestation is inherent to the system of legal protection. First, there is an intervention at a territorial level, a creation of regulations in a previously communal/privately owned territory (prohibitions, limit of access to the territory), and finally, an expropriation from both the place (through expropriation and regulations) and the traditions related to that place (festivities, rituals, practices). The legal protection systems are based on universal concepts agreed at experts' level in international recommendations that do not necessarily correspond to local relationships and understandings of heritage.

Hence, the process of landscape management by the state is linked to the patrimonialization/territorialization processes that consist in, first, the selection of heritage according to the experts' value system; second, the declaration of the site as National Heritage (cultural or natural), which entails the declaration of the site as state property; third, the consequent expropriation of the land property (generally locally managed); fourth, the enclosure of the site (not necessarily with physical barriers); and fifth, the implementation of a management system based on the model of protection (cultural or natural). These management systems are based on zoning (land use), which determines regulations, as well as protective and corrective measures (prohibitions, permissions), which influence the transformation of the landscape/environment.

The PAO and the PNOMP are illustrations of how this is developed in the systems of the *conservation of the past* and the *conservation of nature*. I analyze how the landscape is understood in both systems in order to clarify how it is conserved or not from the perspective of the state practices.

6.2 From monument to cultural landscape

The Archaeological Park of Ollantaytambo is illustrative of the shift from the preservation paradigm to the heritage paradigm. As previously cited from Ashworth, this means that the heritage values are not determined as intrinsic to the objects/building/places, but rather they now relate to how these objects/buildings/places can be economically profitable. However, it is necessary to clarify that the different groups of actors *using* heritage have diverse interests. In this section, I focus on the interest of the State represented by the governmental agencies in charge of the conservation. From this perspective, the PAO also represents the shift from the interest in monumental cultural heritage to the 'intangibilization' of heritage and the interest in

connecting natural, cultural, tangible and intangible heritage, which also relates to the interest in *using* heritage as a means for development (ICOMOS 2011).

In the historical process of the modern conservation practice, the value system determined by experts has tended to homogenize understandings of heritage and conservation. The implementation of this scientific system for the selection of heritage based on universal values has established an international canon with the World Heritage List. Consequently, the value system used to define the Cultural Heritage of the Nation in Peru follows international documents and agreements.

6.2.1 The legal protection: The National Monument, the Archaeological Park

The legal protection for archaeological heritage has been set out through several international agreements, with those that are most relevant and form the basis for the development of the national regulations in Peru listed in chronological order as follows:

- Athens Charter for the restoration of Historic Monuments, 1931
- Recommendation concerning the safeguarding of the beauty and character of landscapes and sites, 1962.
- Venice Charter for the Conservation and Restoration of Monuments and Sites, 1964
- Recommendation on international principles applicable to archaeological excavations, 1957.
- Recommendation concerning the Preservation of Cultural Property Endangered by Public or Private Works, 1968.
- Recommendation concerning the Protection, at National Level, of the Cultural and Natural Heritage, 1972.
- Convention concerning the protection of the World Natural and Cultural Heritage, 1972.
- Charter for the Conservation of Historic Towns and Urban Areas (The Washington Charter), 1987
- Charter for the protection and management of the archaeological heritage, 1990.
- International Tourism Charter Managing Tourism at Places of Heritage Significance, 1999

The legal protection of the PAO has passed different stages of patrimonialization since the early 20th century when it was first declared a National Monument (cf. Chapter 4, Box 3).

The current law N° 28296, also called the General Law of the Cultural Heritage of the Nation (Ley General del Patrimonio Cultural de la Nación) passed in 2004, establishes the "national policies of defense, protection, promotion, legal property and regime and the destiny of the goods that constitute the Cultural Heritage of the Nation. (Article I. Objective of the Law)." Cultural Heritage of the Nation is defined as

every manifestation of the human work – **tangible or intangible** - that for its paleontological, archaeological, architectonical, historical, artistic, military, social anthropological, traditional, religious, ethnological, scientific, technological or intellectual importance, value and meaning, is being expressly declared as such or over the one that a legal presumption exists. (Article II. Definition) ⁷⁸

The legal presumption that "a manifestation of the human work" is Cultural Heritage of the Nation is based upon a historical approach and the assumption of the intrinsic value of these manifestations granted due to their time persistence and assigned scientific and aesthetic values (Smith 2006). If an object/building/place is evaluated as having a pre-Hispanic origin, it inmediately becomes Cultural Heritage of the Nation. The object/building/place would automatically be assigned as state property, and the expropiation would start.

Consequently, the first self-evident conflict, present in the *conservation of the past* and inherent to the Law, has been and remains **the property of heritage**. This is a salient issue in the case of this archaeological park where the majority of the dwellers of the historical Inca village do not count with title deeds.

The second self-evident conflict inherent to the Law is that the selection of heritage comes from an external perspective over an object/building/place to the communities holding that heritage or living in the heritage site. This top-down approach to the inventorying of heritage entails the physical and emotional **expropriation** from the community producer or originally identified with the object/building/place. Moreover, the regulations established once an object/building/place becomes Cultural Heritage of the Nation (CHN) transform the relationship between the local communities and the object/building/place, changing their access and use. Even if the CHN considers tangible and intangible heritage, it is under a value system based upon the international charters produced by experts. This means that the selection of the CHN relies on value systems that do not come from the communities' holders/producers of it.

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⁷⁷ Author's translation from the original text in Spanish. Text in bold is from the author.

Author's translation from the original text in Spanish. Text in bold is from the author. This definition corresponds to movable and unmovable cultural heritage. Nonetheless, the discussion in this thesis only refers to unmovable cultural heritage, and especially, landscapes as heritage sites.

The enlargement of the concept of what could be CHN to intangible first appears to be positive compared with the more rigid ideas centered in monumental heritage. Nonetheless, at the same time, this enlargement now involves an extension of the expropriation, not only of a significant building but also to larger territories and even traditions (e.g. festivities that become folklorized).

The process of patrimonialization of Ollantaytambo started in 1929 when the "Archaeological site of Ollantaytambo" was first declared a **National Monument** and the village a **Historical Settlement**, through the Law Nº 6634. At this time, the "archaeological sites" of Inca masonry, Machu Picchu and Sacsayhuaman were also inscribed as National Monuments (*Ley Nº 6634 Patronato Nacional de Arqueología*, June 1929)⁷⁹. These National Monuments and their architecture have served as symbols for the building of a Peruvian national identity based on the achievements of Inca civilization.

The Government will provide the necessary for the conservation and reparation of the ruins and archaeological sites declared national monuments through special laws, and in any case, the archaeological sites⁸⁰ of Sacsayhuaman, Ollantaytambo, Machu Picchu, Viticos, Atun Collas, Nazca, Pachacamac, Chimu Fortress, Chavin Castle, Huanuco Viejo and Ruins of Chan Chan, which are declared **National Monuments** through the current law. (Article 22°) ⁸¹

The inherent value of Ollantaytambo lay in its pre-Hispanic origin, like the other Inca archaeological sites of the same area of Cusco: Sacsayhuaman and Machu Picchu. Even if it is clear that these constructions are impressive for any un-expert eye from a foreign culture (testimonies of tourists around the world), their declaration as heritage has been legitimized by the experts' vision.

The case of Machu Picchu can serve as a parallel to that of Ollantaytambo, with the difference between these two sites that Ollantaytambo has been permanently uncovered and visible. The archaeological ruins have been inhabited and transformed by people almost continuously since they were constructed in the 15th century (Protzen 1993). On the other hand,

⁷⁹ It was through that law as well, that the National Board of Archaeology was created as an antecedent to the National Institute of Culture, later replaced by the Ministry of Culture (created in 2006).

⁸⁰ It is interesting to note that the term used in Spanish is 'yacimiento' which is generally used more in the context of mining, and it gives to the expression an idea of resources and exploitation. Moreover, some of the terms used for naming these sites have been modified over time, because they were wrongly interpreted under a Western gaze (e.g. Fortress Castle Ruins)

⁸¹ Author's translation from the original text in Spanish. Text in bold is from the author.

due to its location in the entrance to the Rainforest (*Ceja de Selva*⁸²), the structures of stone (buildings and terraces) in Machu Picchu were covered by shrubs and forest. Even if the locals knew about the site, and some of them even used the terraces for agricultural purposes until 1911, when Hiram Bingham arrived to the site, it had not officially been identified as heritage, and specifically as National Heritage. Furthermore, the site was the property of a family that used the area for cultivating⁸³. Therefore, it was a familiar inheritance, but not heritage.

Geographically, the place where Machu Picchu is located is steep and difficult to access. No permanent settlement was installed in the proximities until the re-discovery of the archaeological remains, when an access point to the archaeological site was created. Machu Picchu town was first created as a dwelling site for the workers of the train company that built the railroad connecting Cusco and Quillabamba (the capital town of the province of La Convención in the Rainforest) during the 1940s. Nonetheless, these "National Monuments" were part of the everyday life of the people living in their proximities or, in the case of Ollantaytambo, *in* it. Nonetheless, these sites only passed to be valued as heritage when they were appreciated by foreign scientists (e.g. Hiram Bingham). Moreover, they have firstly been assigned an intrinsic value for being of pre-Hispanic date.

In 1929, the Inca construction in the Bandolista mountain was considered a "National Monument". The town, comprising the areas called Qosqo Ayllu and Araccama Ayllu of Inca foundations, was declared a "Historical Settlement". Since then, the buildings in the Bandolista mountain are called "the Monument" or "The Fortress". This denomination as "the Monument" is still used in the language of the workers of the Ministry of Culture, the Municipality and even local dwellers in the PAO. However, this definition is an inheritance that recalls the European modern conservation practice tradition. In the context of an Inca construction, the concept of 'monument' is not accurate. The complex has been studied by several anthropologists (Rowe 1944; Zuidema 1982), archaeologists (Hyslop 1984; Hyslop 1990) and architects (Gasparini & Margolies 1980; Protzen 1993; Elorrieta Salazar & Elorrieta Salzar 1992) specialized in Inca architecture and its interpretation. The site has been defined as a ceremonial center and astronomical observatory (like most of pre-Hispanic architectural complexes in Peru), which was composed by terraces cultivated with maize during the times of the Inca. Apparently, the complex was not finished at the time of the Spanish occupation and thus it is still possible to find materials left on the way from the quarries to the site, as well as unfinished structures

⁸² Ceja de Selva is the name given to the area between the mountains and the Rainforest, it is the pass from high altitudes to lower altitudes, and from dry puna climate to humid tropical climate.

There are still two families claiming the ownership of Machu Picchu and other areas around the Inca Trail. For more information, please consult the website created by the claiming families: http://propietariosdemachupicchu.info/Unfortunately, the site is only in Spanish.

(Protzen 1993). Nevertheless, the denomination of 'monument' is even used in legal documents, misunderstanding the idea of a monument in its roots.

As explained by Jokilehto, the Greek word for 'monument', μγημετογ (mgimetog) derived from the word μνεμε (mneme), memory. In its original definition, a monument is intended as a 'memorial'. On the other hand, *monumentum*, the Latin word for 'monument', derives from *moneo*, a word that encompasses political and moralist connotations. It means to remind, to admonish, to warn, to advise, to instruct. Therefore, the *monumentum* stood as a reminder of conduct at the time when they were built and with that intention. According to Jokilehto, it "intended to admonish and remind the spectator of the power of the governors." (Jokilehto 1999, p.4)

However, Ollantaytambo was not built as a memorial; even if now it functions as a memorial of the Inca past, this was not its original function. Moreover, even if it could be interpreted as a work that consolidated political authorities, the purpose of the complex was not "to remind" about some governor's power, or a special event. Consequently, calling it "the Monument" does not contribute to a correct interpretation and treatment of the site. Nonetheless, the core of the archaeological site has been depicted as a Western monument, which entails its restoration and enclosure, losing its ritual and agricultural functions.

When the site was enlisted as a National Monument, the interest relied on the reparation of the ruins and protection from further destruction. The focus of conservation efforts was to restore and maintain the physical integrity of the architectural structures. In 1944, the site was declared an Archaeological Park, including both the National Monument and the Historical Settlement. Forty years later, in 1983, the PAO, among other sites in the region of Cusco, was declared Cultural Heritage of the Nation as an archaeological park:

They are equally Cultural Heritage of the Nation, the Archaeological Parks of Ollantaytambo, Pisaq, Pikillaqta, Tipon, other archaeological groups and other zones or historical **unmovable goods** of the Department of Cusco declared "Monumental zones" or "Monuments", in conformity with the law.⁸⁴

The area of protection was thereafter increased from the central "monument" in Bandolista mountain to almost the entire area of the district where pre-Hispanic archaeological remains are present. The town of Ollantaytambo, lying next to the Bandolista mountain became

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⁸⁴ Author's translation from the original text in Spanish (LAW No. 23765, December 1983: Declares as Cultural Heritage of the Nation several places of the City of Cusco).

as important as "the Monument" and was recognized based upon the continuous occupation of the area from pre-Hispanic times until present. 85

Despite the enlargement of the site, there was no mention of the landscape as heritage until this point. Moreover, as seen in the definition of CHN, no mention to landscape was included. The concept of landscape only appeared from 2000, and first, as a contextual reference. In the definition of the ruling law of 2004 of unmovable heritage subject to be declared CHN, **landscape** is understood as a frame to heritage:

1. Material Goods

1.1 Unmovable

It comprises in a non-limitative way, the buildings, the infrastructure constructions, environments and monumental ensembles, historic centers and other constructions, or material evidences resulting from human life and activity, urban and/or rural, even though they are constituted by goods of diverse age or destiny and that have archaeological, architectonical, historical, religious, ethnological, artistic, anthropological, paleontological, traditional, scientific or technological value, its landscape environment and the ones submerged in aquatic spaces of the national territory.

The protection of the unmovable goods integrating the Cultural Heritage of the Nation, comprise the ground and underground in which they are located or settled, the air and the surrounding framework, in the extension technically necessary for each case. 86

This is where the surroundings to heritage become recognized. However, the surroundings are important as context, yet not as valuable per se. They give conditions for the authenticity, integrity and for buffering the 'monuments' (cf. Venice Charter). Landscape appears as a quality of the environment.

In 2000, the Regulations for the Archaeological Research provided a classification of archaeological heritage. Here, the words landscape and environment appeared again as contextual to the remains:

I. About the classification of Heritage

⁸⁵ It is interesting to note that the 'official' historical periods are defined around the Spanish colonization, namely as the pre-Hispanic period, viceregal and republican. In this regard, the Inca period is seen as the culmination of the development of Andean civilization. The most valuable cultural heritage native to Peruvians is that left by Inca people. Thus, Inca civilization has become the symbol of Peruvian national identity.

86 Author's translation from the original text in Spanish. Text in bold is from the author. (LAW No. 28296, General

Law of the Cultural Heritage of the Nation, July 2004).

- Article 1.- In conformity with the recommendations and international conventions, the Unmovable Heritage of Peru, that has to be studied through archaeological research, is classified as:
- a. **Pre-Hispanic Archaeological Monuments** All the rests of human activity from the pre-Hispanic period that survive **in the landscape**, in a superficial, underlying and/or underwater situation.
- b. Colonial and Republican Historical Monuments All the rests of human activity of colonial and republican periods that survive **in the landscape**, in a superficial, underlying and/or underwater situation. Architectural, sculptorical and pictorial monumental works are considered as such, as well as the inscriptions corresponding to these epochs. Archaeological works in this case will serve for the study of the material elements constituting these monuments.
- Article 2.- The pre-Hispanic Archaeological Monuments, subject to be registered, investigated, conserved and protected are classified as:
- a. **Archaeological Monumental Zones** Archaeological ensembles which magnitude makes them susceptible to a special treatment in terms of research, because its physionomy needs to be conserved due to the following reasons:
- 1. To possess urbanistic value of ensemble.
- 2. To possess documental historical artistical value, and/or a singular character.
- 3. To contain monuments and/or urban monumental environments.
- b. Archaeological sites every place with evidences of social activity with presence of elements and context of archaeological-historical character, as much as in the surface as in the underlying substrate.
- c. Archaeological Reserve Zone Are those places that because they have been intensively investigated need to be reserved for the future, as much as new techniques of investigation are developed. Researchers have to suggest reserve areas in the worked monuments. These suggestions will be submitted to the National Institute of Culture for its approval, with the previous positive opinion of the Technical National Commission of Archaeology.
- d. Isolated Archaeological Elements Are the rests of human activity from the pre-Hispanic period that due to cultural or social situations, manifest at present in an isolated or decontextualized manner. These refer to objects or part of them, present **in the landscape**, without association to archaeological sites or zones, given that its register and study is also important for the investigation and the conservation of the cultural heritage.
- e. Archaeological Cultural Landscape Are the areas produced by the human hand or by the combination of it with nature that have a prominent value from an archaeological, historical, aesthetic, ethnological or anthropological point of view. The agrarian infrastructure, namely, andenes, terraces, canals and similar

elements; as well as the road networks, the geoglyph fields and/or petroglyphs are considered as such. 87

There are three points to confirm in this text. First, the word landscape, as previously mentioned, is only used to describe a territory where the archaeological remains are encountered. It could be in the surface, the underground, or even in the underwater. This understanding of landscape recalls approach [2]: **the landscape is not the heritage but the container of that heritage**. Second, the values established for an Archaeological zone to be considered Monumental are again only possibly determined by the expert vision, based on a Western aesthetic approach ("urbanistic value of ensemble", "documental historical – artistical value, and/or a singular character"). Furthermore, the landscape is indeed perceived as a container of monuments ("to contain monuments and/or urban - monumental environments"). Third, in the definition of the Archaeological Cultural Landscape, this is referred to the "agrarian infrastructure", with the elements used as examples those mainly found in Inca archaeological sites ("(...) andenes, terraces, canals and similar elements; as well as the road networks (...)"*88, thus restricting the understanding of the cultural landscape as being principally of Inca production, and the archaeological cultural landscape as essentially agricultural.

According to this classification, the PAO contains Archaeological Monumental Zones, as well as Archaeological Cultural Landscapes, containing Isolated Archaeological Elements and Archaeological Reserve Zones. Moreover, there are also Colonial and Republican Historical Monuments in the park (the colonial Church, around the Plaza de Armas and some of the houses in Qosqo Ayllu and Araccama Ayllu). This understanding disaggregates the components of the Inca remains and their urban/landscape planning into pieces, rather than integrating them in a holistic conceptualization of the entire park as a heritage complex. As a conclusion, this park contains all the categories of archaeological heritage classified in this regulation. What is the impact on the landscape management of the archaeological park? This is analyzed later with the Management Plan of 2005 in section 6.2.2.

On the other hand, the PAO is now also recognized as a holder of ICH, reflecting the main reason why the site is in the serial nomination for the Qhapaq Ñan, as already stated in the previous chapter. In the 2004 Law for Cultural Heritage of the Nation, the ICH is defined as:

2. Immaterial goods

⁸⁷ Author's translation from the original text in Spanish. Text in bold is from the author. (Supreme Resolution/*RESOLUCION SUPREMA N° 004-2000-ED*).

^{88 &}quot;The geoglyph fields and/or petroglyphs" refer to the Nazca Lines, another Peruvian World Heritage Site.

The creations of a cultural community funded **in the traditions** integrate the Cultural Heritage of the Nation. These are expressed by individuals in a unitary and group manner, and admittedly respond to the expectations of the community, as an expression of the cultural and social identity, besides the values transmitted orally, such as languages, autochthonous languages and dialects, traditional knowledge, either artistic, gastronomic, medicinal, technological, folkloric or religious, the collective knowledges of the peoples and other cultural expressions or manifestations that together form our **cultural diversity**. (Title I Chapter I Art.1°.Classification) ⁸⁹



Figure 7: Inca structures in Ollantaytambo. @ Martin Chambi circa 1930 90.



Figure 8: Similar photo taken by the author in May 2012.

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 $^{^{\}rm 89}$ Author's translation from the original text in Spanish.

⁹⁰ Martin Chambi is a Peruvian photographer who depicted archaeological sites, people and traditions from the region of Cusco (from where he was a native) in the first half of the 20th century. Courtesy of Martin Chambi Family Archives (www.martinchambi.org).

Moreover,

The communities that maintain and conserve inmaterial cultural goods belonging to the Cultural Heritage of the Nation are the direct possessors of the aforesaid Heritage. (Title I Chapter I. Art. 2°. Property of Inmaterial Goods.) ⁹¹

In the case of the PAO, this ICH exists, according to the experts, in the *Wayruro* communities living in the highlands of the Park, settled in the Patacancha river Valley. These peasant communities (Huilloq, Pallata, Patacancha, Rumira Sondormayo) are thought to be holders of traditions related to the Inca peoples, as well as their particular Andean worldview. This is mainly manifested in the weaving and agropastoral traditions. The recognition of the ICH is now being used for the development of tourism with the means to increase the economical and human development of the inhabitants in the Puna regions. Indeed, it is through the *use* of ICH as a tourist attraction that the *Wayruro* communities are intended to be economically developed. However, how has the ICH been constructed in these communities? How is the ICH related with the vision of the landscape of local communities? This is discussed in Chapter 7.

What can be deduced from the analysis of these laws and regulations is that the concept of cultural landscape has not been fully integrated in the system. This blurs the definition of what is to be conserved and how the value system is established. Essentially, in terms of law, a shift from monument-based conservation to cultural landscape-based conservation cannot be clearly perceived. What can be perceived is an extension from National Monument to Archaeological Park, which means the enlargement of an area of protection, yet not an enlargement in the focus of the protection. Namely, the focus of protection remains in the 'monument[s]' (in this case, the complex in Bandolista mountain and other archaeological sites), with the difference that the surroundings are now also protected, albeit not because of an inherent value (valuable *per se*) but rather due to their importance as framing the 'monument[s]'. Furthermore, some of the other archaeological sites are conserved to serve as a context to the main 'monument'.

In 2011, a law was passed in Peru, declaring Cultural Landscapes as CHN. After a study of the applicability of the concept of Cultural Landscapes from the 1972 Convention in the Andean context (Mujica B. 2002), it was integrated in the Peruvian law. However, a management system oriented to the conservation of this type of heritage has not been specified.

⁹¹ Author's translation from the original text in Spanish.

Nonetheless, this concept was already used in the Management Plan of the PAO (from 2006, before this law was passed) to define the place, although the term landscape is used inconsistently, in the laws and the Management Plan.

6.2.2 The management: the cultural landscape or the archaeological landscape?

When the PAO was declared CHN as an Archaeological Park, its delimitation remain unclear, as well as the specific regulations to be applied. In 2002, when the Directorial National Resolution N° 395/INC passed, the requirements to be developed for the PAO were stated as a delimitation map with the corresponding Technical Datasheet and Descriptive Memory, as well as the inscription in the inventory of National Goods. Here, a general regulation for archaeological parks has been set out referring to the **conservation of the landscape**:

Article 4°.- Any project for a new construction work, paths, roads, canals, mining or farming claims, housing works and others that could affect or alter **the landscape of the archaeological park** declared "Cultural Heritage of the Nation", needs the approval of the National Institute of Culture.⁹²

Although it is not yet clear what is "the landscape of the archaeological park", the landscape is not the heritage itself. Because the elements mentioned to be avoided if "affect or alter the landscape" are essentially construction works (different types), it can be inferred that the landscape is understood as a view and the territorial framework of the archaeological sites that are specifically declared as heritage.

Nevertheless, the INC only developed a management plan for the PAO in 2005, which was approved in 2006 and is currently under revision. While it was supposed to be reconsidered after four years, the new plan has not been elaborated at present. Notably, several projects stated in the Management Plan have not been achieved. This Plan is structured in four parts:

• Part 1: provides the background and describes the PAO, presenting the location, limits, and history. The natural space is described according to the categories of wind, hydrography, relief, soil and mineral resources (geographical characteristics). Subsequently, the archaeological heritage in the park is listed in an inventory, classified as urban structures, paths, bridges, terraces (*andenes*), canals/aqueducts/reservoirs, canalizations, *qollqas* (reservoirs,

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⁹² Author's translation from original text in Spanish. (Legal Resolution Nº 395/RESOLUCIÓN DIRECTORIAL NACIONAL Nº 395/INC Lima, 13 de mayo de 2002 VISTO, el Acuerdo Nº 114, tomado por la Comisión Nacional Técnica de Arqueología, en su Sesión Nº 06, de fecha 5 de marzo de 2002).

warehouses), quarries and urban architectural and religious infrastructure. The settlements located inside the area of the PAO are listed, including their names, number and types of dwelling and population. Subsequently, the organization in territorial axes is proposed with their corresponding descriptions and map. Furthermore, the etymology of the name Ollantaytambo and the historical process of the occupation of this area are explained. Finally, this first part ends with a table summarizing the analysis of the problems of the PAO based on the diagnosis of strengths, weaknesses, opportunities and threats.

- Part 2: set outs the strategic planning, first explaining the problems in the PAO and then giving the guidelines for the management of the site.
- Part 3: presents the territorial management, stating the criteria for the zoning, the description of the zones and the zoning itself, with a cartographic annex.
- Part 4: devoted to the program of investments, including a description of the programs and sub-programs and specific projects with their corresponding budget. The programs are classified as follows: 1. Archaeological heritage, 2. Natural heritage, landscape and geology, 3. Human settlements, 4. Society, culture and production, 5. Tourism and sustainability, 6. Transports, road management and communications, 7. Legislation and normativity, 8. Management.

Now that it has been clarified through the laws that the landscape is not the heritage itself but the frame to the archaeological heritage, I will discuss the regulations proposed for the conservation of this archaeological heritage that impact upon the landscape/environment change. Then, in terms of landscape management, the relevant practices stated in this management plan that need to be discussed are the zoning and proposed territorial management, namely Part 3. What are the criteria for the zoning and how does this impact upon the landscape/environment?

In the first part of the document, a general description of the PAO and its values are exposed, yet no definition of landscape is stated:

[§1] The PAO, is a unique cultural context, part of the geographical space of the Inca Sacred Valley, delimited from the intersection of the micro-watersheds of Huarocondo River and the Vilcanota River (in the sector Pachar) until the sector Piscacucho – area of Roqabamba approximately 82 km. of the railtrack Cusco Machu Picchu and contains in its area aproximately 204 complexes or archaeological sites of Inca and pre-Inca periods, from which 82 have been identified and/or registered by the Regional Direction Cusco. [§2] The PAO is considered one of the most important complexes of the Region, of Inca construction, for the existence of productive, ceremonial, road, urban

and architectural structures. Nonetheless it is necessary to mention that in the settlement and in Ollantaytambo Park there is a cultural process previous to the Incas, from the Formative period, Middle Horizon and the demographic growth of the Late Horizon [pre-Hispanic periods defined by the official History of Peru]. [§3] In this period they occupied in a massive manner inside and outside the Urubamba valley, modifying the environmental appearance, with construction works of great magnitude such as andenes, terraces, canalizations of rivers, roads, hydraulic systems, containment walls, warehouses, quarries, and urban centers for the settlement of populations. [§4] Inside the Archaeological Park, the Historical Town of Ollantaytambo, and the main Monument constitute with no doubt one of the most important testimonies of great patrimonial value, that host the only Living Inca town and by that it is a sample of the settlement pattern or occupation of the Inca urban planning; associated to this there are other built agricultural, religious, defense and protection structures, and that together with the natural landscape and the scenery that surrounds it gives to it more value and quality as a sample of the territorial management and occupation. [§5] With no doubt, we can affirm that the Archaeological Park of Ollantaytambo represents a unique space, historically and geographically adapted to the Inca Sacred Valley, as well as to the Sanctuary and Citadel of Machu Picchu. [§6] Due to its peculiar characteristics, it constitutes the material representation of an urban-architectural conception in harmony with nature, through a perfect adaptation and occupation of the territory; therefore becoming a symbol of Andean cultural identity. 93

The concept of cultural landscape is not used in this description. The value of the landscape refers to a "unique cultural context", to the way the "environmental appearance" (understood as natural environment) has been modified (cf. Chapter 3, approach [2]), and as one of the "most important complexes" from the point of view of architecture placed in the natural environment (cf. Chapter 3, approach [5]).

The excerpt [§3] describes the place the closest to which has been previously defined as an archaeological cultural landscape in the Regulations for archaeological research (Estado Peruano 2000). The elements listed represent the infrastructure elements created by the former inhabitants of Ollantaytambo, which belong to the agricultural system established during the Inca period ("andenes, terraces, canalizations of rivers, roads, hydraulic systems, containment walls, warehouses, quarries, and urban centers for the settlement of populations") and represent the landscape capital.

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⁹³ Author's translation from the original text in Spanish. Text in bold is from the author. (Instituto Nacional de Cultura 2006, pt.1)

A second reference to the concept of cultural landscape (cf. Chapter 3, approach [2], OG 1972 Convention) is in [§4] which also establishes the understanding of the place as heritage, tangible and intangible. The understanding of the landscape as a frame to heritage is later confirmed in [§4] when "the Monument" "together with the natural landscape and the scenery that surrounds it gives it more value and quality as a sample of the territorial management and occupation." The natural landscape surrounds the "Monument", enhancing its aesthetic value, which is accentuated by the idea of "a harmony with nature", mentioned in [§6], between the constructions and the environment in which they are located.

The idea of the 'living Inca town' is what gives Ollantaytambo a unique feature, differentiating this site from other within the same area: **people are living in the archaeological remains**. However are these people considered Incas? Or are they living in the way people were living when these structures were constructed? Logically not. The structures have been modified and are still being altered, even though the site is protected by the state. Moreover, the majority of the people living in the Inca settlement are the descendents of people who only arrived at this place from the 19th century. Accordingly, people become part of the **landscape/frame** of the archaeological remains.

From this description, the values of the site are presented as:

- **1. Historical value:** Having been continuously occupied and containing cohabiting evidence of past and present civilizations. In this sense, the value of the site is legitimized through Time/History.
- **2. Intangible/Cultural value:** The traditions are maintained by the local population that still inhabit the Inca structures (living Inca town). Again the legitimation of this inherent value is the Time/History related to the persistence of traditions.
- **3. Aesthetic value:** The tangible heritage is defined as being "in harmony with nature" and a "perfect adaptation and occupation of the territory" is assumed based on Classical (Neoclassical/Romantic) –thought to be universal- ideas of beauty, even though the site has been conceived by a different culture in a different context.

⁹⁴ It is said that the Incas left the town of Ollantaytambo after the defeat of Manco Inca in the 16th century, and that they moved to the Rainforest and to the highlands where the *Wayruro* people live now. This is how *Wayruro* people legitimize their connection to the Inca. Through this story/legend they state that they are the descendent of the Inca. This is part of the discussion in Chapters 7 and 9.

Hence, the value that the state intends to conserve relies, first, tangibly, in the Inca structures; and, second, intangibly, in the traditions of the peasant communities that inhabit this area. Is that representing a cultural landscape?

Five territorial axes have been defined in the Management Plan and ten territorial units conceived to conserve these values. Four zones determine the guiding regulations. These strategies directly affect the landscape/environment management.

The main criterion for identifying the territorial axes is the presence of the archaeological heritage. This means that the more significantly tangible remains that are found, the more important, and thus, the more regulated and protected the area becomes (Instituto Nacional de Cultura 2006, pt.1). The other criteria are essentially geographical (population/settlements location, soil, ecological tiers, hydrological system). A territorial perspective is applied to heritage. In order to define the territorial units, the presence of the archaeological structures is again the main criterion. The location of areas for the *conservation of nature* is also used as a priority, giving the natural landscape a role of a frame in the *conservation of the past*. The geographical configuration and the land use are also considered. In this sense, the cultural landscape (approach [2]) starts to play a part in the organization of the space ⁹⁵.

The Territorial Heritage Units (UTP) are delimited based on five territorial axes and the set of criteria established. Inside each unit, zoning determines the land use and defines regulations. The criteria used for zoning are:⁹⁶

- Heritage value: concentration of archaeological heritage
- Accessibility to the archaeological sites
- State of conservation of archaeological sites
- Tourist activity
- Anthropogenic occupation

Clearly, the archaeological remains play the most important role in the landscape management. Indeed, this might generate the persistence of the archaeological structures, as it is possible to remark in Figure 7 and Figure 8, but is this enough to conserve the cultural landscape (see Figure 9 and Figure 10)?

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⁹⁵ Ibid., part 3.

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The main differences that can be found between Figure 9 and Figure 10 that differ by around 80 years, are: 1. a process of 'cleaning' of the landscape, in terms of vegetation, especially in the Inca architecture; 2. a process of modernization of the rural architecture ($ichu^{97}$ roofs to tile and calamina98 roofs); 3. a process of urbanization, and occupation of the agricultural fields.

These topics correspond exactly with the main regulations established in the Management Plan. In one case they have been achieved and in the two others, not. The first point remarked in the pictures refers to the main task assigned to the conservation and management of the archaeological park: the maintenance of Inca architecture (cleaning of vegetation and restoration of architecture) has been successful. The Inca structures in the Bandolista mountain have been clean-up and restored. New findings have been valued and visits to the site are increasing (Chief of the Park, personal communication). However, point 2 remarked in the pictures refers to another important regulation, stating that:

It is forbidden to use construction materials like plastic fibers, asbestos, polycarbonates or similar for the definitive roofs due to their consequence as descontextualizing the landscape." 99

In terms of point 3, the loss of the public square (in the lower right side of Figure 9 /same position in Figure 10) is noticeable, as is the progressive occupation of agricultural fields, despite the regulations establishing that:

The zoning of agricultural areas have an intangible 100 character, it cannot be changed, nor modified in extension, in order to permit the preservation of the landscape and the historical context that surrounds it. 101.

While the landscape, as surroundings and frame, is conserved (geological features, vegetation in the riverbanks, location of the settlement), it has changed in terms of how the environment is occupied and organized by people.

⁹⁷ Ichu: (word of Quechua origin) Hay found in the Puna region, native to the paramo area and that grows naturally. Traditionally it has been the material for the roofs in the Andean region; however, with modernization of construction, it is progressively replaced by calamina. During colonial times, tiles were also used for the new Spanish constructions. Ichu needs more maintenance than *calamina*, but it has better qualities as climate isolator.

⁸ Calamina: corrugated iron used for building self-constructed houses in rural areas, but also in urban sprawl areas. ⁹⁹ Author's translation from the original text in Spanish. (Regulation for the rural settlements sub-zone in the

Management Plan).

100 In Spanish, and specifically in the Peruvian context, the term "intangible" [intangible] is used to designate the areas that cannot be altered, or occupied. They cannot be "touched". For the ICH, the term "intangible" is translated as *inmaterial* [immaterial].

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Author's translation from the original text in Spanish. Ibid.

The regulations (protective measures) established in the zoning of the Management Plan of the PAO are based on the "Recommendation concerning the safeguarding of the beauty and character of landscapes and sites" of 1962. It contemplates four zones¹⁰²:



Figure 9: Landscape of Ollantaytambo. View from the "Monument", circa 1930. ©Martin Chambi

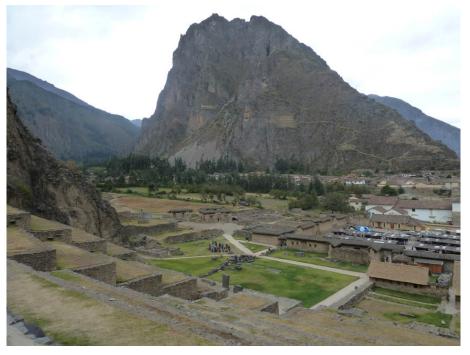


Figure 10: Similar photo taken by the author in May 2012.

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¹⁰² See map in Annex 8.

- A. Zone of Special Treatment: Historical town of Ollantaytambo (Z-TE)
- B. Zone of Archaeological Protection (Z-A)
 - B.1 Intangible Archaeological Monumental sub-zone (SZ-M)
 - B.2 Intangible Archaeological Contextual sub-zone
- C. Zone of Direct exploitation (Z-AD)
 - C.1 Agricultural use sub-zone (SZ-UA)
 - C.2 Shepherding sub-zone (SZ-UP)
 - C.3 Rural settlements sub-zone (SZ-AR)
 - C.3 a. Services and equipment sector (SZ-USE)
 - C.4 Compensation sub-zone (SZ-UC)
- D. Zone of Natural protection (Z-PN)
 - D.1 Landscape-Natural Reserve sub-zone (SZ-PRN)
 - D.2 Ecological buffer sub-zone (SZ-PEA)

Each of these zones involves regulations that have a direct impact on the landscape/environment. The conservation of the Zone of Archaeological Protection (Z-A), as seen above in the Figure 8, has been successful. The main concept used is 'intangibility', referring to the archaeological zones and serving for the "exclusive use for research and archaeological conservation projects" (Instituto Nacional de Cultura 2006). The 'continuity' of the original use of some of the structures is valued and permitted. This corresponds to what has been previously defined as the landscape capital: "hydrological systems, paths and andenes (terraces), precincts" (provided that their structural integrity is not placed at risk).

The basic principles regulating the Archaeological Protection zone is that all interventions need to be authorized by INC (now Ministry of Culture) and conducted by experts, "to not threaten neither the archaeological elements, nor the landscape where they are located". ¹⁰³ Landscape is again the territory, the container where heritage is found.

In addition, priority is given to conservation of old structures over the aesthetic value of a new intervention. In this sense, the use of new technology first needs to be approved by the institution in charge of the conservation.

Security (especially in areas of public use) is considered a priority, as well as an environmental treatment to the areas surrounding archaeological areas (risk management, avoid erosion, etc). These requirements are part of the landscape management because they imply the

 $^{^{103}}$ Author's translation of the original text in Spanish. Text in bold is from the author.

installation of elements (for security) and the plantation of trees (for risk management and to avoid erosion).

There are two special cases in the zoning that can have impacts on the landscape change: the agricultural zone with archaeological commitment (special area of the subzone of agricultural exploitation with archaeological commitment); and the rural settlements located at the borders of pre-Hispanic remains (special area of the rural settlements sub-zone). These areas are conflictive because the use of heritage is confronted with its conservation.

It is permitted to cultivate natural pastures, minor crops and major crops with fruit trees in platforms (provided that it does not affect the structures), as well as cultivating natural pastures and minor crops in the pre-Hispanic terraces. Namely, the landscape capital can be continuously used, based upon the principle of respect, for the regeneration and filtering of the soil, as well as the conservation of archaeological evidence. Moreover, in the subzone of shepherding, it is encouraged to respect the former cattle paths and access, although the construction is regulated to permit the continuity of an aspect of 'rurality' (norms for constructions).

The strategic guidelines and objectives of the Management Plan illustrate the interest in using heritage, rather than only preserving it. Heritage conservation is no longer only seen as an end per se, but also as a means for the development of the communities in the area. In this case, the rural settlements and the town historically linked to these remains are aimed to be the beneficiary of the selection and maintenance of this heritage. The first strategic guideline establishes the need to relate conservation to the economic development of peasant communities:

1. To investigate, to conserve and to maintain the integrity of the archaeological resources of the Archaeological Park based on its significance, preserving, conserving and putting in prospective value the Inca living town due to its high patrimonial value and the rest of the archaeological sites, in a way that they generate benefits for the peasant communities, through the development of tourist activity and education, constituting a factor of development. 104

The archaeological remains are understood as resources that can be exploited for the benefit of the local communities, although the main problem is that development almost entirely

¹⁰⁴ Author's translation from original text in Spanish. Text in bold si from the author. (Instituto Nacional de Cultura 2006, pt.2)

relies upon tourism development. However, tourism, as we will discuss later, is, on the one hand, not sustainable, and secondly, it tends to erode and folklorize culture and traditions.

In the second strategic guideline, the interest of **conservation of the natural and cultural landscapes** appears as a way to develop sustainable models for land use and territorial management. Natural and cultural landscapes are territories, differentiated from the archaeological heritage, and not specifically valued as heritage, but again, as the context to appreciate heritage:

2. To promote and to develop sustainable models in regards to the land use and territorial management; generating a field of possibilities for the valuation, conservation, investigation and management of the **natural and cultural landscapes** based on an appropriate organization of the territory based on Territorial Heritage Units.¹⁰⁵

The living culture is seen as a "factor of development", which relates to the exploitation of the ICH. The archaeological park has to serve as an instrument for the sustainable development (focused on the economical development) of the peasant communities and local communities in general that live inside this protected area:

3. To enhance the conditions and quality of the life of the population that inhabit the archaeological park, promoting the sustainable development of the peasant communities and the settlements of the archaeological park, through the generation of identity in the local population and the living culture as a factor of development. ¹⁰⁶

The archaeological park is conceived in the Management Plan as an instrument for the development of the communities living in the area. The conservation of the archaeological site for the sake of its intrinsic value has become a possibility of economic growth in the district. This demonstrates that it is necessary to present the economic benefits of a moral action such as conserving heritage for its inherent (scientific, historical, aesthetic) values. In order to promote the involvement of the locals in the conservation practice, it is necessary to justify this practice as being profitable.

Nevertheless, the values of the site have not been stated in the base of a cultural landscape approach. This impacts upon the Management Plan, whereby, even if the proposal

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¹⁰⁵ Author's translation from original text in Spanish. Text in bold is from the author. Ibid.

¹⁰⁶ Author's translation from the original text in Spanish (Ibid.). Text in bold is from the author.

involves territorial management, a focus on the archaeological tangible remains. The laws and the Management Plan aim to protect archaeological structures and not landscapes.

6.2.3 Protecting nature in the archaeological park

As previously explained, the landscape is seen in these documents as the environment within which cultural heritage is placed. In this sense, landscape is linked to the understanding of the natural heritage. Natural heritage, the natural landscape are the surroundings to human life. The importance of conserving the natural landscape relies upon its quality as a frame and context for the archaeological remains.

In the Management Plan, a zone for Natural Protection is contemplated inside the park, defined as being composed of:

areas of protection and study for the research, conservation, protection and environmental equilibrium; they are composed of: rivers, streams (riverbeds and brooklets), ravines, hills, slopes, snow peaks, forests, lakes, etc. 107

Inside the Natural Protection zone, there are two sub-zones:

- 1. Landscape-natural reserve sub-zone, which comprises sensitive environments, wetlands, wild environments, restoration environments and a strict protection environment. Here, confusion emerges between landscape, ecosystems and environment. The main corrective measure influencing the landscape management is that it is stated that existent infrastructure must be evaluated, adjusted or eradicated if it places the landscape value of the area at risk. Here, the area called landscape reserve refers to the natural landscape. Therefore, landscape is understood as nature. However, many of the features of this area could correspond to "associative cultural landscapes" (according to the definition in the OG).
- 2. **Buffer ecological sub-zone**, which protects the natural area and permits alternative activities such as tourist and recreational uses, as well as agriculture, stockbreeding, pasturing and forestry. This zone can be modified in its limits, in case of an extension to the exploitation area occurring. This would correspond to the "continuous organically evolved cultural landscape" (according to the definition in the OG).

¹⁰⁷ Author's translation from the original text in Spanish. (Instituto Nacional de Cultura 2006, pt.3 pp. 31–3).

The zones of Natural protection correspond to the Territorial Unit 8 (UT8 Mountains and hills of Tawasaywa and Rukha Uno), the Territorial Unit 9 (UT9 Mountain chain of Huchuycona, Alancoma snow peak – Malaga Pass) and the Territorial Unit 10 (UT10 The Apus of the snow peaks of Wakay Willque and La Veronica). These territorial units are the highest parts of the archaeological park, mainly the peaks of the mountains. Most of these areas are not inhabited, although some parts might be used for pasturing and hunting. Moreover, some of the lakes located in these zones are part of tourist treks guided by locals from the peasant communities. What is interesting to note is how these territorial units have been named. The most remarkable is the use of the Quechua word "apus" for naming the UT10. This name already implies the acknowledgement of the ICH of the Andean worldview, and consequently, culturizes this natural landscape. When the word "apu" is used, it implies the recognition of the cultural association to the snow peak (in this case, Wakay Willque and La Veronica). Thus, the natural landscape of the snow peak is transformed into an "associative cultural landscape".

As stated in this Management Plan, the *conservation of nature*, focuses on:

- Conservation of vegetation, land cover (declared "intangible")
- Conservation of animal, vegetation species, and microbial communities
 - Respect of land use carrying capacity
 - Maintenance of the purity and amount of water sources and wetlands
 - Maintenance of the purity of the air 108

The conservation of native wild flora and fauna is emphasized. In this area "the presence of domesticated species of plants and animals will be limited through a gradual and participative process in case of these being extensive or overgrazing". Even if exotic plants have been inserted in these lands for centuries (e.g. eucalyptus), one of the main regulations indicates that "it is forbidden to introduce exotic species external to the natural environment of the zone" (Instituto Nacional de Cultura 2006, pt.3, pp. 33). However, the concept of "natural environment" is not explained, clarfying the baseline to determine which species would be understood as "external".

The model of the Archaeological Park of Ollantaytambo reflects that the landscape management from the state perspective does not primarily place the landscape as the core of protection. Second, the landscape is not defined as a concept and it is used inconsistently in the

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^{108 (}Instituto Nacional de Cultura 2006).

laws and the Management Plan; for instance, it is used as a natural environment, environment, natural landscape, natural heritage, context and ecosystem. Third, the landscape is essentially understood as a frame to the cultural heritage, which is the center of the conservation efforts.

Even if the landscape is not the direct object of the [corrective and protective] measures established in this area, they nonetheless influence its transformation. First, the practices of the local communities are altered, since the structures of land property are modified and regulations of zoning are established. The path of development of the landscape is guided by norms determined by the State. Primarily, the autonomy of local communities in their relation to their environment is suppressed. The access to areas that would otherwise be used is restricted (Inca archaeological remains for rituals and grazing, terraces for cultivating). When "the Monument" is enclosed, the visit becomes touristic. Second, the archaeological sites located in the park become centers for research or tourist visits (these are combined in most of the sites). The uses of the sites are inextricably linked because the research impacts upon the interpretation of the function and history of the places. This **interpretation** is also managed by the state (through experts' elucidations). Progressively new interpretations (locals or alternative) are being developed, although most of these interpretations lack scientific proof. Third, the focus of the conservation practice relies upon the restoration and maintenance of physical structures. Even if the ICH is recognized, its safeguarding is not conceived as a priority, unlike the safeguarding of the Inca "monuments". Fourth, the state establishes a zoning in relation to the areas that are not the focus of protection, to conserve them as a context for the cultural heritage. These areas are managed as peripheral to the archaeological sites, which concentrate the highest value. The priority placed upon the conservation of remains goes against the development of the local communities. In this sense, restrictions in the use of their land are imposed upon the peasant communities of the district of Ollantaytambo. The areas that do not contain archaeological remains are actually what could be described as the cultural landscape. Nonetheless, this cultural landscape that has been constructed by the local communities through the passing of time, with their autonomy and local practices, is appropriated by the state, otherwise restricting the traditional land use. Fifth, the conservation of nature remains secondary. Natural landscape is the frame for cultural heritage, with the relation to nature as a primary element of the definition of cultural landscape not developed in the management of the site.

Finally, the PAO can be understood and protected in its different zones as a cultural landscape designed and created intentionally by man (in the zones of Archaeological protection - archaeological sites), a cultural landscape organically evolved relict (in the areas of the archaeological sites) and continuous (in the villages and peasant communities). Moreover, due

to the cultural significance of the mountains, snowpeaks and lakes for the Andean worldview, it also represents an associative cultural landscape. Nevertheless, the site does not have a Management Plan that backs up the conservation of the site as a cultural landscape. The site is essentially being conserved as a living Inca museum.

6.3 From Natural Reserve to Biosphere Reserve

On the other hand, the Ordesa and Monte Perdido National Park is illustrative of a shift from a compositionalist to a functionalist approach. These represent two schools of conservation philosophy, which are complementary according to Callicot et al., rather than competitive or mutually exclusive (Callicott et al. 1999). However, they propose two different understandings of the human place in nature. The compositionalist approach is based on evolutionary ecology and states that *Homo Sapiens Sapiens* is separated from nature. The concept of *Natural Reserves* is based on this approach. On the other hand, the functionalist approach is based on ecosystems ecology, positioning *Homo Sapiens Sapiens* as part of nature. Hence, this approach proposes that human presence is necessary for sustainability, assuming that nature is humanly inhabited and exploited, and that there is no need to preclude humans from nature but rather to establish sustainable strategies of human development in relation to nature. This approach is related to the model of the Biosphere Reserve, established by the MaB program, which proposes to integrate protected areas into the development of local communities.

The national park is a very restrictive approach, despite being directly linked to the use of nature for recreation, education and research. There are zones inside the national park defined as "reserves", with forbidden access, as well as zones specifically designated for visitors' access. The objectives of the *conservation of nature* are first to permit future generations to be able to enjoy natural places as they were "originally"; second to permit protected areas to serve as educational instruments concerning the environment and the history of the planet we inhabit; and third to develop scientific research in the present. In any case, these areas are protected from human intervention, with visits and scientific investigation strictly regulated.

The PNOMP has initially been protected due to the intrinsic aesthetic value assigned to the Ordesa Valley and its landscape of mountain peaks. The conservation of this aesthetic value relied upon the restricted use of the natural resources in the area (forest, rivers and pastures). The way in which local agropastoral communities were managing the land was subject to criticism by conservationists and mountaineers traveling around Monte Perdido. They were

more concerned about the forests' preservation than any other natural feature of the landscape, as stated by Fernández and Pradas Regel (1996):

The preservation of the ecosystems in its very rich variety is not the objective of the first conservationists, reasonably obsessed with the priority of the forests, of the trees. It is the case of Lucien Briet when he alerted about the need to protect Ordesa: "The Ordesa Valley is the woodshed of the Broto Valley; there they come from Torla to get supplies continuously of timber for constructions and charcoal. If we prick up our ears we would hear the blows of axes that resound in our heart...(Fernández & Pradas Regel 1996, p.26)¹⁰⁹

Therefore, the focus was not on the conservation of ecosystems, but rather the conservation of the beauty of the natural landscape, which depended on the preservation of forests. These motivations correspond to the conservationism movement, whose origins were in the elites, who considered it important to preserve the beauty of nature to be enjoyed through activities such as fishing and hunting (Ramos 2006).

Nowadays, the PNOMP is the core zone of the Biosphere Reserve Ordesa-Viñamala following its opening to an ecosystems approach that considers the involvement of local communities in conservation and outlines the use of conservation as a means of development.

Subsequently, in terms of shifts in conservation paradigms, the PNOMP illustrates the transition from a focus on aesthetic values and recreation as primary motives for the conservation of the landscape to the interest in *using* the model of the national park as an instrument for the development of the local communities, relying upon an ecosystems approach to the *conservation of nature*. In this sense, it parallels the development of the *conservation of the past*, with both practices converging when shifting from the interest in monuments (in the case of the *conservation of nature*, "natural monuments") to the "intangibilization" of heritage and the interest of integrating traditional knowledge to the conservation practice.

Whereas the *conservation of the past* had to overcome cultural relativism, the *conservation of nature* has always been understood as a universal moral duty. Natural sciences have been considered more precise, due to its primary focus on the natural laws that are assumed to function in the same manner everywhere. Nevertheless, this practice has also entailed from a confrontation with local communities and their diverse value systems and understandings of the environment. The conservation practice has consisted in displacing local

¹⁰⁹ Author's translation from the original text in Spanish. (Fernández & Pradas Regel 1996, p.26)

communities (generally composed of indigenous groups and those native to those areas) from their territories. The paradigmatic example is Yellowstone National Park, the first national park in the world, where different groups of Native Americans lived, yet were removed into Indian Reserves. It has not been different in the case of the PNOMP. Even if the people who occupied these lands were not seen as 'indigenous peoples', their relation to the environment and this specific place has been altered through the introduction of the legal protective figure.

6.3.1 The legal protection: The national park

The value system used for the *conservation of nature* in Spain is dependent on the value system employed in the European Union, which is based on the directives devised by international agencies such as IUCN. The legal protection for the *conservation of nature* has been established through different international agreements, similar to the case of the conservation of archaeological heritage. The relevant documents to which the PNOMP relates are:

- The Ramsar Convention on Wetlands, 1971
- UNESCO Man and the Biosphere Program, 1971
- Convention concerning the protection of the World Natural and Cultural Heritage, 1972
- Berne Convention on the Conservation of European wildlife and natural habitats, 1979
- Bird Directive, 1979, 2009 (ammended)
- World Charter for Nature, 1982
- The Brundtland Report (Our common future), 1987
- The Rio Declaration, 1992
- Habitats Directive, 1992
- Convention on Biological Diversity, 1993
- Earth Charter, 2000

The Birds Directive (Council Directive 2009/147/EC of November 30, 2009, which replaces the Council Directive 79/409/EEC of April 2 1979) on the conservation of wild birds and the Habitats Directive (Council Directive 92/43/EEC of 21 May 1992) on the conservation of natural habitats and of wild fauna and flora are the most important documents for the management of the *conservation of nature* in the European Union. The Habitats Directive contains the definitions of the concepts used for the conservation of nature, comprising "natural habitats" and "wild fauna and flora species" in the European space, as well as guidelines for regulating the management of the selected sites. Natura 2000 aims to create an ecological

network of sites as special areas of conservation that follow the Birds and Habitats Directives. In their annexes, the documents list the birds' species in the first case and the natural habitats types and the animal and plant species of interest to the Community in the second case. In this context, conservation is understood as "a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favorable status" (Council of Europe 1992, p.L 206/8 article 1). Nature is interpreted as the natural habitats, the habitats of species and the wild flora and fauna species. Natural habitats are "terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features whether entirely natural or semi-natural" (Ibid.), bringing the concept of "semi-natural" to the realm of conservation. The habitat of a species "means an environment defined by specific abiotic and biotic factors, in which the species lives at any stage of its biological cycle" (Ibid.). The natural habitat is defined by its abiotic and biotic factors, while the habitat of a species is defined in terms of the species' use of the environment. Here, the concept of landscape is not used, and the vocabulary emerges from ecology.

The value system for the *conservation of nature* is subsequently established according to ecological parameters, the aim of conservation established in Article 2 as "ensuring biodiversity". Four definitions in the Habitats Directive (Ibid.) mark the criteria used for establishing the priorities of conservation:

- 1. "(c) *natural habitat types of Community interest* means those which, within the territory referred to in Article 2 [European territory of the Member States to which the Treaty applies]:
- (i) are in danger of disappearance in their natural range; or
- (ii) have a small natural range following their regression or by reason of their intrinsically restricted area; or
- (iii) present outstanding examples of typical characteristics of one or more of the five following biogeographical regions: Alpine, Atlantic, Continental, Macaronesian and Mediterranean." (Ibid.)
- 2. "(d) *priority natural habitat types* means natural habitat types in danger of disappearance, which are present on the territory referred to in Article 2 [European territory of the Member States to which the Treaty applies] and for the conservation of which the Community has particular responsibility in view of the proportion of their natural range which falls within the territory referred to in Article 2 (...)"
- 3. "(g) *species of Community interest* means species which, within the territory referred to in Article 2 [European territory of the Member States to which the Treaty applies], are:

- (i) endangered, except those species whose natural range is marginal in that territory and which are not endangered or vulnerable in the western palearctic region; or
- (ii) vulnerable, i.e. believed likely to move into the endangered category in the near future if the causal factors continue operating; or
- (iii) rare, i.e. with small populations that are not at present endangered or vulnerable, but are at risk. The species are located within restricted geographical areas or are thinly scattered over a more extensive range; or
- (iv) endemic and requiring particular attention by reason of the specific nature of their habitat and/or the potential impact of their exploitation on the conservation status."
- 4. "(h) *priority species* means species referred to in (g) (i) for the conservation of which the Community has particular responsibility in view of the proportion of their natural range which falls within the territory referred to in Article 2 [European territory of the Member States to which the Treaty applies]"

The priorities of conservation are established according to the "disappearance factor": what is in need of conservation is what is under threat of disappearing. The less appropriate the conditions for the species, plant or animal, (risk of disappearance of habitats or reduced amount of population) the more urgent is to deploy strategies for its conservation.

There are two species for which the PNOMP has been a special conservation area: *Capra Pyrenaica Pyrenaica* (Spanish Ibex) listed in the Habitats Directive Annex and the *Gypaetus Barbatus* (Quebrantahuesos) listed in the Birds Directive Annex. The former was extinct in 2000 and the latter is still preserved in the vicinities of the PNOMP.

The guidelines established by the EU are part of the implementation of the Berne Convention on the conservation of European wildlife and natural habitats (1979) which entered into force in June 1982. From this, the development of a unified strategy for the *conservation of nature* in the European Union started. Spain only integrated the European Economic Community (antecedent to the European Union) in 1986. The Law that was passed, after its integration to the European Union, in terms of conservation of nature is the Law 4/1989, of March 27th, on the Conservation of Natural Spaces and the Wild Flora and Fauna, that establishes the following definition of 'nature':

[nature] understood as the environment where the essential ecological processes and the vital basic systems get along, as well as the ensemble of resources indispensable for it. 110

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Author's translation from the original text in Spanish. (Law 4/1989, of March 27th, of the Conservation of Natural Spaces and the Wild Flora and Fauna). (Government of Spain 1989, p.1)

Nature is not different from environment, and it is intrinsically valuable because it is the container of the ecosystems and resources that are useful for human life.

In the article 1, it is stated that

it is the objective of the present Law [4/1989], (...) the establishment of regulations for the protection, conservation, restoration and enhancement of the natural resources and, in particular, the ones related to the natural spaces and the wild flora and fauna.¹¹¹

Therefore, the priority of conservation currently relies on the necessity of maintaining the natural resources and the ecosystems upon which they depend. Notwithstanding in its origin, the figure of the national park essentially contemplated the enjoyment of the beauty of nature:

The interest of Romanones [President of the Council of Ministers when the Law for declaring the Ordesa National Park was passed] was demonstrated on December the 7th of that same year [1916], date in which the King Alfonso XIII approved the Law of the creation of National Parks being the Ministry of Promotion Rafael Gasset. According to the previously stated Law, national parks could be those places or settings exceptionally picturesque, forested or rough, of the national territory, that the state consecrates declaring them and taking care of them with the exclusive objective of favoring their access through communication lines adequate and to respect and ensure that the natural beauty of their landscapes, the richness of their fauna and flora is respected, avoiding in this way, with the greatest efficiency, every act of destruction, deterioration or disfigurement by the hand of man. ¹¹²

Destruction, deterioration and disfigurement by the hand of man were to be avoided by ensuring the application of protective measures. Here, the idea that humankind was responsible for the deterioration of nature is confirmed and the need to regulate and restrict local practices is stated. This perspective can be associated with a compositionalist approach regarding the relationship between humans and the environment. The decision concerning which areas deserve to be declared national parks would follow the recommendation of experts. Again, the external appreciation of a place marks the beginning of the patrimonialization process:

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¹¹¹ Author's translation from the original text in Spanish. Ibid.

¹¹² Author's translation from the original text in Spanish. (Fernández & Pradas Regel 1996, p.33)

A Royal Decree of February 1917 stipulated that the Chief Engineers of the Forest Districts send to the General Direction of Agriculture, Mines and Forests, a list of the notable sites that deserved protection.¹¹³

As previously explained, the State inaugurated the Ordesa Valley National Park in 1918 as a small portion of what it currently covers. At this point, the Arazas Valley or Ordesa was humanized, occupied, in what is now the entrance to the Park, by a couple of "bordas" (ranchs) and in the slopes of the canyon by "bancales" (as some of the locals still remember). Some areas of the valley were used as meadows, where sheep and cows grazed. Moreover, there are pasturelands in the plateau areas with continuous use for grazing. This to say that, even though the mountaineers who arrive to the site, as well as the authorities, have considered this place as 'natural', different activities were being performed in the area: fishing in the rivers, timbering the forests, cultivating the slopes and grazing the meadows.

Thereafter, since the declaration of the Ordesa Valley as a national park, the activities of locals have been regulated. The national park prohibited fishing and timbering and restricted the areas for grazing. Moreover, the creation of the national park implied an increase in visitors, as a means to promote the development of other activities that could compensate the abandonment of the traditional ones. Furthermore, this would also generate progressive changes in the towns and its surroundings (cf. Chapter 7).

The area of the park was extended in 1982 through the Law 52/1982, of July 13th on the reclassification and extension of the Ordesa and Monte Perdido National Park in order to protect the valleys of Anisclo, Escuain and Pineta, due to the threat of the construction of a hydroelectric dam in the Anisclo canyon. Local communities that exploited these valleys for timbering and fishing also had to stop these activities.

The law declaring the extension reads as follows:

The aforesaid special legal regulations are established to protect the integrity of the gea, flora, fauna, water and atmosphere and, in definitive, the group of ecosystems of the Ordesa and Monte Perdido National Park, due to its educational, scientific, cultural, recreational, touristic and socio-economical interest.¹¹⁴

¹¹⁴Author's translation from the original text in Spanish. (BOE, nº 181, de 30 de julio de 1982).

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¹¹³ Author's translation from the original text in Spanish. (Fernández & Pradas Regel 1996, p.34)

The values emphasized in this law are integrity, nature as a group of ecosystems and the values stated in international conventions and recommendations: educational, scientific, cultural, recreational, touristic and socio-economical.

The principles regulating the *conservation of nature* in Spain are stated article 2 of the Law 4/1989 as:

- a) The maintenance of the essential ecological processes and the vital basic systems.
- b) The preservation of the genetic diversity.
- c) The ordered use of the resources, guaranteeing the sustainable profit of the species and the ecosystems, their restoration and enhancement.
- d) The preservation of the variety, singularity and beauty of the natural ecosystems and the landscape. 115

Nature is seen as manageable in its diverse components, including basic systems, ecological processes, genetic diversity, resources, natural ecosystems and landscapes, with the objective to sustainably use the elements of nature. Here, landscape refers to aesthetics. This paragraph brings back and retains one of the basic ideas of the *conservation of nature* in its origins, the preservation of the beauty of landscape. The idea of the conservation of the landscape was on the one hand related to the conservation of nature, and on the other hand to an aesthetic appreciation of nature, or artialization (Roger 1997). Nature as art has been defined as landscape, while the beauty of nature was expressed through the beauty of landscapes.

Whereas the focus is the maintenance of natural habitats and wild flora and fauna, the conservation of the traditional systems of land use is also contemplated in article 9 of this law, as a general strategy for all the protected natural spaces:

1. The use of the soil with agricultural, forest and stockbreeding aims must be oriented to the maintenance of the biological potential and productive capacity of it, with respect to the ecosystems of its environment. ¹¹⁶

In this sense, the exploitation is not forbidden, yet it must be in accordance with respect for the environment. In the case of the PNOMP, the correlation between traditional land uses of stockbreeding and the increase and conservation of biodiversity has been researched for many

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¹¹⁵ Author's translation from the original text in Spanish.(Government of Spain 1989, p.8264, article 2)

Author's translation from the original text in Spanish. (Government of Spain 1989, p.8264, article 9)

years¹¹⁷. The practices of stockbreeding influence the vegetation composition and have an impact on ecosystems. Hence, the conservation of the landscape as it has been valued and appreciated depends on the continuity of these activities.

However, parks are defined in article 13, as areas that have been little intervened by human communities. Here, the landscape is understood from the approach [1]:

1. The parks are natural areas, little transformed by the human exploitation or occupation that, because of the beauty of its landscapes, the representativeness of its ecosystems or the singularity of its flora, of its fauna or of its geomorphological formations, possess ecological, aesthetic, educational and scientific values whose conservation deserves a preferential attention. ¹¹⁸

Contrary to how parks are defined, according to the historical accounts of Ordesa Valley at the beginning of the century, and later in the 1980s, the other valleys declared part of the PNOMP were exploited by the local communities of the area. My assumption is that the type of exploitation, namely the activities performed by the communities inhabiting these areas, impacted little upon the environment compared to the industrial or urban impacts. Thus, the natural ecosystems were not altered in a manner that would damage their integrity. Hence, the *conservation of nature* would not be against the traditional exploitation of the land, but it would be more oriented to preventing possible larger and more impacting interventions related to development and industrialization, such as the case of the hydroelectric plant in the Anisclo canyon. In this sense, the article 13 proceeds by stating that:

2. In the parks, the exploitation of natural resources could be limited, prohibiting in every case the incompatibilities with the aims with which its creation has been justified.

However, it is confirmed in the same article as a principle, the visitors' access, as one of the elemental features of the park system:

3. In the parks, the entrance of the visitors will be facilitated with the precise limitations to guarantee their protection. 120

¹¹⁷ This topic is treated by the researchers in the Pyrenean Institute of Ecology (IPE-CSIC) since the 1960s. They have published a report with a summary of the research they have been carrying out in the PNOMP: (Researchers of the IPE-CSIC 2011).

¹¹⁸ Author's translation from the original text in Spanish. (Government of Spain 1989, p.8264, article 13)

Author's translation from the original text in Spanish. (Government of Spain 1989, p.8264, article 13)

¹²⁰ Author's translation from the original text in Spanish. (Government of Spain 1989, p.8264, article 13)

The national parks have been created to protect nature, as well as making it accessible to the general public. The patrimonialization process of nature in the PNOMP implied the appropriation, first of the Ordesa Valley and then, from the other valleys, where shepherds and stockbreeders had the autonomy of use and access through communal agreements. When the figure of the PNOMP reclaims these areas, it is for the public to enjoy and scientists to research, as well as for the state to exploit them. These activities impact upon the land use to different degrees, generating the *change of the landscape*. Nonetheless, the concept of cultural landscape does not appear in the laws, and the landscape is not different from nature. The only reference to cultural uses of the natural space in relation to its protection appears when the stockbreeding traditional activities are permitted insofar as they contribute to the conservation of biodiversity.

6.3.2 The management: the cultural or the natural landscape?

The particularity of a national park in relation to other parks is that it is representative of a region or ecological zone of the country. As such, it takes part of a network of national parks, holding a higher status than any ordinary park (Government of Spain 1989, chap.4, article 22).

The Management Plan (*Plan Rector de Uso y Gestión* – Guiding Plan of Use and Management - PRUG) is currently being revised. It was approved in the 1995, with four years of validity, and is taking still some time to be reconsidered and revalidated. The intention is to adequate it in order to integrate strategies that could improve the cooperation between the Pyrenees National Park in France and the PNOMP, given that they are both part of the World Heritage property Pyrenees/Mont Perdu.

The landscape management, based on the PRUG, sets two basic strategies that delineate the state approach to landscape: the zonification and the management of natural resources, research and public use.

The objectives of the PRUG have been established as:

- 1. To identify the actions and develop precise instruments to ensure the maintenance and the restoration of the resources of the park.
- 2. To determine the needs and priorities in terms of study and research about the resources of the park and their dynamics.
- 3. To order the public use adequating the visits to the park to its reception capacity.
- 4. To regulate the traditional stockbreeding activities.

- 5. To define the use for the infrastructures existing inside the park.
- 6. To determine the new infrastructures necessary for the management. 121

As stated in the previous section, the main interests of the creation of the park, apart from the conservation of the natural systems and resources (point 1), is to permit the research and deeper study of that ecological system (point 2) and to provide the public with access to the site, accompanied by an educative interpretation of its natural values. The objective that has more impact in the landscape management in the park is point 4, namely the regulation of the traditional stockbreeding activities. This regulation impacts upon the landscape management as conceived in the customary practices of the local communities, as well as in their traditional way of life.

There are three principles stated in the PRUG: 1. conservation as a priority over any other activity; 2. the maintenance of natural and seminatural systems as a priority – through the respect of natural processes, the re-introduction of extinct species of animals and/or plants and the prohibition of introducing exotic species to the flora and fauna of PNOMP; and 3. the reduction of possible impacts of management activities. (Ministerio de Agricultura, Pesca y Alimentación 1995, chap.Principles and basic criteria)

For this, the park has been divided into four zones: the Reserve zone (770 ha), the Restricted use zone (14,817.03 ha), the Moderate use zone (11.11 ha) and the Special use zone (8.86 ha).

Four places belong to **the Reserve zone**: the Ordesa Shady, the Mount Perdu Glacier, the Soum de Ramond Glacier and the Casteret frozen Cave. These areas and the resources contained therein are considered unique, fragile, rare or threatened. They remain excluded from public use and can only be accessed by the management staff, rights title holders in its interior or other users duly authorized (mostly scientists) (Ministerio de Agricultura, Pesca y Alimentación 1995).

The Restricted use zones occupy all the areas of the park that are not comprised in other zoning categories. Their objective is to make possible the contact with nature in areas little or not intervened by man. Their access and public transit could only be achieved by foot, through the places signalized with that purpose (Ministerio de Agricultura, Pesca y Alimentación 1995). Even if visitors are allowed to enter these areas, they cannot perform any

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¹²¹Author's translation from the original text in Spanish. (Ministerio de Agricultura, Pesca y Alimentación 1995)

activity and cannot take any sample with them or leave any strange substance (e.g. plastic bags or bottles) after the visit. This is how the natural processes are supposed to be respected, through **the policy of non-intervention**.

Three areas correspond to **the Moderate use zones**: the Ordesa Prairie, the roads of Lalarri, La Valle, and Plana Canal and the adjacent zone to Goriz shelter. Their objective is to make possible interpretation activities. They are intended for the public's enjoyment in the natural environment, and within them it is possible to locate small constructions or interpretation panels.

The zones of Special Use contain the buildings of public use and services for the management of the Park, with the roads and existing infrastructures also included in this category. These areas are listed as the built nucleus of the Ordesa Prairie, the parking of Ordesa, the classroom of the nature of the Ordesa Valley and annexes, the visitors' center of the Ordesa Valley and annexes, the Goriz shelter and heliport, the roads and other infrastructures built inside the park.

The management is divided into three areas: the management of natural resources, the management of research and the management of public use. While all three topics will impact upon the change of the landscape, the most relevant in terms of understanding the process of landscape management are the management of natural resources and the public use.

The management of the natural resources is divided into four headings: the management of the soil, the management of vegetal formations, the management of flora and fauna, the regulation of exploitations and monitoring.

The management of the soil focuses on the restoration of eroded areas and the control of activities that could produce erosion. Two areas have been defined in the park for projects of restoration: Las Arripas shells and the paths of Soaso and Góriz. These are eroded by the cascades and water filtrations and are transited by visitors; therefore, the restoration of the soil is oriented to the security of the visit.

The management of the vegetal formations involves the intentional change of the composition or structure of the land cover, with the objective of maintaining the typical formations in the area of the park, avoiding the elimination of exotic species (like in the PAO), maintaining threatened species through the management of habitats, controlling plagues and diseases and preventing wildfires.

The management of the flora and fauna of the park focuses on the maintenance of the species that are proper to the park, following three strategies: favoring the populations of the threatened species, controlling overabundant species that could interfere with the stability of the ecosystems and eliminating the populations of exotic species. This plan, which was conceived before the Spanish ibex ("bucardo") was extinct, established the need to plan its conservation and that of the osprey ("quebrantahuesos"). Moreover, it also mentions the need to establish a control over the population dynamics of the wild boar and the mountain goat. The overpopulation of wild boar is an issue for the stockbreeders of the Sobrarbe, who considered the animal as a plague destroying pastures and fields.

To date, there is no regulation that could be interpreted as concerning the conservation of the cultural landscape. All the regulations are focused on the maintenance of natural habitats and species of wild flora and fauna, as well as the restoration of what could be understood as natural landscapes (soils). Nevertheless, the management of exploitations deals with the topic of the persistence of traditional exploitations. The only activities that are considered compatible with the national park are the extensive stockbreeding and the meadows' cutting. The agricultural activities have been suppressed inside the park, albeit always the rights of the current users taking into account. Therefore, the agropastoral way of life is not compatible inside the PNOMP, due to the prohibition of its agro component. The pasture exploitation that is permitted is the extensive mode that respects the traditional uses and customs. Moreover, in case of conflict, priority is given to stockbreeding over the recreational use in the areas of pastoral exploitation 122.

The guideline that connects the conservation of nature to the conservation of the cultural landscape states that: "the maintenance of the biological systems or characteristic landscapes of the national park and to the promotion of the utilization of autochtonous races and local forms of the Central Pyrenees". (Ibid.) (Ministerio de Agricultura, Pesca y Alimentación 1995). Here, it is recognized that the characteristic landscape of the national park is that produced through the persistence of the stockbreeding tradition. For the first time, the importance of maintaining the domestic species is mentioned, pointing out the relevance of the Pyrenaic culture in the conservation of nature.

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¹²² Conflicts have emerged between stockbreeders and tourists passing through the pasture areas, because tourists tend to frightenen cattles with their dogs, or approach them for taking pictures, provoking their movement and disturbance. MPST, a stockbreeder of the PNOMP, explains: "There are dogs. Tourists enter to the park with their dogs. It is forbidden to enter with dogs to the park. But we have a very high area, and there is no surveillance, many times, tourists release their dogs, and their dogs attack sheep, that's why [stockbreeders don't like tourists]". (Author's translation from Spanish, IntLC PNOMP S1, p. 18).

Finally, the monitoring system focuses on the conservation of wild species and their ecosystems. It deals with research activities for the evaluation of the protective and corrective measures established in order to quantify the variations. This acknowledges the dynamic nature of the ecosystems, assuming their change and expecting to control it through the use of the relevant parameters. Fundamentally, the monitoring focuses on: the evolution of the vegetable formations; the evolution of the populations of flora and fauna; the sanitary state and the contaminating levels of the wild populations; the levels of contaminants in different elements of the physical environment, namely soil, water, etc.; the impact of the exploitations, the management activities and the visits to evaluate the state of conservation of the ecosystems; and the natural values (Ibid.)

In terms of the management of the public use of the park, priority is given to conservation over any other interests. The restrictions of public use are determined with the aim of protecting the natural resources of the park, as well as the traditional rights and activities of the local inhabitants. Whereas conservation is the priority, the public's enjoyment and contact with nature is a primary concern in the landscape management. The interest of the natural space is seen as more than purely touristic and recreational. The scientific values of the park need to be exposed in the interpretation center in order to raise awareness about the risks associated with the use of the park. Moreover, the number of visitors has been restricted in each sector. 123

The interpretation in the PNOMP is based on the appropriate transmission of the values and natural and cultural phenomena, as well as inducing favorable attitudes in visitors towards the *conservation of nature*. For this, some of the strategies state the global interpretation of the ecosystems of the park and the rapprochement of the traditional ways of life, explained in interpretation centers and museums at the entrance to the park or in its neighboring towns.

Among other uses, traditional celebrations are allowed inside the park, specifically those related to the San Urbez shrine located inside the territory of the park in the Anisclo canyon. This shrine is a point of celebration for "*romerias*" on specific dates (Whit Tuesday, May 1st, September 14th and December 15th). Hence, cultural activities inside the park are considered as part of its uses, as far as they belong to a tradition, in this case, religious, associated with the ICH of traditional stockbreeding.

There are few mentions in the text of the PRUG to the landscape and none to the

¹²³ Ordesa Sector: 1.500. Añisclo Sector: 500. Escuain Sector: 325. Pineta Sector: 650. Source: PRUG, Management Plan of Ordesa and Monte Perdido National Park, 1995.

cultural landscape, clarifying that this approach has not been used in the elaboration of the strategies for its protection. The natural landscape is understood as a characteristic related to aesthetics. There is no allusion to landscape as heritage; moreover, the concepts of heritage or natural heritage are not used in the PRUG.

6.3.3 Protecting culture in the national park: the World Heritage site and the Biosphere Reserve

According to Ramos (2006), there were two separate moments in which the conservation of nature was developed in Spain during the 20th century. The first, which he calls the first conservationism (primer conservacionismo), appeared at the beginning of the 20th century, mainly founded by elites (the nobles supported by the King), influenced by the conservationist movement that was being spread around the world and originated in the US, England and Germany. The origins of this movement are related to the impact of industrialization and urbanization in these countries. Even if those processes were not yet as intense in Spain as in the aforementioned countries, the ideal of conservation of nature was received and developed through the passing of the Law of National Parks in 1916. However, it could be said that the interest of the aristocracy in conserving nature was related to their passions of hunting and fishing, which is why the direct antecedent to the national parks are the Hunting Reserves, declared as Royal Reserves in 1905 (later changed to National Reserves)¹²⁴. The conservation of nature at this point was also linked to the scientific-naturalist interest, connected to mountaineering and excursion practices. Until 1936, when the civil war started, the initiatives of conserving nature were spread, achieving its highest success with the declaration of the protection of nature as a function of the state in article 45 of the Constitution of 1931.

From the outbreak of the Civil war in 1936 until its end in 1939, conservationist efforts were relegated. Under the dictatorial regime of Franco, from 1939 until 1975, the *conservation of nature* did not develop any further in Spain, with conservation delegated to the Mountain Engineers (*Ingenieros de Montes*). The repopulation of the forests was oriented to its exploitation, focusing upon the plantation of species of rapid growth, and not on native species. This generated the rapid growth of the forests in these areas of the Pyrenees, mostly planted with pine.

equipment and even a hundred whippings if the furtive opposed resistance to the forest guards." Author's translation from the original text in Spanish. (Fernández & Pradas Regel 1996, p.28).

¹²⁴ "The Royal Reserves, as a legal formulation, are with no doubt the most clear antecedent to the protectionist policy in our country [Spain]. The interest of the conservation of some natural species in Spain is directly linked to the passion for hunting of almost every monarch. According to Geoffrey Parker in his book about Philip II, the Spanish monarch was a supporter of the Flamish style gardening, fishing and hunting. A good prove of this are the strong punishments imposed to the furtives that did not respect the closed season. Fines, banishment, loss of

The second movement developing the *conservation of nature* in Spain is the ecologism of the 1960s, a movement that was also spread around the world. Nevertheless, the development of the ecologist groups in Spain was directly linked to country's situation during this time: deterioration of the environment, industrialization and urbanization, especially in the Mediterranean coast, through the exploitation of tourism.

The ecosystems approach was introduced in the legal system, with the impacts of development on the environment acknowledged. Influenced by the world ecologist movement, the PNOMP was extended in 1982 to prevent the construction of the Anisclo dam. By then, the interest of protection, which was initially focused on the beauty of the landscapes (first conservationism), was also extended to an ecosystems approach:

Additionaly it establishes the special protection of the traditional stockbreeding activities compatible with the conservation, that have contributed to shape the landscape of the park and to configure some of its more characteristic ecosystems.¹²⁵

Landscape is mentioned and acknowledged in this law as being shaped by traditional stockbreeding activities. This approach to landscape is the one of geographers (approach [2]), namely the understanding of landscape as a cultural landscape. However, despite this being stated in 1982, it was only developed later in 1995 in the PRUG. Contrary to the first declaration, when some of the agropastoral structures were destroyed in order to adequate the site for the visitors (Fernández & Pradas Regel 1996), these are now protected, as well as the cattle paths ("vías pecuarias").

Two main components of the agropastoral tradition in the area were used to determine the decision of the experts to nominate *Pyrenees/Mont Perdu* as a cultural landscape: the existence of impressive terraces ("bancales") in the surroundings of the PNOMP – specifically those encountered in the town of Bestue, Aragon (Figure 11)- and the continuity of the tradition of the passing of the cattle to France (known in Spanish as "El Paso a Francia"). Nevertheless, the terraces of Bestue are located outside the limits of the national park, and outside the limits of the World Heritage property. The route of the passing of the cattle to France is located in the Bujaruelo Valley, which could neither be included in the area of the national park nor the World Heritage property, due to an old plan to build a road connecting Torla in Spain and Gavarnie in France. While the road was only built on the French side, a high-tension electric line passes through the Bujaruelo Valley, damaging its integrity and aesthetic value.

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¹²⁵ Author's translation from the original text in Spanish. (BOE, n° 181, de 30 de julio de 1982).

The cultural landscape as it is valued from the experts' perspective, is the result of practices depending upon a disappearing agropastoral tradition. Even though the terraces are a physical remain, what makes them valuable is the intangible in them, its continuous use since the Middle Ages until the end of last century. The same situation occurs with the passing of the cattle. This tradition originated in the Middle Ages, when the modern states of France and Spain did not exist, and when the mountains were managed by valleys. The cattle pass through the Bujaruelo Valley, coming from the Broto Valley to the Valley of Bareges in the French Pyrenees. Even if this tradition is maintained, it has undergone important changes. At present, the practice corresponds with a stockbreeding industry more than a pastoral practice.

The first impact was the loss of its *agro* component. The remains from the agricultural practice are the small orchards that some locals still grow in their family houses. Nonetheless, the significant component of the landscape here is the terraces, which, as remembered by locals (over 50 years old), were sown with wheat. Wheat became non-profitable, and they stopped growing it. Then, these "bancales" were used as fields for growing hay to feed the livestock. These have progressively been abandoned and replaced by fodders. Now, only few fields ("campos") are still in use by the few remaining active stockbreeders, and only to produce hay. The invasion of brushes, "erizón" (Echinospartum horridum) and the forestation of pastureland is the main phenomenon occurring in this area at the level of the landscape (Figure 12).

The agropastoral tradition that shaped the cultural landscape protected by the 1972 World Heritage Convention is no longer being practiced:

In 1997, the area was declared a UNESCO World Heritage Site with the aim of preserving the ancient and fragile herding culture of the Pyrenees – a culture once widespread throughout the high-mountain region of Europe but which is now practically extinct. (Luengo & Rössler 2012, p.116)

As has been revised in the previous section, the regulations of the PNOMP focus on the conservation of ecosystems, mainly aiming at the conservation of biodiversity (Ministerio de Agricultura, Pesca y Alimentación 1995). However, the importance of traditional stockbreeding as part of the functioning of these ecosystems is recognized in both the Law declaring the park and the management plan (PRUG). Additionally, some initiatives to recover native species for livestock are promoted by scientists and locals (e.g. Association of stockbreeders of the Pyrenaic goat), in relation to the management plan, within which the re-introduction of endemic species is promoted. Moreover, following EU policies, the state subsidizes stockbreeding. However, the current practices involve neither the maintenance of the terraces nor the

transhumance. Moreover, these subsidies have added to the crisis of the traditional rural activities, the adequation of a capitalist stockbreeding practice where few stockbreeders manage the same amount of head of cattle and use of the meadows.



Figure 11: View of the terraces from the town of Bestue taken by a local in 1976. ©Saturnino Puertolas Sesé



Figure 12: View of the terraces and town covered by forest in 2012. ©Author

The other model that integrates culture in the *conservation of nature* is the Biosphere Reserve, which implies the understanding of human communities as part of a larger ecosystem. As already mentioned in Chapter 4, the Ordesa National Park (the name of the site until 1982) and the Hunting Reserve of Viñemala were declared a Biosphere Reserve in the network of the

UNESCO MaB program in 1977. The Hunting Reserve of Viñemala is part of a network of Hunting Reserves (*Reservas Nacionales de Caza*) created in Spain in 1966. By this time, the Ordesa National Park only comprised the Ordesa Valley, and hence the other valleys are not part of the Biosphere Reserve. This Biosphere Reserve is currently under reconsideration in order to integrate the other valleys and the Municipal terms involved in the national park, as well as establishing the correct zoning according to the directives of the MaB program. This zoning comprises a nucleus zone, buffer zone and transition zone. The nucleus zone would consist in the area of the PNOMP added to the "Monuments of the Pyrenaic Glaciars" (another protected area in the same region, declared in 1990, extended in 2002, and later in 2007). The buffer zone would correspond to the Peripheric zone of Protection and the Transition zone contains the settlements and the rest of the Municipal Terms that agree to belong to the Biosphere Reserve. The Management Plan for this Biosphere Reserve is still to be formulated when the zoning and area of the Reserve are defined. This plan considers the participation of the Municipalities and the local population in its conception.

Even if this model is not directly oriented to the *conservation of the past*, but more to the socio-economic development of the communities related to the protected area, when including the settlements, it implies the consideration of the cultural aspects and traditions of these communities.

The model of the Ordesa and Monte Perdido National Park illustrates how landscape has been regarded with an aesthetic lens in the context of the *conservation of nature*. Landscape is valued for its contemplation. Landscape is approached as a representation, as a way of seeing nature. On the other hand, natural heritage is not named as such, although the focus is placed on the ecosystems and wild flora and fauna. Therefore, even if the concept of landscape is understood from approach [1], nature is understood from approach [3], particularly from ecology, with nature defined as a complex system. While the landscape is not at the core of the protection, it is assumed, through the conservation of the soils, the land cover, the natural ecosystems and the wild flora and fauna, that the natural landscape is conserved. Subsequently, the landscape results from the interrelations between these natural elements. In the passage from compositionalism to functionalism, landscape starts as an aesthetic representation and ends as an ecosystem.

Even if there is a lack of a specific definition of landscape as heritage or how to manage the landscape, corrective and protective measures established in the laws and management plan influence in the transformation of the landscape of the PNOMP. As exemplified by the archaeological park, customary practices of land use and access have been modified, with traditional activities such as agriculture, timbering and fishing being prohibited. However, the impact of the lacking interrelation between the natural space and the human communities has not yet been evaluated. The state instructions of a non-intervention policy, since 1918 in the Ordesa Valley and 1982 in the rest of the valleys, must have had an impact on the change of the landscape.

The autonomy of local communities in their relation to the environment is also suppressed by restrictions in their use and access to the land. Although the rights to pasturing remain active in some areas, zones that were of common use to local communities are now devoted to the enjoyment of visitors.

The interpretation of the site focuses on the natural values of the place and even if the cultural values are also recognized and stated they remain in a secondary plane.

Similar to the case of the *conservation of the past*, the focus of the *conservation of nature* relies on the concepts of restoration and maintenance, albeit this time involving natural systems. Cultural landscape is not mentioned as such, but is only referenced when the traditional activities of stockbreeding are mentioned as fundamental in the shaping of the PNOMP. Even though this ICH is recognized in the law and management plan, there is no specific regulation focusing on the safeguarding of these activities and the related cultural practices. These are intended to be preserved through subsidies. Moreover, whereas traditional activities are allowed, traditional knowledge related to the agropastoral/stockbreeding practice is not conceived as significant for the landscape management and conservation of the landscape. In terms of the relation to local communities, their integration in the conservation practice has been developed through their individual participation as Guards in both the national park and the hunting reserve.

As part of a World Heritage cultural landscape, the issue of the traditional stockbreeding practice is significant for the local communities and authorities in the area. Nevertheless, inside the site itself, it is only permitted to circulate and leave cattle in a few areas. Moreover, the site itself (the protected area defined as national park) could be interpreted as an organically evolved relict cultural landscape, and the cut of the "organic evolution" is directly linked to its declaration as a National Park. Outside the Park, it could be interpreted as an organically evolved continuing cultural landscape even if most of the landscape capital has already been abandoned (terraces and fields). Hence, there is an incongruity between the cultural landscape values as declared for the World Heritage site, and the regulations and

management of the national park itself, reflecting a very restrictive model for the *conservation* of nature.

The figure of the Biosphere Reserve serves to integrate local communities in the conservation of the protected area by making them responsible for their natural heritage. Since the figure is now being extended and re-worked, it is necessary to analyze how the Management Plan might impact in the change of the landscape, once approved.

6.4 Synthesis: the conservation of the landscape as a container

In the case of the *conservation of the past*, the landscape is a frame for heritage. In the case of the *conservation of nature*, landscape is the central focus of conservation, first as a representation, and later reduced to an ecosystem. This is because landscape has been originally related to the view and appreciation of the features/elements in nature. However, the landscape remains as a frame and the container of the natural and cultural elements of a certain place. In the first model landscape is secondary to conservation whereas in the second model it appears as the primary object of conservation. I have summarized in the Table 1 the understanding, values and problems of both models of protection in relation to the cultural landscape approach.

No specific management strategies have been conceived for the conservation of cultural landscapes. Since these models have been established beforehand and with different criteria and value systems, they result partially and based on a certain epistemology that contemplates an understanding of landscape that does not necessarily match with the understanding of cultural landscapes as heritage sites. Landscape is a frame containing the tangible heritage, and the natural landscape demarcates the picture (mountains, rivers, forests).

In the two models of conservation, there is a historical background of priority given to aesthetics linked to the origins of the conservation practice. Aesthetic perception transformed buildings and natural features into "monuments". The idea of "monument" has been adapted from the cultural to the natural monument. The evolution from the conservation of a "Monument" in the PAO to the conservation of the cultural landscape reflects the evolution from the focus on tangible heritage of the European tradition (Palaces, Castles, Churches, etc) to consider other elements non-monumental or intangible. In the case of the PNOMP, the evolution from the idea of conservation of the natural landscape for its aesthetic value, to the conservation of the cultural landscape and the integration of the socio-economic interests of the local communities, signifies the transition to an idea of usage of heritage. The paradigm shift

from preservation to use can be illustrated by the changing use from heritage as national identity (case of Inca ruins, Inca identity for Peru) or as aestehtic value (natural landscape in the PNOMP) to the use of heritage as a commodity in the tourist market.

In Table 2, I summarize the state landscape management developed in the context of these two models. Whereas the process of enlargement of heritage sites seems to cover the larger needs of protection, it also implies a stronger intervention from the part of the state. The patrimonialization of past and nature consist first in the expropiation of a site from the local communities inhabiting it. Subsequently, the autonomy of the local communities in their relationship to their environment and their heritage is suppressed, with their access to their land restricted and the uses of resources regulated. Experts, who do not necessarily survey local accounts of the places, formulate the interpretation of the sites. When the uses are regulated, there is a loss in the "authenticity" of the relationship between people and their environment.

A significant deficiency in both models has been the lack of integration of local communities in the development of the management plans of the sites. It is expected that locals will have more participation in decision-making processeses in their reformulation. The expropriation of the land and traditions triggered by the patrimonialization of the landscape entails alternative ways of re-appropriation developed by local communities. In the next chapter, their vision of the landscape and its conservation, as well as their relation to heritage protection systems are exposed.

	PAO	PNOMP	
	Archaeological Park	National Park	
	FOCUS: CULTURE	FOCUS: NATURE	
UNDERSTANDING	Container of	Container of natural	
	archaeological remains	elements	
	Landscape not defined as	Landscape not defined as	
	heritage or object of	heritage but as object of	
	protection	protection	
	Landscape as setting of	Landscape as aesthetic	
	archaeological remains	interpretation of nature	
	Cultural landscape as	While not in the regulations	
	setting for monuments	as object of conservation	
		cultural landscape receives	
		high priority in the implementation	
VALUE SYSTEM	Priority of Inca past over	Priority of nature over locals'	
VALUE STOTEIN	locals' present.	culture.	
	Priority of tangible	Priority of tangible heritage:	
	heritage: architectural	biodiversity of ecological	
	structures and	systems, wild flora and	
	archaeological structures.	fauna, native species.	
	•	·	
	Priority of development of	Priority of local traditional	
	tourism over local	land uses over touristic uses.	
	traditional uses of sites.		
0010551471011		5 0 0	
CONSERVATION OF CULTURAL	- Focus on restoration and	- Focus on the restoration and maintenance of natural	
LANDSCAPE?	maintenance of tangible heritage.	ecosystems.	
LANDSCAPE	- No strategy for the	- Strategy of subsidies for	
	regeneration of traditional	the maintenance of	
	knowledge related to this.	traditional stockbreeding.	
PROBLEM OF	Conservation of	Policy of non-intervention	
MODEL OF	archaeological heritage	impacts on the surroundings	
PROTECTION	represents a limitation for	limiting the interventions of	
	the development of local	local communities in the	
	communities.	natural space.	

Table 1: Comparative table of the understanding, values and problems of "landscape as a container" in the archaeological park and the national park.

PAO	FOCUS:	CULTURE	PNOMP	FOCUS:	NATURE
Elements	Practices Core/Monumental zone	Surroundings Other zones	Elements	Practices Core/National Park	Surroundings Area of transition/Area of economic influence
Archaeological remains	- Expropiation - Enclosure (Monument) - Protective and corrective measures - Restoration and maintenance - Monitoring - Research	- Protective measures - Research	Biodiversity	- Restoration and maintenance - Monitoring - Research	Research
Architectural urban structure	- Expropiation - Protective and corrective measures - Restoration and maintenance - Monitoring - Research	- Regulations for construction	Fauna and Flora	- Restoration and maintenance - Monitoring - Research	- Monitoring - Research
Agricultural fields with 'archaeological commitment'	- Expropiation - Protective and corrective measures - Restoration and maintenance - Monitoring - Research	- Protective measures - Restrictions of use - Monitoring	Fields	- Expropiation - Restrictions of use	
Terraces (Andenes)	- Protective and corrective measures - Restrictions on access and use	- Protective and corrective measures - Restrictions on access and use - Support of traditional use	Terraces (Bancales)		
Pastures	- Restrictions on access and use	- Restrictions on access and use	Pastures	- Expropiation - Restrictions on access and use	- Support of traditional use
Forests		- Reforestation - Regulations for timbering practices	Forests	- Expropiation - Strict conservation - No intervention - Monitoring	- Restrictions on access and use
Geological features/ Glaciars	- Strict conservation - No intervention - Monitoring	- Strict conservation - No intervention	Geological features/ Glaciars	- Strict conservation - No intervention - Monitoring	- Strict conservation - No intervention - Monitoring
Rivers			Rivers	- Prohibition of fishing	- Restrictions on access and use

Table 2: Landscape management in the "landscape as a container" in the archaeological park and the national park.

7 Landscape as habitat

The conservation of cultural landscapes needs to overcome the separation between the conservation of the past and the conservation of nature. Past and nature are interrelated, with the source of these interrelations found in local knowledge. The conservation of cultural landscapes requires an understanding of what is heritage and landscape for communities inhabiting heritage sites. If the designation of the object of protection comes from the state in a top-down approach, it would not necessarily commit local communities. The conservation of landscape needs to be based on a holistic approach to places, based on local understandings of the ecumene (Berque 1996; Berque 2001).

In his book of 1996 "Êtres humains sur la Terre: principes d'éthique de l'ecoumène", Augustin Berque explains how to interpret this concept:

What is then the ecumene? The word is ancient. It comes from the Greek word oikos, that means "home". This root is the same than in ecology and economy. The geographers from the Antiquity, like Strabon, talked about the oikoumenê gê to refer to the inhabited lands. That is the classical use: the ecumene, is the part of the Earth that is inhabited by mankind.

This use is out-of-date since humanity has conquered the whole surface of the Earth. Today, the ecumene is the Earth itself. But not Earth like as a simple physical body, not even as an ecological entity, as it could be if us - humanity - would not exist; the ecumene is the Earth as we inhabit it. Moreover: *as the place of our being*. ¹²⁶

In this sense landscapes enlisted as heritage sites have been and are still being produced by the people that inhabit them, in the framework of a relationship where the site is their *ecumene*, "the place of their being". Therefore, environment is not separated from human beings but a structural part of their existence. This refers to the theory of humans as complex living systems that follow the principle of "autopoeisis" (the production of oneself) (Maturana & Varela 1980). As living systems, humans are intrinsically connected to their environment: humans are embedded in environment, and at the same time environment is embedded in them. Thus, the production of the cultural landscape can be understood as the production of the self in a loop process. The resulting problem is that environment is defined as surrounding humans in the documents regulating the conservation practice. Consequently, changes in humans are not

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¹²⁶ Author's translation from the original text in French. (Berque 1996, pp.11–12)

reflected as changes in the environment, and changes in the environment are not reflected as changes in humans themselves. The consequences of this detachment are more evident in urban and industrialized societies. Notwithstanding, an *ecumenal* relationship is renovated in the everyday practices of rural societies that have a stronger dependency in the instability of their environment, at different degrees and in their constant association with environmental processes.

In this chapter, I analyze the understanding of the landscape from the point of view of the local communities that inhabit the selected heritage sites. The local communities defined as relevant in this study are the groups of stockbreeders, farmers and shepherds that maintain certain traditions of agropastoralism. The assumption is these are the communities with a stronger impact on the landscape formation and transformation due to their direct use and management of resources. Moreover, these communities hold the traditions that have been patrimonialized and converted into ICH, and hence they result as an important component of the cultural landscape.

First, I argue that in the context of local communities, the concept of landscape is foreign, brought in from external understandings (state, experts, visitors) and essentially from the approach of landscape as a representation, i.e. an aesthetic appreciation of the environment. However, the way in which local communities live in the cultural landscape is comparable to that of a given species in its habitat. Here, the definition of landscape from the ecological approach makes sense, given that the local communities are embedded in a system of interrelationships between humans and environmental elements and phenomena, with other plant and animal species. Because people maintain a way of life inextricably connected to 'nature' when living in these rural and mountain environments, the detachment implied in the objectification of the environment is not present.

Berque explains the modern attitude to the environment, which is the source of its objectification. In the chapter, "le retrait du sujet" (The retreat of the subject), Berque describes 'the retreat of the modern subject' as the basis for modernity, resulting in the detachment of humans from their environment through its transformation into a collection of objects. This detachment is also the source of naturalism and the will to conserve. At the same time, it is essential for understanding the concept of landscape:

The scientific attitude is just the most remarkable illustration of a more general attitude, the one that philosophers represent with the formula of "the retreat of the modern subject". By establishing a duality between himself and things, indeed, the modern

subject has retreated himself from the environment, to consider it henceforth with distance, like an object decisively distinct from himself.

This is the retreat symbolized by the famous "I think, therefore I am" from Descartes. The being of the Cartesian subject is founded indeed in himself, in his own consciousness, not in a relationship with things that surround him and that he look at henceforth as pure objects.

This objectification of the world under the gaze of the subject has founded ontologically modernity. It is the principle that has rendered possible the development of modern sciences, from where modern techniques are derived, the ones that little by little have changed the world.

This principle is far from dealing only with material things; it concerns as well the other, and even the subject's own body. The objectification of the other is what has rendered possible the emergence and development of the social sciences (from the 19th century), and that of the body is what has permitted the rise of modern medicine. On every object of knowledge, essentially distinct from its own consciousness, the modern subject has started to place the same detached gaze to other inanimate things. 127

I postulate that local communities in their cultural landscape have not necessarily undergone the retreatment process and thus their relation to the environment is not necessarily based on a dualistic ontology and an alienation from their own environment. In the case of rural communities, the concepts managed and practices used are not specified in a document; rather they are regenerated through education and the passing of traditions. In this sense, landscape management can be understood as part of the ICH of a group. The worldview of who inhabits the landscape in a rural tradition is not based on the objectification of its surrounding world. Mountain people do not live necessarily embedded in a naturalist ontology.

The second argument of this chapter is that local communities practices could work as alternative practices to the official strategies for the conservation of the **landscape/environment**. In this respect, I review the agropastoral traditions that are still in use, how they have been transformed through the integration of the external approaches to agriculture and stockbreeding. The resilience of certain practices and their adaptation to new socio-economical contexts illustrate the possibility of a conservation practice based on their way of life.

Finally, I present the systems that I interpret as strategies of re-appropriation of the place. In the previous chapter, I explained how the state has performed a disenfranchisement

¹²⁷ Author's translation from the original text in French. (Berque 1996, pp.22–23)

process of local communities' environment and land, based on a top-down approach to management. In this part of the chapter, I focus on how local communities generate systems of re-appropriation of their heritage and landscape, by adapting and using the resources given by the state (and other non-governmental organizations).

7.1 The habitat

Habitat is a concept used in biology and ecology to define the environment in which a certain living organism develops. The conservation of habitats is related to the conservation of nature, and essentially focuses on saving or restoring habitats for endangered species. The concept is linked to the ecosystems approach to landscape and, from this perspective, a habitat can only be defined in relation to a certain species, population or individual within that population (Franklin et al. 2002). Habitat has several definitions, which has led to misunderstandings. Here, I present the definition stated by Morrison et al., who conducted an exhaustive analysis of the literature in the field of ecology in order to arrive at an operational and precise definition 128:

We therefore define "habitat" as the resources and conditions present in an area that produce occupancy - including survival and reproduction - by a given organism. Habitat is organism-specific; it relates the presence of a species, population, or individual (animal or plant) to an area's physical and biological characteristics. Habitat implies more than vegetation or vegetation structure; it is the sum of the specific resources that are needed by organisms. Wherever an organism is provided with resources that allow it to survive, that is habitat. (Morrison et al. 1997, p.175).

In landscape ecology, a habitat is contained inside a larger landscape, which is a pattern. In this case, landscape contain several habitats for a specific species, or for several species. However, the habitat definition would be different for each species, since it will depend on how this species uses the resources given in the environment. In the context of this research, I study human habitats, specifically focusing on the habitat of agropastoral communities. Former generations have remodeled the environment making use of the resources found to transform it into an agropastoral habitat. However, ecological studies do not apply the concept of habitat, generally applied to animal and plant species, to that of humans. In this study, I use the concept as an analogy because I have found that agropastoral communities living in these heritage sites

¹²⁸ In their article "The concept of habitat and a plea for a standard terminology", these authors present the inaccuracies occurying in the literature in relation to this concept and how this has an effect in the scientific communication among researchers, and in the development of conservation policies (Morrison et al. 1997). ¹²⁹ Text in bold is from the author.

have become or are in the process of becoming a *threatened species*, or an *endangered culture* (Simonič 2006), due to what I propose interpreting as a *habitat loss* or *habitat fragmentation*.

According to Franklin et al. (Franklin et al. 2002), these two concepts have been confused in the ecology literature. While it has been assumed that habitat fragmentation implies habitat loss, this is not necessarily the case, and both might have impacts on the survival of species:

When the effects of habitat loss and fragmentation are addressed independently, habitat loss has been suggested as having the greatest consequences to species viability (e.g. McGarigal and McComb, Fahrig 1997). This observation led Fahrig (1999) to suggest the need to distinguish three cases: (1) habitat loss with no fragmentation; (2) fragmentation arising from the combined effects of habitat loss and breaking into pieces; and (3) fragmentation arising from the breaking apart but with no loss in habitat area. (Franklin et al. 2002, p.23)

Habitat loss would refer to the reduction of the area that the species under study can occupy. This phenomenon, which might have been triggered by different circumstances that I analyze below for each case study, threatens the survival of a certain species. On the other hand, habitat fragmentation does not necessarily imply a threat to the species in question, and would rather refer to the breaking of a habitat into parts, which could imply the loss of the area or not. In these case studies, these phenomena are found, assuming that both sites represent agropastoral habitats. Namely, the manner in which human communities have made use of the resources and conditions present led to the formation of agropastoral habitats, comprising in settlements, agricultural fields, meadows and forests. These agropastoral communities have been undergoing processes of change in their social and economic relations for more than a century, which later impact upon how they construct their culture. When the socio-economic context changes, the cultural landscape inevitably also changes.

The results present here record a specific moment in the evolution of these habitats. In the case of the PNOMP, these habitats are in a process of *habitat loss* due to the occupation of the meadows by forests and shrubs, transforming these in uninhabitable places from the point of view of stockbreeders. When the pastures are succeeded by shrubs, it is not possible to exploit the land unless it is burnt. In the case of the PAO, there is a *habitat fragmentation* due to the urbanization of agricultural fields. However, this *habitat fragmentation* does not imply that agropastoralism is to be discontinued. Nevertheless, these phenomena are part of a larger

transformation of these sites, where tourism leads to change in economic and cultural activities. This might lead to the transformation of these habitats where resources will be used differently.

7.2 A 'threatened species'

By then, they had to sleep in caves, because there were no shelters, and now that there are shelters, there are no shepherds. 130

In 2006, Peter Simonič in the book "Ethnography of Protected Areas: Endangered Habitats - Endangered Cultures" applied the term 'endangered species', used in ecology and biology, to human communities. He outlined the relationship between the protection of natural sites (conservation of nature) and the loss of cultures and communities that were/are living in/next to protected areas. These were found as endangered cultures and he stated the need to protect them in the same manner as protected areas (Simonič 2006, p.8). In my study, I found that the cultural groups under study that I characterize as 'mountain people' - the agropastoralists in the Pyrenees and the Andes – are threatened by several processes that place pressure on their habitats and modes of life. However, I do not postulate their protection, which I consider a paternalist view of these communities. Nonetheless, I consider that there is a need to recognize that modern conservation practices are linked to the disappearance of these traditional cultures. The models of protection established for heritage sites inevitably undermine the autonomy of the people inhabiting them. The processes of patrimonialization of sites contribute to the abandonment of traditional practices and the processes of patrimonialization of traditions contribute to their folklorization. Connected to more general and global processes of commodification and neo-liberalization, these accentuate the unviability of these modes of life.

The major difference between the two case studies that I deal with comes from the origin of the division in the modern conservation practice that I have been discussing throughout this work. In the case of the *conservation of nature*, it has been stated in its origins that human beings alter the 'natural' processes and therefore need to be kept outside the protected area, separated from nature. The best strategy of conservation is based on the exclusion of human communities from natural heritage sites. As discussed in the previous chapter, this idea is changing, whereby the need of involvement of human communities is now promoted. Nevertheless, when the PNOMP was declared, the exclusion of the people inhabiting the area was the first step for its conservation. In the case study for the *conservation of the past*,

¹³⁰ MPST, stockbreeder of the Pyrenees. Author's translation from Spanish transcript. (IntLC_PNOMP_MPST, p. 34)

the PAO, the human communities occupy the archaeological remains and make their living inside the archaeological park. In this case, it was not possible to preclude local communities from the archaeological sites because the archaeological remains have been continuously inhabited, with some of the archaeological structures (Inca terraces) having been continuously used for agriculture and pasturing. Thus, the problems confronted in each of these sites slightly differ. However, the path of the development of the sites and the communities connected to agropastoralism is similar in both cases due to the global relationship between heritage conservation and tourism development.

7.2.1 The agropastoral communities in the PAO

The PAO, located in the district of Ollantaytambo in the province of Urubamba in Cusco, occupies 348 has., representing more than half of the district area (54.35%), composed of 640.25 km². The PAO comprises the more populated settlements in the district since its delimitation encompasses its urban core, Ollantaytambo town, as well as the population nucleus encountered along the Urubamba river, the Patacancha river, the Tanqac river, the Asqaqocha river, and the east bank of the Huarocondo river.

The total population of the district is of 9,851 inhabitants according to the 2007 census¹³¹. 2,982 live in the urban area, while the remaining 6,869 live in the rural areas of the district. Of this total population, 3,229 are economically active (32.77% of the total). In the urban area, 157 inhabitants work in the "agriculture, stockbreeding, hunting and silviculture" sector, as defined by the INEI. 1,374 inhabitants of the rural areas are also dedicated to agropastoral activities. This means that of the district's total economically active population, 47% work in agropastoral related activities. However, the agropastoral activities performed are not necessarily the 'traditional' ones, namely those from the pre-industrial, pre-Green Revolution and pre-mechanization of agriculture and pre-commercialization of stockbreeding. These traditions are associated to a subsistence-oriented way of life and closed economies that have not been inserted in the market. When the systems were opened due to processes of globalization and neoliberalization of the economy, the products of agriculture and stockbreeding have become commodities; therefore, they have entered in larger markets that have apparently 132 transformed the socio-economic structures of these communities. In the last

their products in the market, they keep a separate production for their subsistence. Although, they have become

¹³¹ Data available in the INEI website (Instituto Nacional de Estadística e Informática/ National Institute of Statistics and Informatics) http://www.inei.gob.pe/ Digital Library. The smallest data unit is the district therefore a precise population of the PAO is not possible to be deduced.

132 I say apparently because, in the case of the peasant communities in the PAO, even though, they have introduced

30 years, tourism and the model of Western education have been the main factors disturbing the traditions and modes of life in this Andean region.

Until the 1980s, Ollantaytambo comprised no more than a thousand inhabitants, with the population fully dedicated to agriculture and stockbreeding as the main activities, as well as hunting and silviculture as complementary activities for some. Between the end of the 60s and the beginning of the 80s two significant events marked the history of Peru, and were influential in the development of the agropastoral communities in this area (as in other areas of the Peruvian Andes). The first such event is the Agrarian Reform, already explained in the Chapter 1, initiated in 1969. This Reform changed the configuration of the territorial organization of the mountains, that were previously governed by landowners (inheritors of the system introduced in the colonial times) that held estates, basic units of agricultural production and livestock breeding. From then, the peasant workers of the estates became the owners of the lands and were organized following the structure of cooperatives and peasant communities 133. The second event was the emergence of two terrorist groups that destabilized the country for more than ten years: the Shining Path (Sendero Luminoso, 1980) and the Tupac Amaru Revolutionary Movement-MRTA (Movimiento Revolucionario Túpac Amaru, 1982). Specifically, Shining Path operated in the mountain regions, having a strong impact on the lives of the peasant communities of Ollantaytambo.

In the context of heritage, the Historic Sanctuary of Machu Picchu was enlisted as a mixed cultural and natural World Heritage in 1983, and the PAO became an archaeological park that same year. Even though the patrimonialization processes were underway, conditions for the development of tourism were unstable. The instability caused by the terrorist groups in the country's rural areas delayed the development of this region. Only after 1992, when Shining Path was weakened with the capture of their leader, was the development of the rural areas resumed. Nevertheless it is important to clarify that the mechanization of agriculture and enlargement of a stockbreeding industry in this mountain area did not occur due to geographical and structural conditions of the country¹³⁴. The current situation of the communities in the PAO

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consumers of the industrial markets, they still produce crops for self-consumption following their traditional agricultural practices.

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¹³³ The model of the peasant community is related to pre-Hispanic models of organization, the "ayllu", the Quechua extended family. Nevertheless, these have been influenced by the cooperative system in their administration procedure. The cooperatives did not succeed and most of the previous estates were transformed along the years into peasant communities (Eguren 2006).

peasant communities (Eguren 2006).

134 Peru became a Republic only in 1821, and the construction of the nation-state is still in process. The decolonization did not directly imply a process of industrialization and modernization that remain relative to the urban centers, especially to the capital, Lima. Since its independence the political history has been agitated with many periods of dictatorships, and as explained before, marked with terrorism and narcoterrorism movements during the last 20 years of the 20th century and beginning of the 21st. This did not permit an equal economic development in the country that has followed a centralized government, focusing in the development of urban areas.

is not different from that in the PNOMP during the 1960s~70s, in terms of infrastructure development¹³⁵.

The diversity of ecosystems also influences the way of life in these Andean societies. The description of the use of the environment in Uchucmarca (located in the central area of the Andes) by Prof. Stephen Brush¹³⁶ represents a pattern repeated all over the Andean mountains:

Like other Andean farmers, the people of Uchucmarca farm in four different climatic zones, requiring four different kinds of agriculture:

- "1. a tropical zone... which produces fruit (such as oranges and bananas), tropical roots plants (such as manioc), chili peppers, and perhaps most importantly coca...
- "2. a middle level mountain zone... where maize and wheat are grown...
- "3. a relatively high mountain zone... where the staple of the Andean diet, potatoes, and other tubers are grown...
- "4. a high mountain zone... where llamas, alpacas, sheep, horses, and cattle are grazed on natural pasture..." (Berry 1978, p.175)

These four climatic zones are the main ecosystems related to the Andean mountains, defined by geographer Pulgar Vidal (Vidal 1987) as *yunga* (Western Andes, towards the Pacific coast), *selva alta* (Upper Amazon - the Eastern Andes, towards the Rainforest), *quechua*, *suni*, and *puna*. In the case of the PAO, *quechua*, *suni* and *puna* are the ecosystems present, and through the Patacancha valley and the Urubamba valley it is possible to connect with the Occobamba Valley and Quillabamba province in the *selva alta* region.

Until now, the process of colonization influences the separation of social classes, with the relations deeply influenced by a strong racial discrimination. These social divisions are also related to the divisions of ecological tiers and the difference among the peoples occupying each of them. At present, this division is mostly shown in the relationships between the people living in the valley floor, in the urban center, and those living in the highlands, in small hamlets. The people established in the town of Ollantaytambo have been seen by the rest of the population and by themselves, as the "mestizos" inheritors of the Spanish colonizers. Indeed, they have been called the "mistis" ('white' in Quechua). Their ecosystem corresponds to the Quechua

¹³⁵ As we see later in this chapter, the development of the Pyrenees mountains in Spain only arrived after the 1970s with the connection to the road system. In the present, the Andean communities in the PAO lack of a stable connection to the road system and still make most of their itineraries by foot.

Cited in "the Unsettling of America" by the American writer and environmental activist Wendell Berry, as an unpublished paper from Prof. Stephen B. Brush, Department of Anthropology at the College William and Mary. (Berry 1978, p.175)

137 The category of "mestizos" has been invented during the Colonial period to refer to people that are of half Indian

^{13/} The category of "mestizos" has been invented during the Colonial period to refer to people that are of half Indian and half Spaniard descent. This was established in the system of "castas" (racial groups) established in the Viceroyalties.

ecological tier where maize and wheat are cultivated. Their location in the valley floor brings a more appropriate climate for cultivating a diversity of crops, and according to historical and experts accounts, the soils in this land have been brought from different parts of the country in order to enhance its quality (Protzen 1993). The people from the town differentiate themselves from those inhabiting the puna, who are called the wayruros, named after a plant (Ormosia coccinea) that produces red seeds, wich sometimes have a black spot. These seeds are used as lucky charms and are currently used in jewerly handicrafts and as souvenirs. The name of wayruros has been adopted by the people in the puna of Patacancha due to the characteristic poncho (cape) that they use traditionally which is woven in red tones (Figure 13). The wayruro communities of Huillog, Patacancha, Rumira Sondormayo, Quellcanga and Yanamayo live in the puna ecological tier (Figure 14). Inbetween, there is the suni ecological tier. However this is not a strict division, given that people in between are in contact with both the town in the valley floor, and the puna. The settlements of Pallata, Pumamarca and Marcacocha correspond to this area. Here maize is cultivated (Figure 15) and it is an area where there are Inca terraces. These ecosystemic differences determine slight differences in the way of life, but as a general rule, all these communities are organized as peasant communities. There are some other groups organized as Associations (San Isidro, Rumira, Pillcohuasi) that were formerly Cooperatives from the Agrarian Reform, located in the town and other settlements of the valley floor. Within the socio-economic relations among the different ecological tiers, the exchange of the diverse products and resources produced according to their geographical and climatic situations is characteristic.

The continuity of these communities' traditions is threatened by the education system, which promotes urban life and progress, undermining the rural way of life. In the context of a colonial past, this situation contributes as a historical background in the life of these communities, resulting in the disdain against the highlanders and the native peoples (even if it is difficult to establish who are of Spanish or Indian descent, after 500 years of coexistence). The highlanders or native peoples are associated with agropastoral activity, which in turn is linked to an image of backwardness and poverty. The agropastoral tradition is associated to the past, albeit a past in which rural communities were subjugated to foreign colonial powers and later to the estates' landowners, who did not assign the same value as humans to indigenous people. Moreover, the urban population does not identify the peasants with the Inca past, nor does it recognize them as descendants of Inca people.



Figure 13: Typical poncho from Wayruro nation. Comunero of Patacancha. May 2012. ©Author



Figure 14: Typical environment of the *puna*, in the back there is a brook, next to an *estancia*, in the first plane, *alpacas* grazing. May 2012. ©Author



Figure 15: Harvest of maize in Pallata. April 2012. ©Author

The other factor threatening the continuity of agropastoralism among these communities is tourism, valued as the opportunity for peasants to have a more profitable job. Many "comuneros" (as they are called) from the highlands work as "porteadores" (carriers of backpacks) for the "Camino Inca" (Inca Trail). There is presently a debate about this being a de-humanizing job, which highlanders undertake in order to gain higher incomes in relatively short periods of time (80\$ per 3 days, while the income in agropastoral activities is never secure and maximum of 500\$ per year). The job as "porteador" has brought problems, not only in the health of the "comuneros", who have to carry as much as 80kg for 8 hours per day, but also problems in family cohesion and traditions due to the prolonged absences of male family members (Di Salvia 2011).

The way in which the Inca heritage is located also influences the differential access to economic opportunities among the highlanders and the people from the valley floor. The Inca structures can be found spread around the Urubamba and Patacancha river surroundings. However, from an altitude of 3,500 m.a.s.l. and upwards, these structures are increasingly less visible, and it is only possible to find some *qollqas*¹³⁸. The ceremonial centers and larger *andenes* structures have been built in the valley floor, where the urban centers were located. In Ollantaytambo, the main structure and most visited site, called "*la Fortaleza*" (the "Fortress"), has been built in the Bandolista mountain, in the northwest of the town (Figure 16), comprising an ensemble of terraces that are said to have been used for the plantation of maize (Elorrieta Salazar & Elorrieta Salzar 1992; Protzen 1993).

In front of Bandolista mountain, there is Pinkuylluna mountain the tutelary apu¹³⁹ of Ollantaytambo, where other structures are located. These have been interpreted as qollqas. It is said that the face of Tunupa is carved in this mountain (Figure 17). Tunupa is the main character of an Andean foundational myth. This legend has been recovered by the brothers Elorrieta Salazar (Elorrieta Salazar & Elorrieta Salzar 1992), originally from Ollantaytambo, who have proposed an original interpretation for the complex. First, they consider that all the Inca complexes encountered in the Inca Sacred Valley are part of an integral plan whereby the most important figures of the Andean culture are symbolized. In this context, Ollantaytambo would be a "llama" (Andean camelid). Second, the agricultural fields located between the Urubamba river and the Bandolista mountain are the representation of the pyramid of Paccaritampu, from where the founding Incas started their civilizatory mission in the Andes. Finally, the presence of

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¹³⁸ *Qollqa* (Quechua word) is the deposit where seeds and agricultural products are conserved. These are made of stone and located at high altitudes in order profit climate conditions (cold and dry) for preservation.

¹³⁹ Apu (Quechua word) is the name given to the spirits of the mountains in the Andean region. Every place has a 'tutelary apu', which means it is the most important deity of the place and it is the one that protects the population, the animals, plants and all that exists in the Pachamama (Mother Earth). In rituals, this would be the first deity to be called and thanked.

the face of Tunupa in the Pinkuylluna mountain represents the final stage of his civilizatory mission, which according to the legend, started in the Northern coast of Peru and reached the highest peak of development in the Inca Sacred Valley (Elorrieta Salazar & Elorrieta Salzar 1992).

Qosqo Ayllu is the neighborhood that justifies the town of Ollantaytambo being called the "living Inca town". Its Inca foundations and continuous inhabitation have given peculiarity to Ollantaytambo in relation to other Inca settlements in the Vilcanota-Urubamba river valley. In this neighborhood, located at the East of Patacancha river, West from Pinkuylluna mountain and North of the Plaza de Armas, kancha¹⁴⁰ walls have been preserved until recently. These structures survived Spanish colonization yet are currently being destroyed little by little. In the 1980s~90s, the Swiss architect Jean Pierre Protzen conducted a survey of the structures that had been preserved until then (Protzen 1993). Even if the people who currently live in some of the Inca kanchas declare being the descendants of the Inca, it is well known that the people inhabiting the town after the defeat of Manco Inca¹⁴¹ in 1537 were not from Inca families: "the majority were foreigners; the old Inca square with a long indigenous history was desert of native people." 142

Here, problems of land tenure have a long history, with many subsequent problems having at least since the time of the "Conquista" (Conquest) and continuing at present. The andenes, in the Fortress and the rest of the areas in the PAO where they are found (like Marcacocha, or Musqapugllo), were continuously in use until the site was declared a National Cultural Heritage.

¹⁴⁰ Kancha (Quechua word) is the unit used by the Inca to organize their settlements. It was composed by an enclosure stone wall and several rectangular structures surrounding a central yard.

141 Manco Inca is the last Inca to resist the Spanish Conquest. The battle of Ollantaytambo is known for being the last

battle won by the Incas. After this battle, they had to escape to the Amazon Rainforest. The Director of Urban Development in the Municipality relates the story: "The Incas lived here, right? Manco Inca, the resistance. (...) while he was here, they [the Spaniards] could not enter. He leaves for Vilcabamba and leaves all this. And the inhabitants go up, to Huilloq, Patacancha, everything. (...) They abandoned. The original inhabitants of this place. (...) And many of them who do not follow Manco Inca, they go to the punas, to avoid the Spaniards to follow them, no? Then, it remains uninhabited. But then, the initial inhabitants, they don't come to live here, because they said that was from the Indians. They built their houses around the main square. That is why in the surroundings we have colonial houses, with arches. They did their houses at their own manner, like they needed, for their horses and everything. [That is] the first Spaniards who arrived to live here." Author's translation from the transcript in Spanish. (IntSt_PAO_DirUrbDev01, p. 8)

142 Author's translation from the original text in Spanish. (Glave Testino & Remy S. 1983, p.XVII)



Figure 16: View of the town from Pinkuylluna mountain. In the background, "*la Fortaleza*" (the "Fortress"), also been referred as the "Monument", main tourist attraction of Ollantaytambo town. April 2012. ©Author



Figure 17: Face of Tunupa, next to the qollqas in the Pinkuylluna mountain. May 2012. ©Author



Figure 18: Modification of kanchas in Qosqo ayllu, May 2012. ©Author

The people who live in the *kanchas* of Qosqo Ayllu form part of the *Comunidad Campesina Ollanta* (Peasant Community "Ollanta") and they only have one title deed for the whole territory of the community¹⁴³, which is located inside the archaeological park. Added to this, most of the community's territory has 'archaeological commitment' which means that archaeological remains have been found or are presumed to exist in their land. In the words of the director of the department of Urban Development of the Municipality of Ollantaytambo, 90% of the agricultural territory of the district is categorized as having 'archaeological commitment'. Consequently, land management is constrained by the PAO regulations and community regulations. In some of the areas of the community, important archaeological sites have been located, as well as terrace complexes (e.g. terraces of Musqapuqllo, terraces of Choquechaca, Pumamarca ceremonial site).

Hence, the basic problem concerning the communities located in the valley floor of the PAO, in the urban environment and the Peasant Community "Ollanta" is that there is a strong limitation for the people living there to evolve in terms of urban infrastructure due to the lack of vacant land. The interest of the villagers lies in building new structures, using the land they have in order to increase their incomes, mainly by developing tourist infrastructure, such as hotels and restaurants. However, the limitations established by the park constrain the possibilities for the town to develop economically. Nevertheless, the regulations are not strictly implemented and there are large numbers of illegal constructions already occupying agricultural fields and old Inca structures. Moreover, in the neighborhood of Qosqo Ayllu, the richest area in terms of archaeological heritage, there are very few *kanchas* that conserve the original Inca structures and layouts and constantly there are new projects being built destroying this heritage (Figure 18).

In the case of the communities in the highlands (*suni* and *puna*), problems differ. The interest of these communities is to become connected to the urban core of Ollantaytambo in order to benefit from economic development. The basic need is the road. During my stay in Ollantaytambo (April~May 2012), the road that was not reinforced and thus was extremely precarious and unsafe was being affirmed with pavement, from the town up to the community of Pallata (which is only half of the way to the upper part of the PAO, approximately one hour walk). Peasant communities have been indoctrinated with ideas of development and progress, which can only be reflected materially by achieving higher incomes and being connected to the town, and from there, to the rest of the valley and the city of Cusco.

¹⁴³ Only few inhabitants of this neighborhood have a title deed independent of the communal one.

By May 2012, the road was not paved and public transportation was reduced to communicate the town of Ollantaytambo with the peasant communities in the *suni* and *puna* ecological tiers. At present, the first option for transport is trucks trading products from the city of Urubamba, at approximately 20 km. from Ollantaytambo (mainly maize and bread), or Occobamba valley at approximately 50 km. from Ollantaytambo (mainly fruits and coca leaves), with the communities of the highlands. People have to ride in the back of these trucks together with the products being traded. The second option is to use the small buses (only two) that transport teachers to the schools located in the hamlets of these highlands (with very strict schedules), which offer few spaces for those other than teachers. Moreover, there are a few small buses that do not follow a strict schedule and thus are not reliable. Otherwise, it is only possible to arrive to these areas by private means, tourist excursions, horses, or by walking. The path is difficult, and not every car can pass. Moreover, there are risks of flooding of the Patacancha River during the rainy season (October to March)¹⁴⁴, which sometimes prevents communication.

The organization of the peasant communities is similar to that of the associations. There are two aspects in the governance of peasant communities. On the one hand, there is the traditional organization. The "cargos", that are responsibilities relying in a person for a certain period. This is one of the traditions conserved. Two "cargos" are being performed continuously: "varayoq", which is a symbolic task as mayor of the community; and the "mayordomos" who are responsible for organizing the traditional festivities (there are different festivities depending on which community¹⁴⁵). While the varayoq is a system that has lost much of its political role, every member of the community has to complete it as a symbolic role one time in his ¹⁴⁶ life (it cannot be repeated, because this would be considered a lack of respect). The responsibility lasts for one complete year and the tasks of the varayoq have been reduced to distributing bread to each family in the community for the season of Christmas and New Year's eve:

For example, one of the "cargos" is that of varayoq, the mayor. Then, and also the councilor, then the mayor. First you are a councilor, then you can be a mayor. Then, by self-consciousness, I have to pass through that "cargo". (...) First being a councilor. Councilor is when you are young. And varayoq is when you are married, mature. (...) The councilor is the councilor of the mayor. (...) For example, we call "repajo", we do

¹⁴⁴ In February 2013, the rainy season in Ollantaytambo has been intense and there has been a serious flooding of the Patacancha river that destroyed the agricultural production of some peasants of the *Wayruro* nation and below, and cut the access from the highlands to the valley floor.

¹⁴⁵ For example, all the communities located in the town of Ollantaytambo celebrate the *Fiesta de Choquequilca*, but only the Association San Isidro celebrates the *Fiesta de San Isidro Labrador*, that is also celebrated by other peasant communities not settled in the urban area, like Pallata (an annex of *Comunidad Ollanta*). The communities in the highlands used to celebrate the *Fiesta de Compadres* (Carnivals).

¹⁴⁶Only male "comuneros" complete the task.

it in August, August 15th, "*repajo*". That is how we call it, no? (...) So, it is more or less the last day of the "*cargo*", no? And also the first day, that is to say, to the ones who will receive it. So, that day, the *varayoq* is selected from the ones who have not been mayors yet. Then, that person did not do it yet, it's his turn, something like that. Then, it is by election. Then, consciously he has to accept. Then, from that day he starts looking for its councilors, as a mayor. His councilors, one, two, three, depending. Then, Christmas comes, the 25th and then the "*cargo*" of the other one ends and the other one already starts, the whole night he plays the *pututo* [marine conch used as wind instrument] with its councilors. It consists on that, then it is already one year of "*cargo*". (...) Well, now the *varayoq* does not do many things, he almost doesn't have any tasks in the community. He is being replaced by the President, everything, the directive council. Those are who organize. But somehow, there is still that job. Among all of us.

The President of the Community has taken the organizing responsibility that was once that of the *varayoq*. Nevertheless, the "*cargo*" of *varayoq* persists in a symbolic manner.

The "cargos" for the festivities are assigned to several members of the community, who are called "mayordomos" when they receive this "cargo". This "cargo" can be repeated, the people that receive the "cargo" are usually relatively wealthy in the community. This is a condition for receiveing the "cargo" because it is not only an organizational task, but also involves an investment in buying and preparing food for the dancers and performers during the festivities. These tasks are related to rituals and traditions of the Andean communities.

I mean, the "cargo", the "cargo", is like, the receivings, it has many receivings. For instance, to me, last year, my uncle had a "cargo", my uncle, my dad's brother, his little brother. And he, well... yes... My uncle must have seen or talked to my husband, what would it be? that he had already told him, you know nephew, I have seen that you have, I mean, you understand me? A responsibility with... you like the dance, and you have faith in the Lord. (...) My husband doesn't dance, my son dances, my older son, yes. And, he says, you know niece? I have seen that you have faith in the Lord, devotion to the Lord, and your son dances, he says, five years. We had thought that you could receive the "cargo" from us. And I said, uncle, but to receive the "cargo" is a big responsibility, I said, because it is not a game uncle, it's four days and... but niece, he said, the Lord gives you everything, he said. Well uncle, if you have pointed me for receiving it from you, I will receive it. Because, what can I say, no? I cannot retract myself after this, not anymore. (...) And how could I retract if he had already seen, my

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¹⁴⁷ FST4, "*comunero*" of Rumira Sondormayo and president of the Association of Living Incas. Author's translation from the transcript in Spanish. (IntLC PAO FST4, pp. 12-14)

uncle had seen, in me, in my husband previously already, no? From then, from then it's that I have to... (...) In the central day is that [the passing of the "cargo"] is done, Sunday. The central day, for example, this year is going to be the 27^{th} , Sunday, central day. Then is when, well, when in the *plaza* [public square] they name you "receiving of a dance", and you have to go and sign the minute book. You put your sign, everything, you put the "mayordomo" in front of the Lord. You have to sign and all that. (...) You are in the *plaza*, in the chapel, and he is, he is in front of you, and when one has faith and this minute book, how could you retract yourself? And then, you have to sign, you have agreed that already. You can't [retract yourself], because the Lord is punisher. Yes, the Lord is punisher because in many occasions we have confirmed it. He tests us, the Lord. He makes you tests that you have to overcome. And then, from there, with my husband, we had received it then, how could we retract ourselves? 148

This testimony proceeds from FSH, an inhabitant member of the Association San Isidro, which is a neighborhood of Ollantaytambo town, part of the urban sprawl. The festivity she received "cargo" is the Fiesta del Señor de Choquequilca, the most important festivity in the town, celebrated at the end of May. The dates are connected to the Catholic and agricultural calendar, with the dates changing every year. The festivity lasts five days, during which the groups of dancers perform from dawn to sunset. They must be fed by the "mayordomo" of the dance, who has received the "cargo" the previous year, as explained by her, during the central day, in front of the whole town and participants.

This tradition, an example of syncretism between Catholic faith brought by Spaniards and the native Andean worldview, represents the involvement of the community life with place and their *ecumene*. It incorporates a ritual commitment that is linked to the moment in the year (time-calendar) when the Great Harvest of Maize is been collected. The ritual implies time, place and regeneration of the values of the community. The "cargo" for this celebration is the major responsibility towards the community, involving a commitment mediated through the image of a punisher God. The value regenerated is reciprocity, translated in the concept of "ayni":

The *ayni* is for example when a person, let's say, I have never done *ayni* to anyone, because it is the first time I do the "cargo". But in that case, my mother had done *ayni* at different "cargos"... For example, she has brought five boxes of beer. And because they know that I am the "cargo" and my mother is not there, they have to give it back, the five boxes, because my mom has brought them *ayni*. They have to give back the beers or maybe my mom for instance, to a "cargo", there has been a "cargo" before,

¹⁴⁸ FSH. Author's translation from the transcript in Spanish. (IntLC_PAO_FSH, pp.7-8)

January 6th, Epiphany, my mom has brought a "cargo", five guinea pigs. And my mom said, you know what, my daughter is with expenses of the "cargo" of el Señor de Choquequilca, and I am coming to give you five guinea pigs as ayni. Please gentlemen, start preparing for that month, so you can give me back the ayni. Yes m'am, they said, ok. There is no problem. And so they have to bring me that day, what my mom has brought to them and if they want to have the will to bring me one more or if they want five only. That is the ayni. Well, here, the ayni is still being practiced. No, that custom has not disappeared. 149

As a habitat, the relationships established among members of the community and the community and God, other deities and the environment generate the cultural landscape. The "ayni" is the basic value in this context. Receiving the "cargo", receiving the role of "varayoq" are all expressions of "ayni". It means to give so you can receive, to receive so you can give, and this is extended to all components of the environment (soils, mountain peaks, lakes, rivers, etc.). The "ayni" is the key to life in a sustainable community. It represents the understanding that nothing "belongs" to anyone, and that everything is there to be shared by everyone. Nobody is left alone, but everyone is committed with the community and the consciousness of sharing. It is a tool generated by these human communities in order to thrive in an unstable environment, by maintaining a system upon which members can rely.

Apart from the traditional organization, there is an administrative organization, related to the state government, which is more connected to the reorganization of the communities during the Agrarian Reform. The symbolic and traditional systems work parallel to the modern system as interdependent layers. The modern system (inherited from the Agrarian Reform, yet adapted to communal pre-colonial traditions¹⁵⁰) is the system through which peasant communities relate to the Municipal instance and other formal institutions. In this sense, the community elects a President every two years¹⁵¹, as well as members of the President's council, called "regidores" (councilors). The elections are held in "Asambleas" (Assemblies) which are the main instrument for the community's management. All the topics related to the community development, maintenance and organization are discussed in the Assemblies. Finally, the working system that has a direct impact on the landscape is the "faenas", communal works undertaken by all members for the benefit of the whole community. Examples of "faenas" include the cleaning of the canals, the harvest, the repairing of andenes, the plantation of trees

¹⁴⁹ FSH. Author's translation from the transcript in Spanish. (Ibid., p. 22)

¹⁵⁰ See (Guerra García Cueva 2009) on how the organization of peasant communities intends to recover communal systems of "*ayllus*" from pre-colonial times.

This task can be assumed by a woman.

and the construction of some communal infrastructure (like the school). All members of the community must participate in such activities:

What are your functions [in order] to become a qualified "comunero"? To participate in the General Assemblies, we have always the communal "faenas", no? In all those works you have to participate. (...) I had a "faena" last Saturday and Sunday. Transport of materials, meaning sand, cement, we had to move because practically to the sector we are bringing our canal, cars cannot enter. We, as "comuneros", as peasants that we are, everybody has their horses, their donkeys and we do all the movement of material and we put it so the workmen, that is the Municipality, work, advance the work because the works are projected for three, four months. ¹⁵²

While the "faenas" have also been traditional since pre-colonial times, the name is Spanish, unlike "ayni" that keeps its name in Quechua. Nonetheless, the concept of the "faena" also implies the basic value of "ayni". Through the "faena" the whole community shares the responsibility, renews its commitment to the group and reproduces the traditional values, integrating the relationship to external agents to the community (e.g. the Municipality, the road construction).

7.2.2 The agropastoral communities in the PNOMP

The Sobrarbe region is the less inhabited area of the Spanish Pyrenees. The PNOMP is located in this region and the six municipal terms¹⁵³ involved with the Park management only acount with 1,979 inhabitants¹⁵⁴. Most of the population is located in the urban centers of these municipal terms, which are small towns such as Torla, Broto, Bielsa, and smaller like Bestue, Puertolas, which are not contained in the limits of the PNOMP. Sobrarbe has been compared to a desert, and the depopulation phenomenon in this area has been subject to substantial research (Herranz Loncán 2002; Ayuda Bosque & Pinilla Navarro 2002; García Pascual & Mateu González 2003)¹⁵⁵. This particular situation in the region has allowed the conservation of the agropastoral traditons valued by the World Heritage Committee; however, it has also been one cause for the depression and lack of development of the area.

¹⁵² CFS1, president of the Peasant Community "Ollanta". Author's translation from the transcript in Spanish. (IntLC_PAO_CFS1, pp. 5-6)

The six municipal terms ("ayuntamientos") that form the Area of socio-economical Influence of the Park are: Torla, Broto, Bielsa, Puertolas, Fanlo and Tella-Sin.

¹⁵⁴ Source: INE, Instituto Nacional de Estadística of Spain (National Institue of Statistics). http://www.ine.es/

An institute dedicated to this subject is linked to the University of Zaragoza, CEDDAR (*Centro de Estudios sobre la Despoblación y Desarrollo de Areas Rurales* – Center for the Study of Depopulation and the Development in the rural areas - http://www.ceddar.org) that edits a journal called "*Ager. Revista de Estudios sobre Despoblación y Desarrollo Rural*" (Ager. Journal on the study of Depopulation and Rural Development).

The history of the Pyrenees during the 20th century is marked by a massive migratory movement (Ayuda Bosque & Pinilla Navarro 2002; García Pascual & Mateu González 2003). The Pyrenean regions became natural reserves, labour reserves and energy reserves. Nevertheless, no other area, apart from Ribagorza (also in the province of Aragon) has had such an impact in terms of population. Compared to other areas of the Pyrenees (Catalan Pyrenees or Basque and Navarrian Pyrenees), traditional economies were preserved until recently, mainly due to the historical, political, and environmental conditions. According to Herranz (2002), the conservation of the traditional way of life in the area of the Sobrarbe is directly linked to the late development of the road system which would have integrated these villages to the industrial zones (Herranz Loncán 2002). On the other hand, the processes of industrialization of the closer cities (Barcelona and Zaragoza) pulled out the youth, who could not see possibilities of progress in this mountain area. According to Ayuda Bosque and Pinilla Navarro (2002), the depopulation of the Aragonese Pyrenean mountains can only be understood within the framework of the economic transformations that had taken place in the Western European countries since the beginning of the 19th century, whose central axis was the industrialization process within a capitalist economic model (Ayuda Bosque & Pinilla Navarro 2002).

The agropastoral practices that influence the landscape have undergone a transformation process linked to these socio-economic and political circumstances. During the 20th century, a disarticulation of the transhumant ovine stockbreeding and the agricultural production for self-consumption characterized the evolution of this region.

The crisis of stockbreeding is explained by the liberal Agrarian Reform (developed in various steps that started in the early 19th century), which meant the disappearance of the rights and privileges that stockbreeders maintained. It triggered a process of privatization of the land, which was hitherto property of the towns, the state and the church. This reform led to the agricultural development of the Ebro river valley, which prompted the increase in the prices of the winter pastures used by stockbreeders from the Sobrarbe. Hence, the traditional transhumant stockbreeding became unviable. Added to this, the international and national competition in the wool market rendered its production unprofitable ¹⁵⁶. Moreover, there was no local industry connected to the transformation of this product, contributing to its decline (Ibid.).

Consequently, the cultivated surface of the Sobrarbe in 1981 was 29.5% of that at the beginning of the 20th century (Ibid.). The transhumant ovine exploitations were transformed to

¹⁵⁶ The quality of the wool of the Pyrenean sheep was not high, but only medium, reducing its competitive value.

semi-stabulated exploitations, and at the end of the 1950s, the ovine livestock was changed to bovine for the production of meat. This was followed by an agricultural re-orientation, turning the cultivation land from cereals and fallow system to the production of fodder for the livestock diet. There was a replacement of wheat and rye with barley. Added to these transformations in the traditional agropastoral socio-economic system, the entrance of Spain to the EU in 1986 also affected the Pyrenaic bovine exploitations, which were forcibly introduced to a larger and more competitive market.

On the other hand, alternatives of development were undertaken in this area, although these did not necessarily have a positive impact on people either. The production of electric energy was the most important project undertaken by the state in this area, focusing on the construction of waterfalls and dams. These projects had a major impact on the landscape of the area and the history of the people. In the words of Ayuda Bosque and Pinilla Navarro:

The main negative effect was the necessity of evacuating some towns and flooding productive land for the construction of reservoirs, which although did not imply globally serious consequences for the whole Pyrenees, at local and regional scales it had, in occasions, a key importance. 157

Even if none of the towns evacuated for the construction of reservoirs were in the municipal terms linked to the PNOMP, the history of the reservoir of Janovas and the depopulation of the Solana Valley, in the neighborhood of the PNOMP, are important in the memory of its local communities, even for the new generations that did not witness these events:

All that is la Solana [Solana Valley], was, well, due to the reservoir of Janovas, Janovas is the town in the riverbank of the Ara river, below, where the project of a reservoir was made, in the times of Franco. Then, for many years, there was a controversy with the people of that town, they kicked them out, but almost with bombs. Even children were inside the school and they were demolishing houses with diggers forcing them to leave. And it was a little like the head of that zone of the region, that were some few towns, like if it was in the slope and Broto that is here, you know [he compares Solana Valley with Broto Valley where he lives]? Well, where they were going to do shopping and they were going to do a little bit like the reference, no? of the head. When Janovas disappeared, the Solana disappeared. ¹⁵⁸

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¹⁵⁷ Author's translation from the original text in Spanish. (Ayuda Bosque & Pinilla Navarro 2002, p.116)

SHT, stockbreeder and park ranger from the Hunting Reserve of Viñemala. Author's translation from the transcription in Spanish. (IntLC PNOMP SHT, p. 2)

The story has been told by parents and grandparents to their children. The towns of the Solana valley are famously the "abandoned towns" ("pueblos abandonados")¹⁵⁹. Indeed, they even reached notoriety outside Spain, attracting young people who intend to leave the urban and capitalist system, and particularly from Northern countries of Europe. The towns of "la Solana" (as local people call it) look now like archaeological remains (Figure 19) and could be considered a valuable cultural heritage for the local inhabitants. However, it is not a phenomenon unique to the Pyrenees, since there are also abandoned towns in the rural areas in other regions of Spain (e.g. La Rioja) where similar situations occured.

The other sector promoted for the development of this region has been tourism, although this only started in the 1960s. It is currently the main activity for the local people who do not continue with agropastoral practices or are not involved in the PNOMP administration. In fact, a number of former stockbreeders interviewed explained they had to sell their cows ("quitarse las vacas") because they had to choose between tourism and stockbreeding. Naturally, tourism is a more profitable activity; therefore, the majority of people who diversified their economies, had to choose tourism due to a lack of human resources ¹⁶⁰:

Because at the beginning, there were my parents, there was a sister of my father, everybody in the family worked, I had a sister, that also worked in the family... and then, well, we could be everywhere. Then we had people that worked in the tavern, and in the guest house and we had also people working in the fields... But then, well... well, at the end I stayed alone and I had to be everywhere, and then, I say, well, I need to leave tasks somewhere... ¹⁶¹

Hence, unlike the case in the PAO, where families can diversify the economies because they are still numerous, tourism has become an alternative to stockbreeding in the case of the PNOMP. This has further reduce the number of stockbreeders in the area, especially those from Torla and the Broto Valley, where tourism started to develop before any other town of the Area of socio-economic Influence of the PNOMP, due to the existence of the Ordesa National Park since the beginning of last century.

¹⁵⁹ There is a whole literature developed on this subject. See for example (Cuesta 2003) on the specific case of the Sobrarbe region. A website has been created where the abandoned towns in Spain are mapped: http://www.pueblosabandonados.com/

¹⁶⁰ Normally, people work in a family business-basis (remanence of the old "*casas*"), therefore, when there is no generational change over or when young people leave their hometowns in the rural areas, for studies or work in the urban centers, there is not enough labour force that can cover both activities.

¹⁶¹ ST1, former stockbreeder from Torla that currently manages two hotels founded by his family. Author's translation from the transcript in Spanish. (IntLC PNOMP ST1, p. 17)



Figure 19: Ruins of a house in the town of Burgase, la Solana Valley. July 2012. ©Author

At present, all the towns encountered in the Municipal terms inside the Area of socioeconomic influence of the PNOMP are of very small size, except Broto, Torla, and Bielsa.

Some count with few houses, including those where only two or three families live.

Nevertheless, the population varies depending on the season, with houses and bars are open in
the high season for tourism (June to September). People originally from these towns come from
the cities where they now live (Zaragoza, Huesca or Barcelona) and stay to spend the summer in
their mountain house, or with their parents or grandparents. Moreover, some families already
mount family business by accomodating their houses to become guesthouses. By contrast, very
few families live in the whole area in winter, when it becomes deserted and sometimes
uncommunicated due to snow.

The four seasons in the PNOMP are strongly marked. During winter, the snow can reach the valleys. Even during the day, the temperatures can change drastically: a very warm summer day can turned into a hailstorm.

The use of the pastures is directly linked to these changing seasons. The pastures in the Pyrenees are called "estivas" or summer pastures, because they can only be exploited during summertime due to their high altitude. During winter, it is impossible for livestock to stay overnight in such great altitudes, essentially due to snow. Some of the "estivas" are still being exploited, albeit with increasingly fewer cattle.

The vegetation in the PNOMP is connected to the mountain climate, i.e. subalpine and alpine ecosystems. This vegetation has evolved with the cutting of the forests to open land for pastures, as well as the use of these pastures and natural meadows for livestock. Even though

the soils have been continuously used for agricultural aims, they are poor and dry, with a strong erosive tendency. Therefore, the quality is not as good as that in the PAO where a diversity of crops can still be cultivated. In the area of the PNOMP, the crops were mainly wheat and cereals. Originally, a variety called *Tritricum Escanda* was characteristic of the area. Nevetheless, this wheat was not very productive and hence was only used for self-consumption. However, this type of wheat is almost extinct and no longer cultivated. First, it was changed to more productive cereal, and later, to the production of food for livestock. Moreover, the forests in the mountains were exploited by the population of the towns in the vicinities; custom that also changed when timbering became an activity with low or no profits.

The organization in the communities in these areas surrounding the national park remains town-based. These towns and the municipal terms own the mountains and forests and used to exploit them making profits invested in the development of public works.

Systems from the past are curretly combined and overlap with modern systems of management. An example of a surviving management system is used by the people of the Broto Valley, whose ensemble of towns is called *Mancomunidad del Valle de Broto* (Commonwealth of the Broto Valley). This association was created during the Middle Ages (Provincia de Huesca 1968) and is the one related to the continuity of the tradition of the "*Paso a Francia*", which is based on the exploitation of French pastures by the stockbreeders of the Commonwealth.

The Broto Valley is one example of surviving traditional organization. The valley is divided in four parts, grouping one to four towns. The Commonwealth comprises eight towns: Torla, Fragen, Viu, Linas de Broto, Broto, Asin, Buesa, Oto and Sarvise. Every town is divided in four parts. The unit is called a *vico*. There is one representative per *vico*; and therefore, each part has four members, resulting in sixteen members or representatives in the Commonwealth. Torla has four representatives; Fragen, Viu, and Linas another four; as does Broto, Asin and Buesa; and finally, Oto and Sarvise.

These representatives not only stand for stockbreeders but also for the tourist services community. For instance, in the valley of Bujaruelo, the Commonwealth owns land for pastures and the "Mesón San Nicolás de Bujaruelo", a house formerly used for sheltering shepherds. Nowadays, this place is rented as a concession for tourism. Locals perceive that the PNOMP has been more beneficial to this Valley than any other due to the early tourism development:

Here, let's see, yes, here, in the national park, it can be said that it has given us a lot of life. A lot. Because, I don't know how to say it, the people who is dedicated to

stockbreeding, well, it did not made us, we did not have problems with tourism. It did not make us any. However, I don't know how to say it, because in terms of the land that for example that was owned by people who was leaving the stockbreeding, and dedicated to tourism, those lands we have assumed little by little. (...) So, somehow, we had received some benefit from tourism, no? And now, well, now, for some years already, the rural houses and all that. This in other areas has no life. There are rural houses in many places, in many. There are here, there are next to Zaragoza, there are. But they do not have, in a town next to Zaragoza, for example, that there is a rural house, well, maybe for workers or something like that, but there, there is no tourism. How could it be? Here they come, they come to see the park. That is the reality. 162

Moreover, the presence of the park has contributed to the stockbreeders that persist in the activity with communal pastures exploited by fewer people due to many stockbreeders leaving the activity to dedicate themselves to tourism. While the number of bovine cattle has remained similar to previous epochs, these cattle belong to only few stockbreeders. Therefore, the exploitations have been enlarged, while the number of stockbreeders, has been reduced.

Apart from the Commonwealth, there are associations of stockbreeders of the PNOMP, association of stockbreeders that raise the Capra Pyrenaica, hunting associations, and other associations related to the thematic of the park (e.g. for birds' protection, for tourism, etc.)

In the past, the towns performed what was called "las vecinales" that are similar to the "faenas" of the PAO. However, the organization is not based on a community-structure, but on a town-structure composed by the different *casas* that existed in each town. 163 When there were works that would benefit the whole town, everyone had to participate:

they cleaned, maybe they did a wall or they cleaned the brushes to pass through the path... "vecinal" that people used to say here... (...) what the whole town did... (...) One of each "casa" had to go, people call it "la vecinal" and one of each house had to go to the work, to work, of course. 164

However, there are currently not enough people living in the casas to perfom vecinales. Hence, most of the community-based activities are not maintained, apart from festivities (e.g. the festivities of each town - fiesta del pueblo) and the traditions related to the movement of the

¹⁶² STM, former president of the Commonwealth, stockbreeder from Broto Valley. Author's translation from the transcript in Spanish. (IntLC_PNOMP_STM, p. 10)

163 These "casas" (houses) were also called "fuegos" (fires) because of the image of the hearths. The "casas" were

composed of more than one family and could count with as much as 20 inhabitants.

SP, former stockbreeder and former park ranger from Bestue. Author's translation from the transcript in Spanish. (IntLC PNOMP SP, pp. 14-15)

livestock from spring pastures to the summer pastures and back to the towns, such as the "Paso a Francia", "el día de la suelta" (the day of the release of the cattle), which are not based on a general organization of the local communities linked to the PNOMP administration, but rather to each town and how they have managed these events historically. Nevertheless, people from the different towns know each other and share with people from the other towns during these festivities. However, these festivities are not lived as religious commitments, and these are celebrated in the high season, when people have come back to their hometowns, when there are tourists, and the region is more populated.

The PNOMP has contributed to the regeneration of the ties among the people of these towns through the park rangers' system. Most of the people working in the local administration of the Park are locals from the towns of the Area of socio-economic influence of the PNOMP. However, the demand for qualified personal has rendered the positions as park rangers more difficult to obtain by locals without a university education. Moreover, the work of park rangers is seasonal in many cases, and therefore unstable. This situation results unfair for the local inhabitants of the region, because they consider that the jobs related to the park should be given to people who are originally from these towns and that have taken care of, are related to and know these places better than anybody else:

And look the centenary trees that are here... A lot. That means that people knew how to take care also... They knew how to take care. I say that always, the Ordesa National Park has been extended and has become park because of how well it was taken care of... and who has taken care of it? The people that have lived here. Now, why people come to work at the park, why they come to take care of the national park? Because they have a salary in front of them, otherwise, we would not have anyone... If they take away the [title of] park and it stays like before, everybody would go away... to another place... That is why it hurts me many times, it hurts me many times, that, I am working here already and for me there is no problem, but it hurts me many times that the job positions should be for the people that have been taking care of, for the people of the surrounding towns... ¹⁶⁵

Summarizing, the main difference between the agropastoral communities in the PAO and the ones in the PNOMP – namely that the former inhabit the protected area, while the latter surround it- has an impact on the population dynamics of each site. Although structural, socioeconomic and political events have marked the persistence or disappearance of agropastoralism

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¹⁶⁵ MPST. Author's translation from the transcript in Spanish. (IntLC_PNOMP_SP, p. 27)

in each site, the patrimonialization of these cultural landscapes has influenced the evolution of the traditional practices.

The population in the Area of socio-economic influence of the PNOMP is shrinking due to long processes not only related to the establishment of the protected area. The socio-economic and political situations undergone by Spain during the 20th century has brought about a depopulation phenomenon that is not only present in the Area of socio-economic influence of the PNOMP, but also in other areas of the Pyrenees and even other mountain areas of the country. These mechanisms are connected to a general process of modernization around the globe and especially in Europe during the late 19th century and early 20th century, linked to processes of industrialization and urbanization. On the other hand, the population of the PAO is not shrinkring but rather growing, essentially moving from the rural areas to the more urbanized, such as Ollantaytambo town, or generating new rurban (rural-urban) cores, such as Patacancha and Huilloq. This phenomenon brings about the main conflict, which is the scarcity of land, due to the 'archaeological commitment' of most of the plots in the valley floor and the Patacancha river valley. In the PNOMP, there are at most 40 stockbreeders (living in the towns from the Area of socio-economic influence); whereas in the area of Ollantaytambo, more than 1,300 people still work in agriculture and stockbreeding as main activities.

Nonewithstanding, due to the patrimonialization of both areas, the population is changing their main activities to tourism. In the case of the PNOMP, this change already has long history, at least in the town of Torla, which is the door to the Ordesa Valley. At the beginning, people could diversify their activities, integrating tourism. However, due to the depopulation, it was no longer possible for one casa to maintain all the business and people generally gambled on tourism as a more profitable activity. In the case of the PAO, people still can diversify the activities of one family, maintaining agricultural, pastoral and tourist activities, because even though young people are leaving for the urban centers to study or work in many cases, many young people still stay in their hometowns to maintain the agropastoral tradition. Moreover, due to the growing demand of tourism, Ollantaytambo town has become attractive for people from the rural areas and also, as well as other areas of Peru (Lima, the capital, and Puno, the neighboring department), to start business or work. Hence, it could be said that whereas the surrounding towns of the PNOMP are depressed, with some remaining entirely abandoned, there is a dynamic environment in the PAO area, and especially in its urban core. Nevertheless, in the case of the PNOMP, the depression and lack of activity of the surrounding towns is reflected in the loss of the agropastoral landscape due to a lack of use and maintenance. In the case of the PAO, the dynamics of the town influence the archaeological heritage, which is

also being lost due to the invasion of dwellings and hotels gaining over the agropastoral landscape.

Nonetheless, the relationship between the local communities of the PNOMP and the stockbreeders' community is closer to the administration of the park than that of the local communities in the PAO to its administration. In the PAO, the relationship between the local communities and the administration of the INC, now Ministry of Culture, responsible for the management of the site, is delicate and usually conflictive. These conflicts are dealt with in Chapter 9.

In the next section, I expose how these population dynamics are affecting the agropastoral habitats as well as how they are making the landscape evolve in each of the sites.

7.3 Habitat fragmentation and habitat loss

7.3.1 Habitat fragmentation in the Andes

7.3.1.1 The "good place"

The Andean worldview has been studied by diverse scholars from different disciplines, particularly anthropology and archaeology. Some theories state the continuity between precolonial times and the present, postulating a persistence of the pre-Hispanic traditions being held by the peasant communities that inhabit the Andean mountains. However, Andean traditions have been strongly influenced by the Spaniards and their religion. Catholicism is nowadays the official religion of the Peruvian State, followed by most of the population. Hence, Andean festivities are characterized by being connected to an agropastoral calendar founded on the traditional relationship with this specific environment associated with the religious festivities of Catholicism ¹⁶⁶.

Some basic concepts used by the Quechua people are the *Apu* and the *Pachamama*, which are the most important deities. The *Apu* resides in the mountains and are those who take care of people. *Pachamama* is the Mother Earth and also takes care of people, providing food and shelter. The *ayllu* is the basic structure that includes the family, community, animals and plants, while the *ayni*, as explained in the previous section is the basic value of reciprocity. Nonetheless, the Andean worldview has been altered by diverse events, as previously explained. On the one hand, three centuries of colonization and evangelization have brought about

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¹⁶⁶ As in many other places in the world, where Catholicism has been imposed over native beliefs.

syncretism with Catholicism. During the 20th century, modernization influenced the way in which peasants see themselves, as well as how they are perceived by others. In the modernization project, their traditional practices of agropastoralism are considered backward. Therefore, it is not possible to talk about an original culture or pure culture. School, NGOs, the State and municipalities have worked as agents of modernization, undermining the peasants' own beliefs and way of life.

Especially in this area, where tourism has been and remains a major influence, my conversations with locals show a high degree of persistence in the Andean worldview that has been recorded and interpreted by a large number of anthropologists while they also show a high degree of disturbance. Peasants identify more with their traditions, the further they are located from urban areas. Moreover, some discourses of re-affirmation of the Andean culture have been spread and are used by the communities as an instrument for the re-appropriation of the place. This is discussed in the section 7.4.

The elements of the Andean habitats in the rural areas that have been occupied by the Incas and other pre-Inca cultures are the *chacras* (cultivated fields), the *puna* (paramo), *pastos* (pastures), bosque (forest), llamas (domesticated camelids of the region), casas (houses), río (river), estancias (ranchs), pueblo (town or rural settlement), and ruinas (the archaeological remains or ruins). This is what, from an external perspective will imply the concept of an "Andean landscape". However, for the Andean people, everything could be landscape, and at the same time, nothing is landscape. "Landscape" seems to refer to a good place, but no precise translation of landscape can be found. This is why I postulate that landscape is not a concept present among these communities, an that an exact equivalent to the word landscape does not exist. Furthermore, a precise translation of the word nature also does not exist. Some scholars have translated nature as sacha, or even use the concept of Pachamama as an equivalent to nature. However, I consider that the Andean worldview does not imply a strict division of nature and culture; therefore, equivalents are not useful to understand this particular worldview. Since the language has been mixed with Spanish and influenced by Quechua words, people mix words of Quechua and Spanish. It could be said that in the urban area, people speak Spanish properly with some colloquial uses of Quechua integrated in the daily vocabulary. The further one goes from the urban center into the Patacancha river valley, the more the language is mixed until in the highlands, where many people cannot speak fluent Spanish. While this limits the possibilities of communication when one is not a Quechua speaker, it is interesting to note that there are some understandings of certain concepts that are linked through the language to the school teachings, the relationships with tourists and re-affirmation discourses brought up by NGOs and researchers.

Hereby I present some fragments of interviews with people inhabiting the middle and highlands of the park in relation to their understanding of nature and landscape. The first testimony is from an inhabitant from the Community of Pallata, FS1, which is an annex from the Peasant Community Ollanta. He is a farmer and stockbreeder. The settlements of Pallata are located in the way up to Patacancha, next to the river and they are connected to the archaeological site of Pumamarca (Figure 20). Some *comuneros* of Pallata work the Inca terraces of Pumamarca and Choquechaca (Figure 21, Figure 22). They do not live in the valley floor, and they are not part of the *Wayruro* nation. They have been historically related more to the valley floor than to the highlands.

M¹⁶⁷: And you, how would you define nature? FS1: Good. M: Does it exist a Quechua word for nature? FS1: Of course, the greens. The forests, the nature. M: How do you call it? FS1: Eh... there are chachacomo [Escallonia resinosa], queuñua [Polylepis], aliso [Alnus acuminata], unca [Myrcianthes areophila]. 168 M: That is nature? FS1: Of course. M: And what would not be nature? FS1: Not nature would be the eucalyptus I guess, because it is eucalyptus. M: And why the eucalyptus? FS1: They say it sucks more water... M: And the maize [Zea mays, domesticated crop] is nature? FS1: Also. M: And the quinoa [Chenopodium quinoa, domesticated crop] FS1: Also. M: The stone? FS1: Mineral. M: But isn't it nature as well? FS1: No. M: No? FS1: It would not be, then. M: Ichu [Jarava ichu, a wild hay typical from the Andes]? FS1: Ichu? M: Ichu. FS1: Also nature. M: The mountain is nature? FS1: Of course, because it's green. M: And the Apu [Andean deity living in the mountains]? FS1: The Apu would not be, then. The Apu will always be. The Apu will be always. M: Apu, not nature? FS1: Not nature. M: And how would you define, when I speak about landscape, what do you understand by landscape? FS1: By landscape I understand good. M: Good? FS1: Yes. M: And what would you mean? FS1: In Quechua it is said, allinchay lugarkuna. The good places. Right? M: Which are the good places? FS1: The apus. M: The apus? FS1: Of course. M: Up there [pointing the top of the mountain]? FS1: Up there, up there, always. M: That is landscape? FS1: Landscape. M: And this one down here? FS1: It is also landscape, would it be. Of course. M: And where we are now [his chacra next to the house]? FS1: Landscape. M: But is it also good? AM: Good. M: And how would you say landscape in Quechua? FS1: Allinchay, Allin lugar sitikuna. M: Allin lugar? FS1: Allin lugar. M: Lugares... FS1: Lugares buenos. 169

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¹⁶⁷ [M] is the letter used to name the author/researcher/interviewer.

All these are the names of native trees of this region.

¹⁶⁹ FS1. Author's translation from the transcript in Spanish. (IntLC_PAO_FS1_01, pp. 39-42)

According to this testimony, there are four conditions for something to be natural: to be green, to be native, to be alive, and to be mortal. These conditions are related to different sources of knowledge that influence and sometimes modify the perception assigned to the traditional Andean worldview.

The first characteristic, to be "green", refers to what is taught in the school: nature is green, nature is the trees. Children are taught in school to colored their drawings with green, the color of the trees designated as the color of nature¹⁷⁰. Nonetheless, next to this statement, after naming the native trees that he uses for describing nature, he declares that what is not nature is what is not native. Eucalyptus cannot be nature because it is an exotic species and "they say it sucks more water". This refers to the knowledge imparted in capacity-building workshops that have been undertaken with all the communities in this watershed by the NGO ECOAN¹⁷¹. ECOAN (Asociación Ecosistemas Andinos - Association Andean Ecosystems) is dedicated to the conservation of nature. It was founded in the year 2000, and intends to protect and restore the native forests of the Andes, essentially composed of queuñua (Polylepis), chachacomo (Escallonia resinosa), kiswar (Buddleja incana), which are native species to these mountains. These native trees have been over-harvested and replaced by eucalyptus. Indeed, eucalyptus grows faster and has invaded the mountain areas of Peru, and not only Ollantaytambo. Hence, comuneros have been taught in the capacity-building workshops that they need to take care of their precious heritage, the native forests. They have been involved in the plantation of queñuales, for example, through the system of faenas.

In association with two peasant communities ECOAN has established Private Areas for Conservation (A.C.P. – Areas de Conservación Privadas): A.C.P. Choquechacha with the Peasant Community "Ollanta", and A.C.P. Qosqoccahuarina with the Peasant Community of Rumira Sondormayo. The main purpose of these protected areas is to conserve the habitat of a critically endangered species of bird: the Royal Cinclodes (cinclodes aricomae). The queñuales (or Polylepis forests) are the habitats of these species and have also been exploited, leaving only few patches, such as those previously mentioned and defined as protected areas.

The A.C.P. Choquechaca is entirely inside the PAO, but Qosqoccahuarina is not. Nevertheless, this place is of major significance for all the communities in the area because it is a high point from which it is possible to observe Cusco city.

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¹⁷⁰ Here, it is necessary to clarify, that this informant only finished the primary school.

¹⁷¹ More information in their website: http://www.ecoanperu.org/



Figure 20: Pumamarca archaeological site. In the second plane in front of the Inca structures, there are some *andenes* hidden by the trees. May 2012. ©Author



Figure 21: Andenes of Pumamarca, covered by trees and brushes. May 2012. ©Author



Figure 22: Sheep grazing in Pumamarca terraces. In the back plane, terraces and slope fields being worked currently by the Peasant Communities of Pallata and Ollanta. May 2012. ©Author

The A.C.P. Choquechaca is frequented by the *comuneros* of Ollanta and Pallata, and they have attended these workshops, where eucalyptus has been recognized as the cause of loss of underground water impoverishing the soils of the mountains and riverbanks. This knowledge has been confirmed in practice by the *comuneros*, who have noticed that the soil has dried in the areas where there are eucalyptus forests:

Eucalyptus rather impoverishes the land. But those native plants, no. (...) I do not plant any more. Because I already realized, that where those eucalyptus trees are, it doesn't grow anything... Neither plants, nor potato, nothing anymore... But on the contrary, where the native plants are, there they grow. Normal. 172

Then, quinua and maize, domesticated crops are recognized as nature by FS1. What would be cultural in the case of a Western understanding is also natural in the Andean perception. All that is alive is natural. Nevertheless, the Apu, the deity that lives in the mountains, is not considered mortal; therefore, it is not natural. Nonetheless, it is considered as landscape, because it is in the altitude and it is good.

In a different testimony from CFS3, the president of the Community Rumira Sondormayo landscape is also associated with the idea of openness and altitude:

CFS3: Landscape is when there are, upper, then more landscape, wider, then, wider, then more air, also, no? M: Mhm. CFS3: Then, that is what tourists want more, no? More than they are taken for a walk, higher, where there are snowpeaks, like that, no? Then, the landscape we say then. M: So you think tourists come to see the landscapes? CFS3: Mhm. M: Really? But not this one from here [the rural town] but the one upper [mountain peaks and lakes]? CFS3: For that they come also. M: And for this one they also come... And is there any word in Quechua to say landscape? CFS3: *Allinpuntapuntakuna*, *puntakunata risun*. M: *Puntakunata risun*. CFS3: Mhm. M: And what is the literal translation for that? CFS3: *Puntakunata risun*. That is the name of the landscape, simply. ¹⁷³

This idea of landscape comes from tourists' appreciation of places. As I explain later in Chapter 8, this approach to landscape is connected to the first and more classic approach to the concept, which is that of a representation, based on a mental and cultural grid. These places are landscapes for the tourists who have learned to see the environment under that gaze.

¹⁷³ CFS3, President of the Peasant Community Rumira Sondormayo. Author's translation from the transcript in Spanish. (IntLC PAO CFS3, pp. 23-24)

¹⁷² FSR, *comunero* from Patacancha, former President, agricultor and stockbreeder. Author's translation from the transcript in Spanish. (IntLC PAO FSR, p. 5)

Accordingly, they value the snow peaks, the access to views and contemplation. These are interpreted by the *comunero* as an interest for a wider and higher place, which is, for him, the description of landscape.

In both cases, those from the *comunero* of Pallata, and the *comunero* of Rumira Sondormayo, they relate landscape to a "good place" ("*lugar bueno*"), which in Quechua is *allin* – good, and the second word used, qualified as good are: *sitio*, *punta*, *lugar*. These are Spanish words that refer to place (*sitio*: site, place; *punta*: point, related to the shape of the mountain peaks, *lugar*: place). The ending *-kuna* is the plural in Quechua. The verb *risun* means to go in Quechua.

When tourists visit these areas, they go for tours and treks to the mountains. This region is frequented by mountaineers, whith the influence of their use of the word landscape, resulting in its translation as a "good place".

The last extract is from a *comunero* of Rumira Sondormayo, which forms part of the group of the Association of Living Incas. His understanding of landscape and nature is more connected to the classical translation used to the Andean worldview, based on scholars' interpretation of Quechua words. He has been educated for a technical career; therefore, his use of the language is clearer in the sense that the distinction between Quechua and Spanish is clearly managed:

M: And there is any term in Quechua to define, to say landscape? FST4: Landscape? In Quechua? Not like landscape, but there are. M: For example? FST4: Well, *orcos*, *cochas*. M: *Orcos* are the mountains, *cochas* are the lakes. FST4: The lakes and... *sachas*. M: *Sachas*, what would that be? FST4: The forests. M: The forests are the *sachas*? FST4: Uhum. Yes. M: What else? FST4: Also the animals, the condor [*Vultur Gryphus*], the puma [*Puma concolor*, cougar]. M: All of that you would say is landscape? FST4: Yes. M: For you, what is landscape? FST4: Landscape is the nature that exists. M: But, and for example, your house is also landscape? FST4: Of course, it is also landscape. M: And the *chacras* are also landscape? FST4: Yes. M: But you see them as nature? FST4: Uhum. M: How do you define nature? or you do not make a difference? FST4: With what? M: With something that is not. Because you say nature, but is there something that is not nature? FST4: I think not. M: Ok. Everything is nature? FST4: Yes. M: And the city? Or for example, here, in the town, everything is

nature too? FST4: Nature, because it is something natural... If not, what other kind of place is there? ¹⁷⁴

In this case, the existence of a word for landscape is denied. Nevertheless, the elements of the landscape, which are the elements of nature, are described as the landscape: lakes, mountains, animals and settlements. Again, this renders the idea of landscape understood as the representation of the environment.

It is difficult to ascertain a distinction between a concept of landscape and a concept of nature. However, for these communities, there is no need to create a word for landscape, and the concept is not part of their understanding of the environment. Landscape and nature are linked to external interpretations that have been adopted through education, capacity building and their relationship with tourists.

7.3.1.2 Persistence of agropastoralism

Unlike the area of the PNOMP, Ollantaytambo and the Cusco region in general are mostly farmland, complemented with stockbreeding. As explained before, there is a gap between the people who live in the valley floor, in and next to Ollantaytambo town, who are more oriented to tourist services and the commercialization of maize, and those who live in the highlands, who are generally more oriented to agropastoral and subsistence activities. However, the picture is not this simple, and the divisions are not as strict. The majority of the inhabitants of Ollantaytambo town maintain their land and in some cases continue to cultivate. In the highland areas, even if people are more focused on the production of potato and the breeding of alpacas [Vicugna pacus], they are also working in handicraft and the commercialization of some agricultural products, as well as rural tourism.

Despite being more oriented to the market and tourism, people in the valley floor still maintain customs related to agriculture. The *Fiesta del Señor de Choquequilca* is one example, among others, of the prevalence of celebration of activities related to the agropastoral calendar. However, agricultural practices have changed and been influenced by modernization: they currently use pesticides and mainly focus on the production of maize (following the monoculture model). Furthermore, since the Municipality is located in the town, the relationship with the urban communities is closer. The proximity to this and the road system (which arrives

¹⁷⁴ FST4. Author's translation from the transcript in Spanish. (IntLC_PAO_FST4, pp. 30-31)

in Ollantaytambo, connecting Cusco with Quillabamba) generate a stronger influence from modernization and tourism. The Municipality provides incentives for the use of pesticides and fertilizers (which it sells to farmers at a better price than in the Inca Sacred Valley markets).

On the other hand, people in the highlands continue to produce following traditional ways, although in some cases they have begun to produce crops that are demanded in the market. While those are produced with chemicals, the ones that they consume themselves are not.

In terms of the agricultural practices, the one that is conserved and related to the maintenance of the diversity of potatoes (and other crops, but in this area, specifically potatoes) is seed selection, which guarantees the maintenance of the ancestral native species:

FST2: From us only, the seed is. We ourselves classify the little potatos. When the fruit appears, we increase more *guano* from the *corral* [manure], for the next year. We put a lot, there they appear more selected seeds. M: You select the seeds? FST2: Yes. M: And you exchange them too? FST2: Yes, here in the watershed only. M: And those seeds are old, old? FST2: Yes, they are old... M: When one is a child, how do you learn about the seeds? About the chacra? FST2: Children almost don't learn from anybody [in contrast to how they are taught in the school], little by little they learn... they know... 175

The selection of seeds is the only practice that needs to be taught to the children. Otherwise, they learn how to work the land by doing so early in life. They accompany parents in their labours, learning to be farmers by imitation. The same happens with the pastoral practices. From the age of five to six years old, children learn how to take care of animals by herding them to pasture. However, this traditional learning process is affected by the school schedule, which is not coordinated with the traditional activities of the communities. Hence, there are two options: children stop going to school to take care of family duties (farming and herding); or they frequent the school and stop helping in the house. Both situations pose complex questions, because in the first case, the children will remain less educated and will have a limited access to higher education and the job market – yet will continue the tradition of agropastoralism - and in the second case, the traditions will progressively disappear since there is no intergenerational transmission. The second case is more widespread in the urban area of Ollantaytambo; for example, where young people leave the town to get education and jobs in the cities (Cusco or Lima). In case they stay in the town, they alternatively run tourism business,

¹⁷⁵ FST2, comunero of Patacancha. Author's translation from the transcript in Spanish. (IntLC_PAO_FST2, p. 25)

rather than persisting in farming and stockbreeding, which are less profitable. Nevertheless, some people continue traditional activities on the side.

"Agriculture is an adventure," 176 says FST, one of the comuneros of the Peasant Community Ollanta that inhabits Qosqo Ayllu. He means that this activity is not secure: it cannot be predicted because it depends on many factors. Production can always change and one can never rely on it. There is interdependence with climate, environment and deities. Therefore each year it needs to be undertaken considering possible adversities (e.g. hail, long rainy season, short rainy season), and for this they use traditional techniques of forecast and reciprocity to the land.

The first ten days of August are observed as an anticipation of the whole year's weather. The agricultural calendar starts in that month, with each day reflecting how the weather behaves in each following month of the year. August and September are the months when people sow. During the month of August, people "ask for permission" ("pedir permiso") to open the land in order to sow, making offers called "pagos" (payments) to the Pachamama (Mother Earth), the deity in care of production. The first day of August is called the day of Pachamama and Andean people (not only in this region) use this day to ask for the year to be fruitful and good in terms of agricultural production, as well as positive in every aspect, positive for the family who does it, through the ritual of the "pago" 177.

These traditions are maintained in the context of Catholicism. In Ollantaytambo town, farmers perform these rituals. However, the performance of rituals is being progressively lost due to the halt of its practice in the highlands, prompted by introduction of evangelistic groups bent on eradicating alcoholism in the peasant communities. FSR, a comunero from the Community of Patacancha, who is still Catholic says the following about the continuity of traditions:

But not much any more, they are being lost. Before, there were more, customs (traditions). Now, with that religion that has appeared... with that almost, it is almost lost already...¹⁷⁸

Evangelism, unlike Catholicism, is not centered on the celebration of festivities. Moreover, evangelism forbids the consumption of alcoholic beverages, including the traditional

¹⁷⁶ Author's translation from the transcript in Spanish. (FST, unrecorded conversation)

¹⁷⁷ To read more about these rituals, see for example (Van Kessel 2000).

¹⁷⁸ FSR. Author's translation from the transcript in Spanish. (IntLC_PAO_FSR, p.1)

chicha (maize beer), consumed in every festivity. The festivities of the highlands, such as Carnivals ("Compadres") in February and other celebrations connecting the agricultural calendar to the celebration of Catholic Saints, are celebrations that take days, without work and comuneros get drunk. These festivities are generally celebrated after a great "faena" such as the harvests. In some cases, the celebrations are performed with the activity, as in the case of cattle branding during Carnivals. The following extract explains one example of a tradition whose content is changing. Above, FST4, one comunero from Rumira Sondormayo, 25 years old, explained the maintenance of this custom. However, this comunero from Patacancha, FSR, 40 years old, explains that they way in which it is performed now differs from the past:

Before it was done, eh, *varayoq*, now there is no more *varayoq*. (...) There is no more. One only, but it is not like before. Before they did customs, Carnivals, Christmas, Epiphany, more beautiful it was before. Now, not any more. They shared breads out in New Year's, the *varayoq*. (...) This year, no. There was only one, but not much. But before there was, varayoq and its councilors, like that. They delivered to everyone. They made the bread mixed. Also, in Carnival, they did, *puchero*. (...) *Puchero* is in the mountains, *impoque* they call it... *puchero*, meat, with potatos, with whatever they can, with potato, with chicken, with *choclo* [corn], with *yuca* [manioc], like that they did like a plate like that. That they invited, in carnivals... (...) *Varayoq* and its councilors. They used to eat that. That's why they did *chicha* [typical alcoholic beverage made of a type of maize]. (...) Of course, they drink, but they don't produce it anymore here, they bring it from Ollanta. 179

The majority of the *comuneros* in Huilloq, Patacancha and Rumira Sondormayo have become evangelistic. In recent years, the traditional festivities of Epiphany, Carnival, and *Compadres* are no longer celebrated in these communities. This means that what could be selected as their ICH is already in the process of disappearance. This practice of *varayoq* is an example whereby an older *comunero* already describes it as "not the same", while a younger *comunero* understands it as a custom conserved. Nevertheless, agricultural practices of the peasant communities in the highlands are being maintained. These are based on the rotation of crops (*muyuy*) and dryland farming. Each plot (*parcela*) has to rest for five years in order to regain its fertility, due to the lack of water in the *puna*. Agriculture in the *puna* depends on rain. Unlike the valley floor where the Inca irrigation canals are found and the soils are more productive, this landscape capital is not present in the *puna*. Nevertheless, the agricultural production in the whole region is based on dryland farming. The difference between the valley floor and the *puna* hamlets is around 1,100 meters (Ollantaytambo is located at 2,800 m.a.s.l.

¹⁷⁹ FSR. Author's translation from the transcript in Spanish. (IntLC_PAO_FSR, pp. 2-3)

and Patacancha at 3,900 m.a.s.l.), which generates the differences in temperature, sun exposure and pressure that influence the type of seeds that can grow in the different ecological tiers.

The valley floor in Ollantaytambo and other districts along the whole Inca Sacred Valley are currently dedicated to the cultivation of maize, and one specific species, namely the white maize or "grano de oro" (golden grain). Even though some other types of maize are grown (e.g. maize chumpi, maize cancha, and mote), the main production is focused on "grano de oro", which is the commercial crop. On the other hand, the main cultivation in the highlands is potato, albeit in a diverse variety of seeds (around 140 varieties of native potatoes 180). The potatoes of these highlands are famous for being cultivated with traditional techniques, without pesticides or fertilizers and regenerating seeds from their ancestors. While the wayruros are also producers of alpacas, unlike the cows, sheep and goats of the stockbreeders in the Pyrenees, the alpacas are permanently settled in the higher lands, where natural pastures feed them. They keep their cattle around their "estancias" (ranches) and they use the excrement for fertilizing the soils and cooking when it is dried ("bosta"). These cattle are only moved to lower areas when there is hail or frost, otherwise remaining in the highland pastures. They also have sheep and llamas. In the valley floor, people raise cows, donkeys, and in both areas, they have horses.

They used to cut trees for construction and firewood, but have recently stopped following their forest practices, due to the capacity-building workshops of ECOAN. As mentioned above, the intention is to restore native forests and displace the eucalyptus, the exotic species that has invaded these mountains. Nonetheless, whereas native trees are mainly twisted and not useful for construction purposes, eucalyptus is profitable and useful for the production of material for construction (timber). Large forests of eucalyptus are currently still present in the area, and these are the trees consumed by local communities for construction and firewood. *Comuneros* do not harvest native species at present.

In the past, the process of deforestation was related to the process of adapting the place for agropastoral purposes, i.e. for the creation of the agropastoral habitat:

Yes, our grandparents had already several times, here for example, they have forests only... better not, right? Working potatos, working *olluco* [*ullucus tuberosus*], yearly working, like that, working, there for some also, for some, digging, working, they are already enhancing it like that, flat, then, then, already our grandparents, they already have their plot of land, their plot of land they already have. Then we, when our grandparents, their plot they have to enhance, enhancement, there then our children too,

¹⁸⁰ CFS2, president of the P.C. Patacancha. (IntLC_PAO_CFS2, p. 6)

eh... there we are doing our little house, like that. (...) And we have plots as well, our father, also has little plots, then, plots they already have, enhancement they have, then there we are also working. (...) Two things we are working. Agriculture and stockbreeding, yes. We are doing agriculture, only here, it is, almost three thousand sixty above sea level, three thousand six hundred sixty six above sea level, up there is already 4,000 already. (...) Yes, around 3,600 like that. Then, because there is the settlement... Then, up there is already in 4,000. So because it is already a little bit high, the maize does not grow, we only cultivate potato, olluco, lisas, oca [Oxalis tuberosus], and also other things, also, beans [habas - Phaseolus lunatus], only. Maize does not grow here, does not grow. So we dedicate ourselves only to that agriculture. And also we dedicate ourselves, here in the microwatershed, art they have, from our customs, from our grandparents, handicraft they do already, weavers, women do weaving more than anything. For example, that girl is also using the blanket [manta]. The same we are doing those since from our grandparents also, like typical clothing, we are doing. Until now we are maintaining, also, we do we also raise animals, alpaca, sheep, cow also, all the animals that we raise that can live in the altitude, no? So, some raise almost 500, 600 alpacas, or 100 alpacas, or more or less 50 maybe, they raise, some, they don't raise others, they always raise, sometimes there are here in the settlement, they do not raise animals, few only. In the altitude, a lot of people also live... then... (...) [they are] part of the community because they are already, our grandparents they have there, in the estancia, they live, already our grandparents had also, animals, alpaca, sheep, llama [Lama glama], pacucha, then, they take care always. Us, from my father we also have alpaca. Alpaca, llama, sheep... (...) Up there, yes, [my father] yes, he lives there. ¹⁸¹

The grandparents ("abuelos"), as the ancestors are called, have gained productive land to the forests. In the need for survival, cultivation has necessitated the adaptation of this territory. These mainly lands are sloping, with grandparents and current generations working on the "enhancement" of the land, which consists of turning it flat so that it is easier to work. Moreover, stones fall constantly in this part of the *puna* area, making the use of land further difficult. Hence, they have always had to "clean" the land from the stones in order to work, and maintain periodic cleanings once a year. These productive lands represent the landscape capital for these communities: the cultivation land and meadows gained to the forests. Furthermore, in this fragment, the *comunero* has explained how the integration of tourism is developed through the marketing of handicrafts, essentially from their weaving traditions characteristic to this microwatershed.

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¹⁸¹ CFS3, president of the Community Rumira Sondormayo. Author's translation from the transcript in Spanish. (IntLC PAO CFS3, pp. 6-7)

In the case of the communities in the valley floor up to the *suni* ecological tier (around Pallata and Huilloq), they count with the *andenes* (Muris, Musqapuqllo, Choquechaca, among other ensembles) as the most important landscape capital of continuous use since the Inca times. In higher lands, Inca and Pre-Inca architecture of *qollqas* correspond to a landscape capital that is not being used in the present. Some are in a bad state of conservation due to their distance from the Fortress¹⁸², as well as being in difficult terrains.

However, the landscape capital is undergoing different processes, depending on their location and possible uses:

1. In the valley floor:

- Occupation of agricultural fields (with special soils) with hotels and housing.
- Restoration and conservation of *andenes*, albeit not used for agricultural purpose, but only decorative together with the architectural ensemble (the Fortress), exploited as a tourist attraction.
- Canals and urban fabric in continuous use yet receiving low maintenance and in many cases modifications, alterations and reconstructions, without the appropriate supervision of the Ministry of Culture (in charge of heritage protection).

2. In the middle land:

- the *andenes* are still in use but not all in a good state of conservation.

3. In the highlands:

- *qollqas* are not used, and remain in a relatively poor state of conservation (compared to those restored close to the valley floor).
- the agricultural fields are being fragmented due to the division of lots followed by urban habilitation.

7.3.1.3 The change: fragmentation

The change in the constructive practices is the most visible impact on the cultural landscape, and is the major phenomenon that is bringing about habitat fragmentation. Formerly, not only in the hamlets but also in the valley floor, constructions were done with *adobe* (earth brick), *ichu* roofs (hay), and sometimes tiles, known as the vernacular architecture of the region

¹⁸² I explained already in the previous chapter that the conservation efforts are focused in relation to the distance to the "Fortress" monumental complex.

(Figure 23). However, the new constructions are being made with concrete and *calamina* (metal roof of corrugated tin) for the past 20 years, (Figure 24). While people sometimes still use tiles, adobe and timber from eucalyptus to make the roof structures, balconies, stairs, etc., the typologies are changing.

The change is stronger in the valley due to urbanization and the hotelization of the town, with agricultural fields increasingly being occupied by hotel and restaurant constructions. In the highlands, the need for being inserted in the market forces people to move to urban centers. Formerly, people in the highlands were only dedicated to activities of subsistence, based on agriculture (production of potato) and stockbreeding (mainly *alpacas*), and used to live near the areas where their animals pasture. People then were spread and living in their *estancias*. The construction of the road and the public high school in Patacancha in 1996¹⁸³ brought people to occupy former cultivation fields and generate a rural core in Ayña, the name of an area next to the road that is now known as the settlement of Patacancha.

M: And the plots where now is the school for example, are there more houses? what was there before? FSR: Potato we always cultivated there. M: Potato, all of that was potato? FSR: Potato it was, yes. After, when it was divided in lots, houses have been done. M: Who has divided in lots? FSR: The directives. M: Of the community? FSR: Yes, indeed. I was the President then. M: Ah, ok, in that time of the road? FSR: Yes. Then we have divided in lots. But it was difficult (...) Now yes, people want to divide more into lots, also here now [in upper areas]. Before, they did not want to live here. Because they are used to live spread only. That way they wanted to live... M: Ah, they did not want to live here... FSR: No. M: And how did that change? FSR: Little by little. 184

¹⁸⁴FSR. Author's translation from the transcript in Spanish. (IntLC_PAO_FSR, p.6)

This school was built with the support of the Hope Fundation. More information in the website http://www.hopeperu.org/



Figure 23: Vernacular architecture from the Andean region. Stone foundations, adobe walls and ichu roofs, circa 1930. ©Martin Chambi



Figure 24: Changes in architectural typologies. Outskirts of Ollantaytambo town. March 2011. ©Author



Figure 25: Rural core of Huilloq. March 2011. ©Author

The process of dividing the lots, which are normally one territory for the whole community, has been relatively recent. Even though people have agreed to move to the rural core due to the need of their children being closer to school, as well as the connection to the town through the road, most of the *comuneros* maintain their *estancias* in the highlands, and only a second house in the rural core. The same occurs in the community of Huilloq and Rumira Sondormayo, whose children attend the school of Patacancha. They keep their ranches in the highlands near the cattle, and have built a second house in the rural cores of Huilloq (Figure 25) and Rumira Sondormayo. Added to this, *comuneros* are also constructing small shelters for receiving tourists who are interested in having a cultural experience. The core settlements of Patacancha, Huilloq and Rumira Sondormayo are on the Ollantaytambo-Lares route, an Inca trail route that has become increasingly popular in recent years, prompting the inclusion of the PAO in the nomination for the Qhapaq Ñan to the World Heritage List.

The fragmentation of the agropastoral habitat is presented as the reduction of the areas for developing agricultural practices based on the change in the social and economic organization of peasant communities. These communities enter in the tourism sector, which is more profitable, and make their land value increase through its urban habilitation. Nonetheless, the urban habilitation of agricultural plots with 'archaeological commitment' is strictly forbidden by the law.

To summarize, the occupation of the agricultural land is a basic need for the population of the PAO, in all its ecological tiers. This process of land use change is accompanied by a change of the architectural typology, from the vernacular architecture and the use of local materials to the import of modern materials (concrete, tiles, steel). This change is related to the construction of the road that permits access to the town and supplies from the market. Whereas Ollantaytambo was a district that could produce its own supplies, this situation has now changed, now depending on imports from the neighboring cities.

Hence, even if the urbanization of terraces and agricultural fields have been perceived negatively by heritage experts, architects, municipal authorities, for the people that live in the town and the hamlets, there is no other choice than to occupy this land in order to progress. The population growth requires an urban planning that was not considered until the Project Vilcanota developed the Urban Studies of the Inca Sacred Valley towns during 2010 to 2012. It is important to clarify that many of the lots occupied, and especially those on the way from the main square to the train station, have been developed as hotels and restaurants. However, this occupation has entailed the loss of a yet unknown amount of Inca archaeological heritage,

particularly in the areas of Pillcohuasi, San Isidro, the Patacancha riverbanks and the Bandolista terraces.

This habitat fragmentation is accompanied by agropastoral habitat loss, since the areas for cultivating and pasturing are being progressively reduced, in both the valley floor and the highlands, which increasingly function as tourist cores.

7.3.2 Habitat loss in the Pyrenees

7.3.2.1 "Dirty fields"

When asking to a local, former stockbreeder and park ranger about how he saw the landscape of his hometown Bestue (Figure 26), he replied:

Well bad you see it [the landscape], because this has no way to be fixed. There is no way to repair it. History cannot be fixed. It has been neglected for too long and now, it is not... It's like a house that you leave it, you leave it, you leave it, that it gets... it's destroyed and at the end, on the ground. The same. ¹⁸⁵



Figure 26: View from the mirador of Bestue. August 2012. ©Author

The environment surrounding the town is compared to a house, and particularly to a careless one. This comparison re-affirms the perception of the landscape as habitat. Even if the concept of landscape itself is understood from approach [1] in the case of the communities of the PNOMP, their relationship to the environment is related to their work on the land and their

¹⁸⁵ SP. Author's translation from the transcript in Spanish. (IntLC_PNOMP_SP, p. 13)

use given to its resources. This site of the Pyrenees has a long story of being appreciated by mountaineers, scientists and visitors, and in this way, the common understanding of the locals when asked about landscape is related to the frame used to see the environment. However, where visitors see beauty and aesthetic enjoyment, locals see dirt and carelessness:

Now there are pieces that one can't see the terraces, or anything, because it has all been covered. (...) Some pieces, they had to build stone walls so the soil would not fall so much... that. That's how they do. But, I, all my life I have known them like this. (...) I have seen them when they were still being worked! I have seen them, those terraces, like they are now, but worked. (...) there are pieces here of these fields that if it were not because one knows, one would say there have never been fields here. It has become very dirty, like this one... ¹⁸⁶

The traditional agropastoralist landscape of the PNOMP and its surroundings comprises the mountains, forests, meadows, fields and towns. The fields have been terraced due to the sloping terrain. While these terraces are the characteristic of this Pyrenean cultural landscape, this traditional landscape has already been in the process of rapid change for more than a century. The reduction of population, the abandonment of the agropastoral practices and the patrimonialization of the site have brought about what local stockbreeders would call "neglected and dirty fields". The brushes and trees are covering the fields that once were cultivated with wheat, and subsequently with fodder, transforming them progressively into useless ground. The stockbreeders that still maintain the activity have become accustomed to being surrounded by the agropastoral landscape and hence they can see the difference, having witnessed the process of forestation and scrubland formation in the once-productive fields. Moreover, for them, the dirtiness of the fields immediately refers to the possibility of fire:

there is no doubt that it is more beautiful to see the land cultivated, than seeing it there all wild, and covered by weeds... It is dangerous for the fires and if all that is not a little bit cared, it is a serious danger. ¹⁸⁷

For the stockbreeders, these two aspects of the negligence of the land are their main concerns. From their vision (stockbreeders and former stockbreeders), the fields that are not worked are dirty. Their understanding of "dirtiness" is not related to an aesthetic appreciation, but rather to an understanding of the impossibility of working when the fields are not

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¹⁸⁶ Author's translation from the transcript in Spanish. (Ibid., pp. 9-10)

¹⁸⁷ ST2, stockbreeder from the town of Fragen in the Broto Valley. Author's translation from the transcript in Spanish. (IntLC PNOMP ST2, p. 17)

maintained. However, the common feeling is one of nostalgia, having seen these fields worked and cleaned in the past:

Behind those straw lofts, down to the bottom of the cliffs there are fields. And further down, in these cliffs, there are also farms, but... (...) one doesn't know if that's a field or not a field because they are wooded. Since they do not work them for so many years... Up and down from this mountain there are also fields that go as far as behind there, in San Miguel. And there are fields there also. And around here and down. And high there almost up to Castillo Mayor [a mountain peak of the area]... There was land in that place also... (...) It has become very dirty, before, [in the past] everybody cleaned, but now, nobody does it. 188

However, this lack of maintenance is directly connected to the lack of generational change, which has resulted in the unfeasibility of working in the fields for more than 30 years. Nobody cleans, because there is nobody who can clean. Moreover, as ST2 from Fragen (a town belonging to the Commonwealth of Broto) explains in the following extract, the work is not simple due to the sloping terrain and small size of the field plots:

Well, here we are doing it because it is a sloping terrain, well, all the herb that goes the cut of the tractor, and all that the cut doesn't catch, that is a cut with discs, well, all that we do it with... the scythe, with the scythe. This, where it is flat, they leave it at home, they do not use it anymore, because they take what the cut takes and that's it, in this town everybody, still, we do it like this, whatever it doesn't take, the tractor, we do it by hand. It's not like it is a lot, but well. You have to border all the fields afterwards, and well, that's already something rare. They say, 'but... you do this like that?!' It is not about the amount of herb that you harvest more eh? What happens is that everything is conserved much cleaner, the fields and much more, otherwise you can see it perfectly... You go down there, down the fountain and you see from a viewpoint, and you look at the fields and you see that they are cleaner, because otherwise the weeds come up wherever, wherever it is not cut, the weeds come up... weeds, blackberry bushes, and well, while it can be done but there is no doubt that this will come to an end. 189

For them, there is a clear difference between what is clean and cared for, namely worked and laboured, and what is neglected. This stockbreeder is one of the few who still maintains some of the former methods. Apart from cleaning the fields with scythe, he does not own a stable, and he still uses his old *borda* (ranch). However, the use of *bordas* inside the

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¹⁸⁸ SP. Author's translation from the transcript in Spanish. (IntLC_PNOMP_SP, p.4)

¹⁸⁹ Author's translation from the transcript in Spanish. (IntLC_PNOMP_ST2, p. 10)

towns was already forbidden by the Municipalities during the 1980s, as a way of sanitizing the towns. Nevertheless, he managed to gain permission until retirement. However, he acknowledges that the work of maintaining these fields in the mountains is not profitable and hard to do. Even it could be seen as not rational:

life keeps evolving and here it can't be so profitable, never, this work like it is in a flat zone, that, I don't know, in four days, they pick up all, the harvest and that. Here, I have spent, one month and a half picking up the herb that there is to harvest, I harvested three thousand packs of herb, from these small ones. This, in any flat zone, they harvest it in three or four days. Then, it is not profitable, what happens is that if you don't cultivate the fields, if you don't clean them, they get covered with weeds and then they are not valuable not even for pasture. 190

This stockbreeder is struggling to maintain his landscape capital. He knows that if he stops cleaning, even if it is hard, the value of that land is lost. Clearly, the maintenance of this cultural landscape is directly connected to a way of life that has almost disappeared from the locals' understanding. Keeping its remains implies the mechanization that does not permit the maintenance of fields in the sloping terrains, and the use of stables and larger exploitations.

An artisan from Buerba, who stands in the entrance of the town carving Boj (Buxus sempervirens)¹⁹¹, says that for conserving the landscape, it needs to be worked. Moreover, the work of stockbreeding and agropastoralism is "hard work", which increasingly fewer people are willing to undertake. Nevertheless, the idea of this work being tough is connected to the older way of practicing it, which implied transhumance and moving the cattle to the field every day. Previously, shepherds had to leave the town to feed the cattle in lower lands every winter, because the snow reaches the level of the towns. This would take them away from their families for approximately six months. However, stockbreeders have since modernized their exploitations. They count with electric shepherds, "cuadras" (stables), and transhumance is rarely practiced, if at all¹⁹².

ST2 explains how hard transhumance was in the past:

¹⁹⁰ Author's translation from the transcript in Spanish. (Ibid., p.12)

¹⁹¹ Boj is an evergreen shrub growing in these mountains. It is used for carving and producing handicrafts because of

the softness of its wood.

192 Only one family keeps practicing transhumance but not in the traditional way since now they count with transportation. Therefore the sort of peregrination that the movement of the cattle to the lowland implied has been lost.

Take into account that then, life here was very tough. Because everything was worked with mules, the road passed up there, one entered to the town, you had to walk all the time, there was no television, there was no internet, the advances that there are now, the life was very hard, and in the town like here in the mountain, that snows, maybe it snowed in November, then you could stay until March, with snow, uncommunicated. The life was tough. Then, in the cities, I tell you, the work was easy, it was those years, the 60s, in the pillars of development of Spain, there were jobs everywhere. And people lived, well, pretty good. Then, many were encouraged to leave. From these towns, few, but here in Linas, half of the town left by then. And all the valley of la Solana, this one there, above Fiscal, and all that? All those towns that have little land and live rather from transhumance, they had cattle cabans and they went down. In the summer, they were here in the mountain, and in winter, they went to the lowlands there... to take care of them, there. But of course, they left the family here and, all the family here, and them in the lowland, it was very hard. Then, all these people had the opportunity, also that the Forestry Patrimony, the way it was called here at the time, they offered little money, but they offered something for the fields and so, they sold, they sold. And all those towns are almost uninhabited now in La Solana. Yes. 193

As previously mentioned, the story of La Solana valley is very significant for the people who still live in the mountains around the PNOMP. It is an example of what could happen to the rest of these towns and valleys if people leave, which also generates fear and anxiety in the stockbreeders, who do not see a future in their tradition.

For the local stockbreeder that still maintains the practice around the PNOMP, the understanding of the landscape is directly associated with the work of the fields. Hence, its conservation is also linked to the continuity of their practices, which they do not see a future for due to the lack of descendants:

Well, here, the future of stockbreeding, as MPST [another stockbreeder present] knows it as well, well, here, eh, if there would be descendants, well, even badly, well, it could withstand, but for example us, ourselves, there is nothing coming after... Here, it's more the future of the cows because the cows go around there and it's fine... And the winter, well the farms are more adequate, instead of being here, around there, there is a man that has cows that is H, who is the mayor, well, he has a good, a good stable for that. But here, the sheep, well you have to move them, from here, if you have few, if you have few, what we have talked, you cannot live. (...) Well here, that's the future of the sheep, if it doesn't change... well, for example, the tendency is that of the young agricultors. Well, there are some that wanna do it, there are some that want to buy sheep

 $^{^{193}}$ Author's translation from the transcript in Spanish. (Ibid. pp. 3-4)

for example, ours, because they are waiting to see if they receive subventions... and that, some, it seems one other guy... maybe, the way that is now here the crisis in Spain, well some, maybe can come back and become stockbreeder... (...) Well, because some have gone to the construction and they have no job. And someone has called me precisely that wanted to buy sheep, because (...) he didn't know what to do... (...) And he had before, he sold them because he thought that this would not work anymore and now he lost his job. Well, they end up badly and of course, they want to get some sheep, in the lowland... (...) I've seen for example... Look, two or three towns, 10 stockbreeders, and now, nobody. There is nobody. There were stockbreeders, man, there were some that had more than a thousand sheep... 700, 800. Zero. The problem has not been only in Spain, it has... that the market is bad, only well, there are no people, we have become old, there is no descendants, and of course... well... old people, well, they retire and you can't keep being stockbreeder... And it is because of that that they have created that of the "young farmers" [state program], and MPST, well, yes, we can see that they give a lot of facilities, but then, afterwards at the time of the truth, well, there are many controls, right MPST? 194

There is a difference between traditional stockbreeding, involving ovine cattle, and the modern stockbreeding practice, which involves bovine cattle. While bovine stockbreeding, with modern techniques might remain and people who are modernizing and enlarging their exploitations persist, ovine stockbreeding seems unviable. The issue is that the agropastoral landscape has been maintained by ovine cattle that cleaned the fields, which was connected to the traditional practices of transhumance. However, there are currently no people who could inherit them and maintain these practices.

7.3.2.2 Unviability of agropastoralism

The main problem concerning the conservation of the cultural landscape in the PNOMP is the unviability of agropastoralism. As already seen, agropastoralism as such no longer exists in the surrounding towns. First, agriculture has not persisted since the middle of last century. However, people still remember how it used to be:

Well, everything that was done before, people cultivated... sew wheat, next year potatos... that grew very well there... Even in dryland, without irrigating, they grew very well. And they have disappeared afterwards. Everything that is not pasture for the

¹⁹⁴ S2, stockbreeder from Fanlo. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S2, p. 54)

cattle, you can't, you can see that there is no cultivated place here, if it is not some orchard next to the house, that there are...¹⁹⁵

The remains of agriculture are the orchards that are maintained and consumed by people living in the towns the whole year. The end of agriculture in the communities surrounding the PNOMP was originated by mechanization, which turned flat land more productive. Even when mechanized, the mountain areas cannot produce as much and as quickly as in lowlands. Similar to the highlands of the PAO, traditional agriculture was oriented to subsistence and the wheat and potatoes from the Pyrenean towns were not competitive in the market. Hence, only stockbreeding survived:

Stockbreeding, there has always been at home, what happens is that, this that it has... this [land] that today we dedicate finally to the stockbreeding, by then it was mixed. Stockbreeding and agriculture. Because it was the cereals that we picked up here, vegetables and all that... it was used to do agriculture. Now, only mountain stockbreeding. But the majority of fields were producing wheat, potatos, that's to say that the agriculture was very present. (...) Well, but not any more, it has been left away, it was a, a progressive change. Little by little the agriculture was left away, already dedicating ourselves to stockbreeding. Well the change, because here, here when that what is agriculture, it started to be worked strongly, with machinery, already more industrial, well it resulted that the cereals in other zones, they produced them better than here. And here, producing cereals did not compensate, stockbreeding compensated more. (...) Formerly, it was for self-consumption, and, well, the one who produced more, well, that one used to sell. 196

The impracticability of a mechanized agriculture that could compete is directly linked to the geography of these mountains, in terms of weather and terrain. The mechanization of agriculture and the opening of the market were the basic conditions that generate the loss of agriculture in the surrounding towns of the PNOMP.

The second traditional characteristic of agropastoralism in this zone was ovine stockbreeding. Ovine cattle have been reduced. The common saying is that there were 30,000 sheep in the pastureland of the ports in that area of the Pyrenees. Nowadays, there are few sheep and what has persisted is the bovine stockbreeding that is easier to handle in an industrialized process, as well as being more profitable.

¹⁹⁵ ST2. Author's translation of the transcript in Spanish. (IntLC_PNOMP_ST2, p. 11)

¹⁹⁶ S1, stokebreeder from Torla. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S1, p. 1)

stockbreeding has been already taken on a large scale, we have passed from having exclusively stockbreeding, instead of having 5, 6 cows, well we passed to 40, 50, 60. 197

Therefore, exploitations have changed their scale and purpose. The agropastoral activity related to a subsistence economy has been transformed into a stockbreeding industry that is not competitive in terms of national or European markets. While there are fewer stockbreeders, the number of cattle remains the same as 30 years ago. It would be not sustainable for the stockbreeders to have small exploitations, since the price of livestock has remained stable for more than 30 years. This means that livestock has lost value and thus, if stockbreeders want to survive by living in this business, they need to enlarge their exploitations. The state provides subventions for the cattle they raise, paying an amount of money to the stockbreeders depending on how many heads they have, and it could be raised when the species breed is an endangered native to the Pyrenees. Added to this, stockbreeders have facilities for loans to enhance their exploitations' infrastructure. However, this type of production is no longer related to the production that originated the traditional Pyrenean cultural landscape. The change from sheep to cows has had a strong impact in the landscape:

stockbreeding has changed because now you only see cows and before there were a lot of sheep... Then, the sheep cleaned better the mountain, the administration also has made its policies, so we do not intervened any more like we have intervened before. Because formerly, when you were in the mountains, well, because there were no weeds, well, if something came out, you would put it on fire or you would clean it somehow, and that, we have been totally forbidden, many years ago already and the weeds have taken over everything.¹⁹⁸

Accompanied by the prohibitions concerning the maintenance of the mountains (pastureland and forests) by the stockbreeders, these are conditions that affect the agropastoralist habitat, which is losing ground.

The lack of labour force is contributing to the decrease of sheep cattle. Herding sheep demands more resources than those currently required for the bovine cattle:

Well, because the sheep needs other kind of manipulation... Then, with the cow I feel more comfortable. That is to say that I take an equivalent of 600 sheep, in cows I can take them, but in sheep I can't do it alone. ¹⁹⁹

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¹⁹⁷ S1. Author's translation from the transcript in Spanish. (Ibid., pp. 1-2)

¹⁹⁸ S1. Author's translation from the transcript in Spanish. (Ibid., p. 3)

¹⁹⁹ S1. Author's translation from the transcript in Spanish. (Ibid., p. 5)

Surveillance is needed in the mountain ports, and shepherds are required. However, in the Area of socio-economic influence of the PNOMP - what was previously an ensemble of towns inhabited by shepherds - shepherds are now rare. The only shepherds (and stockbreeders as owners of the sheep) who remain in this area are two brothers from Fanlo. They are known because they are the last shepherds to have performed the traditional transhumance to the lowerlands. Nevertheless, one of them is already retired and the other is close to retirement age. Neither of them has descendants. The younger brother explains how the tradition of transhumance has lost its importance, and hence, its continuity:

Today, transhumance could not be bearable... (...) Now, people go in trucks like you say, for living, and doing, people went down walking, eh? (...) I have gone down walking many years, walking to Zaragoza, and going up, well (...) There are around 300 km. eh? To Zaragoza there are at least, but, well, that... Transports cost a lot of money. (...) Yet the future of the stockbreeding is complicated here and more in these areas. Put the sheep to one that can maintain them, without leaving, like MPST for example. There is another one here, that has some stables, that I have seen, he has them very well [maintained], well... withouth leaving, well. But the transhumance has no future either, no. The transport and going walking now is impossible. Also, many of the cattle trails have disappeared, yesterday they were saying this about Andalucia... well, there, that is another topic, but also, there are cattle trails that have been appropriated, well, some by farmers, others by constructors and like that, and they have disappeared. And he said, one said, he said, how can they tell me that I have robbed, if, he said, if the one that has robbed more is the state, because they have done in the cattle trails, they have done urbanizations. There are more than 100,000 hectares. And that, how is it called? They have given permission to the municipalities, of course. They have disappeared them [the cattle trails]. In Spain that is the topic, it is like this. Now yes, now they have it more controlled but now that there is not much cattle left, in many places. For example in La Solana Valley everything disappeared. ²⁰⁰

Transhumance, a third characteristic of the Pyrenean agropastoralism, is not only unnecessary due to the transportation and road systems having improved throughout the years; moreover, the cattle trails that are part of the landscape capital and heritage of these communities have been damaged and some erased. Apart from this traditional route of transhumance to the Ebro Valley, the other route that is still in use is the one that takes the cattle from Spain to France in the event called the "Paso a Francia", from Torla to Gavarnie.

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²⁰⁰ S2. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S2, p. 55)

The need to move cattle was based on the weather and soil conditions of the mountains, which was not equal for all the towns in the Area of socio-economic influence. Some have larger pastures in their proximity than others. The transhumance to the Ebro Valley was a custom from the Vio Valley, which included the Municipal Term of Fanlo and la Solana Valley. The tradition of the "Paso a Francia" belongs to the Broto Valley. The main difference between these two valleys is that the Vio Valley suffered from a larger migration during the 1960s-70s, also related to the building of the Janovas reservoir, which, as previously mentioned, displaced the population of la Solana Valley. Contrary to this, the Broto Valley had benefitted from the presence of the Ordesa National Park since the beginning of the 20th century, which immediately brought in tourism, investment, subsidies and development. In the words of experts and locals, this valley is the most dynamic of the region.

In the next extract, S1 explains how the movement of the cattle to France is related to the organization of the Broto Valley. Unlike the stockbreeders of the Vio Valley, who needed to rent land in the Ebro Valley, the stockbreeders of the Broto Valley have held land rights in France since the Middle Ages. This provides an explanation for the maintenance of the "Paso a Francia" tradition:

We graze here in Suaso de Linas, that here, there is a Commonwealth that is called, Commonwealth of Linas, Broto and Fragen. We graze these three towns, here in Suaso de Linas and we pass the major part of the summer in these towns, in these ports ["puertos"]. But like here they are lower and in the month of July and August it is warmer and so, well, we take them to the zone of Bujaruelo and even we passed to Gavarnie, that we have right to pastures there. And there are some pastures that are greener and more abundant than in this side of Spain, because normally, in France, it rains more, then, in the North aspect, there are very good pastures. And they pass every year from here to the Valley, they pass, at least 600 heads, or 800 heads of bovine. Formerly they went much more and sheep and everything. Now the sheep have decreased in the Valley, that is why, because it snows, in winter, they had to go to the lowland, then, there are no more shepherds to move there. Then, the ones that still are, they have them installed here, but these are very few already. In winter, and in summer they have them in these mountains, but already in the French part, sheep, we don't take them anymore. But cows, because there are many in the Valley, there's a lack of pasture, then we take them. I was last summer, we were there the months from July twenty something until the end of September, and very good, the pastures are very abundant and moreover, they welcome us perfectly, the French people, very good relations with that side. They even do a party the day of passing the cows. They called the party of the transhumance. And well, I think that for the moment we won't lose these rights that we have and we will continue going while there is stockbreeding in this

side, because we never know [if] it will evolve in a way that there is the need to decrease the stockbreeding, here we can stay in the side of Spain that it's much more comfortable, because in this side we have the mountains with roads that we can reach with cars and so. There, you have to walk a lot if you have to pass the border to the other side and if you want to go by car through France, well, it is very long, eh? There are 350 km. or something like that so we have to go... far... But well, today, we go every year and... well, I trust that we will continue going because the pastures are abundant and we are not interested in losing the right we have, of course.²⁰¹

Hence, the tradition of the "Paso a Francia" will persist because it is related to the dynamics of the Broto Valley, as well as the possession of land rights, i.e. the passing to France does not mean an investment. By contrast, for stockbreeders it is convenient to continue passing to France in order to renew their rights to that land.

Nevertheless, this tradition has been adapted to the changing circumstances and the present context. The cattle passing no longer involves ovine cattle, as it used to be, but rather consists in bovine cattle. While few stockbreeders pass²⁰², the number of cows remains constant at around 600 heads. Added to this, stockbreeders do not remain on the other side of the border, but only visit their cattle from time to time, using cars and trucks. Only during the day of the passing do people cross the border walking with the herd. Therefore, it could be said that it is not an "authentic" transhumant event, but only the movement of cattle from one mountain to the other.

Furthermore, this event is seen as a tourist event, particularly by French people, with people going to the border to receive the passers. With the passing of the years, increasingly more "foreigners" (people that are not linked to stockbreeding) attend the event. Moreover, some do not even do the crossing by foot, but rather they go by car to the French camp, where the welcome party is held.

Finally, the last characteristic of the Pyrenean agropastoralism that has been transformed is the exploitation of the forest. On the one hand, timbering became non-profitable at the same time as agriculture and other traditional activities of these mountains. On the other hand, state policies of reforestation of the mountains due to the reservoir projects directly influenced the use of the forest and other resources such as fields and meadows:

²⁰² In 2012, only four stockbreeders passed their cattles.

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²⁰¹ ST2. Author's translation from the transcript in Spanish. (IntLC_PNOMP_ST2, pp. 6-7)

But the impacts of the policy of great reservoirs was not limited to the environment to the concrete areas where the works were located. On the contrary, the constructions took an intense labour of forest repopulation in the high parts of every valley, in order to slow down the process of silting of the reservoirs. Due to the shape in which it took place, it prevented the exploitation of local resources, the repopulation supposed the definitive desertification of entire valleys, like the ones of Garcipollera and the Aurin river, la Solana de Burgase, the Serrablo, la Vall Manyanet, La Vall Fosca or la Vall Castellbo and, in fact, it constitute the final determining of the total depopulation of "the mountains between Ainza and Broto, the Western Pre-Pyrenees and the right bank of the Noguera Ribagorzana (Chauvelier (1990:101). ²⁰³

The woods have since colonized the mountains and are still in the process of colonization of the agropastoral habitat:

Moreover there people used to cut timber every two years, every five. They used to cut one part, they cleaned. Now you go to one of those forests and they are all pines, huge. Huge. Super old. And the young that are born next to them, they cannot grow because they don't have enough light, you know? For growing...²⁰⁴

The lack of cutting related to policies, as well as a lack of profit from timbering has generated the invasion of pine forests, shrubs and weeds to what once were fields, meadows and locally managed forests. Here, the conservation of the forest was also part of the tradition, according to SE:

The trees, there were trees that could not be touched, that they are there still... We did firewood but always the primitive trees, old, we always have a respect for them. ²⁰⁵

7.3.2.3 The change: loss

As explained in the previous section, the process of change of this landscape generates the habitat loss to the agropastoral communities. The complexity of the problem leading to this phenomenon involves the depopulation of the mountains, the opening of once subsistence-oriented communities to the market, the mechanization of agriculture and stockbreeding, the modernization of the mountains, the prioritization of urban-industrialized centers, and finally,

²⁰⁴ MPST. Author's translation from the transcript in Spanish. (IntLC_PNOMP_MPST, p. 5)

²⁰³ Author's translation from the original text in Spanish. (Herranz Loncán 2002, p.220)

²⁰⁵ SE, former shepherd from Bestue. Author's translation from the transcript in Spanish. (IntLC_PNOMP_MPST, p. 19)

the development of tourism. Working together, all such mechanisms (which have not been unique to these mountains) have resulted in the discontinuation of a tradition that is nevertheless intended to be conserved as part of the identity of the Pyrenees.

These mechanisms have transformed the cultural landscape of the towns surrounding the national park, as well as the majority of its population, from agropastoral towns to tourist services towns. In the words of MTS, the owner of a hotel and mayor of the town of Torla: "I mean, the evolution, in Torla, I imagine like in all the Pyrenees... where there were cows, now there are tourists." ²⁰⁶

None of the locals are positive about the changes in the landscape, nor in the possible extinction of stockbreeding. However, the common feeling is one of impotence towards the situation. There is a constant fear concerning what these changes might mean for the landscape:

Well, it has changed a lot also. A lot. Because before in the towns, in all the towns there was stockbreeding. And it is what I said before, this stockbreeding, one needed to take care of it every day, and go to the fields, because there were many, some plots in one neighbor and in the other and one needed to take care of that... Then you could not leave sheep in the "partera" of the neighbor... And these people went to the field and they cleaned the fields a lot, between the sheep, that were the whole day in the fields, and the shepherds themselves, they entertain themselves then when they found a brush, when they found shrubs in the field, people cut it, no? It was pleasant to see, all these fields clean without shrubs, no? But little by little, it has been abandoned, little by little, they have forbidden us to make clearings, cutting the timber, all those things you know...²⁰⁷

The "cleaning" of the fields was a daily practice that formed part of the stockbreeding activity. However, the declining performance of this activity is related to the reduced stockbreeding, as well as the regulations imposed by the administration of the forests and mountains. Hence, there are two reasons for the abandonment of the forests and mountains: the lack of profits from previous traditional activities linked to subsistence modes of life; and the regulations imposed upon the locals from central administrations.

The secondary succession of pine forests, shrubs and weeds in the meadows and fields generates discomfort among the inhabitants:

²⁰⁷ MPST. Author's translation from the transcript in Spanish. (IntLC_PNOMP_MPST, p. 5)

²⁰⁶ MTS, mayor of Torla. Author's translation from the transcript in Spanish. (IntLC_PNOMP_MTS, p. 5)

That we can see it day to day... that every day there is more vegetation and every day, as for us, we are worse. The vegetation, well, it invade us from everywhere, also there are many pieces of mountain that are good, well, they are being damaged by her.²⁰⁸

Vegetation is seen as an "enemy", especially to stockbreeders, because the landscape capital is being undertaken by it. Moreover, the possibility of reversing this process seems unlikely and the most generalized feeling towards the transformation of their habitat is that of fear. This contradicts the general understanding of the *conservation of nature*, which is generally equal to the conservation of vegetation, and one of its basic practices is reforestation. What could be understood as ecologically positive to green activists and some ecology experts means terror for local people:

Well, it's ok, but nature is not conserved, because it has to be taken care, it's like a garden, and here, it is not taken care, this is every day wilder! And what can't happen, or what has not happened maybe in 100 years could happen in 10 minutes, because this, wild as it is, the fire is dangerous... if something happens... And in fact, there are, there are, there are memories from ancestors that there have been already very serious fires because of that.²⁰⁹

Wilderness does not bring a positive vision to the local stockbreeders. Wilderness represents danger, and for the locals, nature would need to be domesticated, taken care of, and not left alone. Nature needs to be ordered through human practices that are based on the use of the resources found in this environment.

Memory plays an important role in this topic, as in the case of the Janovas reservoir story, the memories of fire maintained the exploitation of the forest as an important part of agropastoral life. Now, these memories feed the feeling of habitat loss in the local communities.

Yet, the habitat loss is clearly understood as a consequence of the change in the way of life. Once, there was a stable way of life that remained sustainable for centuries. This stability was maintained by the closure of the system. However, when the system was opened through the aforementioned mechanisms, the pillars to the stability of this way of life were undermined, bringing the complexity of the present situation.

²⁰⁹ Author's translation from the transcript in Spanish. (Ibid., p. 12)

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²⁰⁸ S1. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S1, p. 4)

The changes from the agropastoral habitat to the stockbreeding habitat are pointed out by S1, when asked about the new landscape:

Yes, but it goes with everything. It is related to everything, with new life habits and all that... Of course, because also it has changed to be meadows, the farms were also worked differently before. When it was cultivated, cereal, potatos and all, then it was something else. Because there was another management of the farms and everything. Also, there were much more people. And also, there was much more stockbreeding, than now, because there were sheep and goats and all that, well, the suckers recently fresh out, they meddle them. Yes. I mean, they eat them, that is what cleaned...²¹⁰

Locals are conscious of change as part of life. The agropastoral landscape (with fields of wheat and potato) is recognized as different from the stockbreeding landscape (with fields producing hay), although both have been the consequence of different landscape management systems that resulted in different habitats. Hence, the "new" habitat, mainly colonized by forests, responds to the present way of life, which implies a landscape management with no agriculture, less stockbreeding, no forestry and more tourist services.

In addition to the specific changes in what was once agropastoralism and its related practices, other aspects of the traditional local knowledge are also in the process of disappearance, and deserve to be mentioned. These aspects, which are not directly related to the landscape, also form part of the habitat of local communities.

On the one hand, there is a progressive disappearance of the language. In this region, people used to speak Aragonese, and also had different dialects depending on the Valley. For instance, the characteristic language of the Vio Valley was studied by Jean-Joseph Saroïhandy, a French philologist at the end of the 19th century, when this language was largely used in the valleys of Vio and Fanlo. Nevertheless, as explained before, this valley has suffered the major impact of depopulation, and hence the language is rarely used nowadays.

There are few dialects spread along both sides of the Pyrenees, in the border between France and Spain. For example, it is said that in the area where the "Paso a Francia" is still performed, people use to share a common language: Patues (Aragonese Benasquese). Now, identified with the Valley of Benasque (neighbor to the PNOMP), none of the people participating in the event used it any longer. What can be heard during the "Paso a Francia"

²¹⁰ Author's translation from the transcript in Spanish. (Ibid., p.13)

celebration are songs in Occitane (sung by French people). All these dialects of the Pyrenees are progressively disappearing.

Language is a fundamental part of a worldview and the inhabiting of a place. Hence, it is not rare to remark that, as habitats are being lost, languages accompany.

On the other hand, the religious content that is kept in the area of the PAO, for instance, has already been washed out from these mountains. In the past, these mountains were related to eremetic practices, Celtic cultures as well as the Way of St. James. For example, in the area of Tella, there is a path that connects three shrines from the Middle Ages. Moreover, Tella is known as the Witches' town, and, profiting from this, the park administration has established the Witch House there. In this small botanic museum, the endemic plants of the Pyrenees are presented, as well as the medicinal traditions based on their use. Nevertheless, when asking about these traditions and the witches, people would feel reluctant to associate their town with them. Even if most of the people are Catholics, there are not many special Catholic festivities celebrated, apart from the "Romerias". These are processions celebrated on specific dates: May 1st, September 9th and December 15th. On these dates, locals pray for the coming of rain and for it not to be destructive. These are performed in the shrine of Saint Urbez in the Anisclo canyon (Figure 27). Clearly, these festivities are also connected to the agropastoral calendar, that however, has lost its sense due to the loss of agricultural practices.



Figure 27: Shrine of Saint Urbez, carved and built inside a rock in the Anisclo canyon, inside the PNOMP. August 2012. ©Author

7.4 Systems of re-appropriation

In Chapter 6, I explained how the state has appropriated these cultural landscapes through processes of territorialization and patriomonialization. In the previous section, I explained how local inhabitants perceive their disappropriated landscapes and how they persist in their traditions, adapt them or decline from continuing them.

I have found two ways in which locals to these heritage sites have generated reappropriation methods based on the tools given by the state. In the case of the PAO, this reappropriation is generated through the adaptation of the "Inca discourse" to their own life experience and way of life. In the case of the PNOMP, it is through the work as park rangers that locals feel identified to their place; moreover, they are empowered by their local knowledge. Furthermore, both strategies are related to tourism, the main activity promoted by the state, as an alternative for the development of these rural areas.

7.4.1 Inca tales

Local people, precisely, indigenous peasants inhabiting the PAO have been empowered through the discourse about their Inca ancestry. They justify their closeness to nature and a harmonious way of living through the idea that their practices are ancestral and follow the traditional knowledge from the Inca.

Inca culture is seen and officially recognized as the highest civilizational achievement in the Andes mountains. Even if accounts of the Incas have been brought by foreigners to the land, the archaeological heritage left by them shows a remarkable mastery of stone and building techniques, anti-seismic strategies, agricultural technology and territorial management. Largely studied by scholars from all over the world, these are seen as examples of how to live in harmony in the Andean environment. The recognition of these achievements is affirmed by the high protection and priority given to the Inca remains of this region by the state. As analyzed in Chapter 6, laws and management plans give more importance to the Inca past than the present development of the communities inhabiting the PAO. Hence, the locals need to interrelate with this discourse in order to visibilize their needs.

An example of how the Inca discourse is being adapted to develop tourist alternatives is the case of the Association of Living Incas. I asked the President of the Association why they decided to name it as they did: Because, because of our culture itself, in comparison to others, we are the ones closer to the Incas, no? Because of the wisdom, because of what you see. The textiles, the organic agriculture, and some other knowledge.²¹¹

The re-affirmation of the local knowledge and the Andean culture is part of the work of several NGOs that intend to recover the Andean values against the Western urban values taught in the schools of the rural areas. The project of the Association of Living Incas has been developed together by students of the Patacancha high school and teachers, workers of the Hope Fundation that support the students and try to help them recover the memories of their ancestors, their traditions and identify the ongoing traditions. This is how members of the Association recognize the value of their original textiles, their agricultural methods ("organic") that are not industrialized and resist the entrance of monoculture and fertilizers. Nonetheless, the work of the Association is connected to the safeguarding of the local knowledge that is also appreciated by tourists. Their initial project involves enhancing their houses in order to receive tourists, in a mode of community rural tourism. They have also created different routes, alternative to the Fortress, in the highlands in order to promote the tourist development in their communities. They take tourists to the lakes, to visit their houses, teaching them about medicinal plants and the Andean worldview. They have learnt that these experiences interest tourists, who are impressed by "nature" and "tradition".

Furthermore, peasants have constantly attended capacity-building programs by NGOs such as Arariwa and ECOAN, where they are taught that they should value their own local knowledge about biodiversity, soil conservation, as well as their local resources (native forests and seeds). In this sense, even if they have to insert their products in the market, they are conscious of the value of maintaining traditional techniques of production:

But sometimes we think that the enhancement of animals, alpacas, also of agriculture, also, we work only, sometimes they work these fertilizers, right? in the valley floor, fertilizers, products, also bigger potatos, bigger olluco, bigger maize, right? But here, we work only with natural fertilizer, manure from farms. So we work, then, we harvest small potatos, but like this, very small, better potato, better, floury potatos. That is 100% vitamin, right? Then, for those reasons, I, wanna keep working, maintaining, we also raise animals, not so much, sometimes we raise sometimes we raise, sometimes they put fattenings, right? Injections... right? Then, we do not. We are breeding naturally with grass only we are breeding. Then that is why we want to maintain here a

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²¹¹ FST4. Author's translation from the transcript in Spanish. (IntLC_PAO_FST4, p. 5)

little bit because, sometimes, when these hormones that, they do harm to our body, sometimes, illness, right? That is why we want to think like this, right? but we keep working, we keep working. ²¹²

This generates a resistance from the highlanders to modernization in aspects that they find critical for health and sustainability of their resources. People in the valley floor are also conscious of the harm to the land generated by artificial fertilizers; however, the problem is that they have more pressure to use these modern techniques in order to be accepted in the market.

As a part of the modernization project, peasant communities have learnt in school to give more value to urban life and reject their rural origins and way of life. Furthermore, there has been an evolutionary idea of the primacy of urban Western culture, and the city as a symbol of progress. The Patacancha watershed and Ollantaytambo district in general are highly disturbed areas due to their integration to the tourist network. For years, the aforementioned NGOs have been dedicated to providing alternative education to local people against the hegemonic discourse of development. They have intended to give value to their own local knowledge and way of life. In the Patacancha watershed, Arariwa has raised awareness concerning the value of traditional methods of agriculture and stockbreeding in the context of the highlands, where the implementation of mechanized agriculture was clearly not possible. For this, they have been researching and working on alternative and local development strategies with the peasants through the recovery of their traditional practices for more than 30 years. ECOAN has introduced the idea of conservation of nature in these communities, through the capacity building in the understanding of climate change, general ecological knowledge and the importance of native species to their sustainability. While we could not affirm that this knowledge was not already developed by the communities themselves, the current way of structuring the knowledge is clearly influenced by the workshops and projects developed by these NGOs.

At present, a non-established amount of NGOs work in the Ollantaytambo district, although the majority has no official relations with the Municipality, and hence their impact cannot be monitored. The influence of the NGOs in the local communities also play an important role in the way in which they understand their heritage; therefore, it would be important to further study their projects and effects in the PAO.

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²¹² CFS3. Author's translation from the transcript in Spanish. (IntLC_PAO_CFS3, p. 7)

7.4.2 Park rangers

When visiting the PNOMP, one can find that most of the park rangers are local inhabitants of the towns of the Area of socio-economic influence. Moreover, the majority of them are related to stockbreeding, not necessarily because they are themselves stockbreeders but their parents or family members.

The valleys of the PNOMP that are open to the public use with restrictions in the reserve areas were formerly of common passage for the locals. Now, locals are employed as guards in the park, which is how they have regained their access to the site, and in some way, they regain the power to manage it.

Park rangers feel identified with the site and consider important the *conservation of nature*. Moreover, they are aware that stockbreeding is part of the ecosystem and vital to the conservation of the landscape "as they know it". This is part of the education, the research developed and awareness raising undertaken in this area by the administration of park, scholars and experts related to the sites and environmental activists groups. The Pyrenean Institute of Ecology has played an essential role in research and raising awareness in this area. The vegetation, ecological processes, and especially the relationship between biodiversity conservation and stockbreeding practices in the PNOMP, as part of their research objective, have been largely studied. Moreover, the PNOMP, as the second national park in Spain, is pioneer in the *conservation of nature* in the country, which the locals from that area know and feel proud of.

The possibility of working in the park is an alternative for youth and locals in general to halt the depopulation of the region. The current alternatives to stockbreeding are concentrated in the tourism sector and the park. In some cases, locals manage to participate in the three activities, depending on the size of their families.

However, the system of positions in the park is complex. There are the permanent positions as civil servants ("funcionarios") and temporary seasonal posts. The park contracts a company that provides them with temporary personnel, who work for three to five months as guards, especially in the areas frequented by tourists. On the other hand, the civil servants secure fixed positions as APNs (Agente Protector de la Naturaleza – Agent Protector of Nature). The positions are gained through national competitions based on exams and educational background, and are offered to people from any region in Spain.

This generates a problem for the locals, who in many cases do not have a higher education. Hence, the majority can only apply for the temporary positions. This laboral inequality is criticized by locals:

The ones who work in the park, they are not like they should be. I mean, if they employ 8 people, wherever they come from, they should be 8 permanent positions, fixed and stable. But, well, they are from this town or from the other town, but families that could have their stability.²¹³

With the generalized crisis in Spain, this perception could perhaps change, given that it becomes increasingly harder to retain permanent positions in any kind of job. Nonetheless, the positions for locals as guards and APNs have been an instrument of their empowerment *vis à vis* tourists and foreigners. They have gained respect, access, knowledge and responsibility towards their environment and their site.

The topic of the re-appropriation of the site is relevant in the discussion of local communities' involvement in the conservation of heritage. In the case of the PAO and the Inca discourse, it means that these Andean peasant communities are conscious of their ICH and can regenerate it. Nevertheless, as we have seen throughout this chapter, the economic and protection systems work against the regeneration of the local knowledge by promoting the neoliberalization of the market and defining regulations in the use and access to sites. The involvement of locals through the guardianship is an interesting tool, since it commits them to the *conservation of nature*, giving them responsibility towards their site. Furthermore, in the case of the Pyrenees, it serves as an incentive for young people to remain in their rural villages, developing these depressed areas in economic terms.

It is important to note that both systems of re-appropriation are associated with the development of tourism. Public use is the essence for the need of guards in the park, and the Inca discourse can be promoted by visitors' acceptance, admiration and interest. The conservation of traditions becomes economically viable through its exploitation as tourist attractions. Nevertheless, it can be accompanied by the folklorization of traditions and commodification of the landscapes, taking away the essence of the inhabiting traditions of the sites as *ecumenes*.

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²¹³ S1. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S1, p. 11)

7.5 Synthesis: the conservation of the landscape as habitat

Despite showing different population characteristics (see Table 3), the agropastoral communities of both mountain ranges have undergone processes of adaptation to the changing conditions that were mainly triggered by structural economic changes in both countries. Faced at different points in time, these changes are part of a larger transformation from tradition to modernity, from rural to urban ways of life. In this context of change, the agropastoral tradition, which represents the engine of the persistence of the cultural landscapes valued by experts, is struggling to survive.

		PAO	PNOMP
		Archaeological Park	National Park
POPULATION	Dynamics	Constant growth	Depopulation phenomenon
	Location	Inside the Park	Outside the Park
	Distribution	One urban core	Several small towns
	Occupation	Agriculture, Stockbreeding,	Stockbreeding, Tourism
		Tourism	
	Organization	Peasant communities	Towns, "casas"
		Associations	Associations

Table 3: Comparative table of the populations in the archaeological park and the national park.

First, the inhabitants of the places, and specifically the agropastoralists, do not perceive the landscape as such. This is to say that the requirement for "seeing landscape", which is based on distancing from the environment, does not exist. Accordingly, there is no aesthetic appreciation but rather a functional appreciation. If the aesthetic component is mentioned, it is related to the definition of landscape brought in by the visitor's perspective. Second, "landscape" can be interpreted as a habitat by the inhabitants, because this definition implies the interrelationships between use and resources. It is the use of the resources that transforms a specific portion of the environment into a habitat. Therefore, the topic of the conservation of landscape can only have meaning in their context, while this landscape has viability in economic terms. Landscape as aesthetically valued does not represent the same value for the communities that inhabit the heritage sites. It has sense when it is worked and being transformed into a resource, or landscape capital. Third, the complexity of how people identify themselves with their landscapes is fundamental and refers to an intangible dimension that is not explained only by traditions but also refers to a way to coexist with and in the environment. All such aspects appear when locals are asked about their habitat change.

In the case of the peasants of the PAO, the past seemed more difficult than the present due to the inherited colonial system, where the autonomy and integrity of indigenous peoples were not recognized. The current situation appears more positive in terms of their affirmation and future development. It is noticeable that a higher degree of conservation of landscape and traditions is shown in the highlands in contrast to the valley floor. This is clearly explained by the accessibility and dependence on the altitude/slope for the penetration of modernization.

		PAO Archaeological Park	PNOMP
LANDSCAPE	Understanding	Archaeological Park - Habitat - Everything - Altitude - Openness - Vision of tourists - Identity - Inheritance	National Park - Habitat - "Monte" (Mountain and pastures) - Work - Identity - Inheritance - terraces, pastures, mountains,
		- Agricultural fields, terraces, pastures, mountains, lakes, forests, hamlets, town	villages - Forests
	Perception of change	Habitat fragmentation Need of change (urbanization)	- Habitat loss - Forest invasion - Fear of fire
VALUES		Landscape capital Fields, terraces, pastures Urban and infrastructure	- Landscape capital Fields, terraces, pastures - Clean "monte"
		development - Economical use - Symbolic	- Economical use
		- Ayni	

Table 4: Comparative table of the understanding and values of "landscape as habitat" in the archaeological park and the national park.

By contrast, in the case of the stockbreeders of the PNOMP, the past is seen with nostalgia; moreover, due to the aging of the stockbreeding population, there is greater consciousness among them of their past, their history and the changes in their cultural landscape. Nevertheless, they consider as well that the existing conditions for the life in the mountains are more comfortable.

In the PAO, identification with the *conservation of the past* has not been developed in relation to the main object of conservation, namely the archaeological remains. Nonetheless, identification with the Incas exists in the *Wayruro* nation, which feels closer to their ancestors and their practices. This has been related to the development of tourism and together with the capacity building from diverse NGOs, local communities are developing strategies, where the connection between identity affirmation and human and economic development is a pillar.

In the case of the PNOMP, the identification to their cultural landscape and the agropastoral mountain culture has not been undermined at the level found in the Andean

mountains. Nevertheless, for the stockbreeders of the Area of socio-economic influence that are the remnants of Pyrenean agropastoralism, their former way of life is now considered unfeasible, and the transformation of their habitat is seen with a mixture of fear (of fire) and resignation ("we cannot do anything about it", they tend to say).

Finally, tourism has become a promoter for the re-appropriation of the sites by the communities, and although mountain people remain an endangered species due to the economic change, alternatives seem possible for their persistence through adaptation. The habitat fragmentation in the PAO will probably continue to diminish the cultivated area, affecting the viability of agriculture as a means of subsistence for the younger generations of peasants. Meanwhile, the habitat loss in the PNOMP is clearly eliminating the possibilities for stockbreeding to persist. The phenomena that represent the landscape capital loss for both local communities (PAO and PNOMP) are linked to the loss of traditions. The traditional knowledge of people in this region is becoming a scarce good. While such scarcity makes it valuable, this is not the case from an economic perspective. Moreover, this is the main problem of the conservation of heritage. In the current socio-economic context, if an activity that requires effort and dedication does not represent a direct economic benefit to the individual or group carrying it out, it will not be considered viable.

	PAO	PNOMP
Elements	Practices	Practices
Agriculture	- Valley floor: monoculture, maize	- Monoculture of hay in fields and
	- Highlands: diversity, potato, tubers, hay,	terraces
	alfalfa	- Diversity in small orchards
Stockbreeding	Extensive	Extensive/ Semi-stabulated
Ranchs	Estancia	Borda
Cattle	Permanent location	Seasonal location
	alpaca, llama, sheep, cow	cow, sheep, goat
Pastures	Communal	Communal and private
Forests	- Reforestation of native species	
	- Timbering of exotic species	
Construction	- Informal	- Regulated
Tourism	- Valley floor: construction of restaurants	- Rural tourism
	and hotels, remodelation of houses	- Remodelation of houses
	- Highlands: homestay tourism,	
	construction of small infrastructure	
ICH	- Mountains, river, lakes worshipping	- Maintenance of transhumance events:
	- Maintenance of "ayni" and "faenas"	"Paso a Francia", "día de la suelta"
	- Valley floor: maintenance of traditional	- Maintenance of towns festivals ("fiestas
	festivities	de los pueblos")
	- Highlands: cessation of traditional	
	festivities.	

Table 5: Landscape management in the "landscape as habitat" in the archaeological park and the national park.

8 Landscape as picture

Where there were cows, now there are tourists.²¹⁴

This statement reflects the change of the landscape in heritage sites such as the PNOMP. The traditional vocation of rural towns, especially in European mountains, is turning from agriculture and stockbreeding into second houses and tourist towns (Perlik 2011). Global tourism is promoted as a tool for development and economic growth in places with historical and natural value. In the case of the towns of Torla, the gate to the Ordesa Valley, as well as Ollantaytambo town, the core of the PAO, tourism has become an instrument to activate the economy and retain the young population in rural areas. However, in order to become tourist towns, Torla and Ollantaytambo have been adapted throughout the years.

In Torla, the absence of cattle circulating obeys a Municipal directive that ordered to take all the "bordas" (old stables) out of towns and re-install them at a minimum distance (500 m.). The movement of the bordas represents the "sterilization" of the landscape. Enjoying the landscape as a picture means that the landscape is sterilized and odorless.

When the *bordas* were inside the town, cattle used to pass freely, bringing their noises and leaving their dirtiness. Furthermore, manure was collected in *bordas* and hence the smell they brought to the place was not appreciated by tourists. Even if they are interested in experiencing rural areas and natural settings, tourists do not enjoy the implications. In the words of MST, mayor of Torla:

Even if it seems very bohemian to have the cows down there, in the ground floor... before, you know, in the houses, the mules were in the ground floor in order to warm the house... This has no sense anymore. Now, I give you an example. Eh... when people do the trashumance in summer, from the low ports to the high ports, eh... there are people that see it as a necessity, that have the capacity to carry it out. But some others, on the internet they make reference to the fact that they can't sleep... I mean the annoyances that stockbreeding produces at the level of noise and smells and so on, they are not compatible with tourism... ²¹⁵

Apparently, tourism and stockbreeding are not compatible. When tourism becomes the alternative for economic development in rural towns, stockbreeding needs to be sacrificed.

²¹⁵ Author's translation from the Spanish transcript. (Ibid., p. 25)

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²¹⁴ MTS. Author's translation from the transcript in Spanish. (IntLC_PNOMP_MTS, p.5)

In Ollantaytambo, the majority of houses have barnyards. Cattle are increasingly less visible, replaced by tourist buses and taxis. There is currently no regulation concerning the movement of stables outside the town. However, this has become an organic process, whereby inhabitants are transforming their houses into hotels or running guesthouses. Consequently, the space for cattle is being reduced and moved to higher areas where they have agricultural fields, or in some cases, eliminated. Nevertheless, tourists are still forced to share the space with domestic animals (hens, pigs, guinea pigs, roosters, cats and dogs).

Managed under two different systems of protection, these sites share the 'invasion' of global tourism, receiving approximately one million tourists each year²¹⁶. Nonetheless, their tourist practices differ. In the PNOMP, the visits are markedly seasonal, while in the PAO access is possible throughout the whole year. The high season in the PNOMP is the summer, for only two months (July and August) due to weather conditions; in winter, the Pyrenees receive strong snowfall and there are high risks of landslides, with visits turning dangerous. In the PAO, the high season is from June to September. The Andes are characterized by two main seasons: the rainy season and the dry season. The climate does not represent a constraint for visiting the place, even though there are risks of flooding and landslides during the rainy season.

Tourism has become the main economic activity in both areas. Nevertheless, people in the PAO maintain a diversity of activities (agriculture, stockbreeding and tourism). By contrast, this is not common in the PNOMP, where former stockbreeders have abandoned their original activity in order to develop tourist business. Most people who continue stockbreeding have not developed tourist business.

The visitors' practices refer to the preference of places and the activities performed therein. In general, these practices are suggested by the state and tourist agencies and define access, tours and guidance to the protected areas. The visitors in the PNOMP have different motivations for their visit than those visiting the PAO, with the main difference that the visitors in the PNOMP are generally trekkers. This relates to the distinction between 'nature' tourism and cultural tourism: the former is characterized by the will to experience areas where apparently²¹⁷ humans have not altered the environment; whereas in the case of cultural tourism, the focus is placed on traveling to the past (e.g. archaeological sites, historic urban centers, etc.).

²¹⁷ I say "apparently" because generally, all the places have been affected by human inhabitation, sometimes prehistoric, or pre-modern hence the difficulty for a non-expert eye to detect former human activities.

²¹⁶ 600,000 visitors enter to the Ordesa Valley every year. Two million visitors arrive to Machu Picchu every year, most of them pass through Ollantaytambo train station, and at least half of them, visit the archaeological site in the PAO (the Fortress).

Visitors play a role in heritage sites and have an impact on the landscape. Nevertheless, the emphasis of this thesis is placed on the state and local communities that have a direct participation in landscape management. This chapter serves as a complementary perspective to these visions studied in Chapter 6 and Chapter 7.

In this chapter, I explain how the understanding of the landscape from the visitors' perspective is informed by approaches [1] and [5]. The landscape of visitors refers to the original aesthetic meaning of landscape, related to a cultural frame used to observe the environment. First, I explain the landscape understood as a picture, referring to the practice of going out from one's *ecumene* to an *eremos*, i.e. other people's *ecumene*. Moreover, I explain how this appreciation of the landscape as a picture is accompanied by processes of the musealization, folklorization and commodification of traditional places and customs. Second, I elaborate on the images generated by the visitors to these places, as well as how they contrast with the locals' understanding. Third, I describe how tourists look for an 'authentic' experience based on an idea of time travel, and how these longings turn the places and their traditions into folklore. Finally, I explain how different kinds of visitors develop different practices, which also influence the way in which the state "sells" the site and locals "sell" their traditions, thus commodifying their heritage.

8.1 Landscape as picture

Berque argues that the landscape was born in China during the 5th century, when the attitude of detachment from the environment and perception as something external and as a representation was first documented (Berque 2008; Berque 2010). He asserts that "a number of authors effectively make of contemplation a condition without the one we could not look at the environment as landscape."²¹⁸

Berque explains that this perception of the environment is found in the poems and writings of the nobles who had estates in the rural areas, outside towns, and spent long periods enjoying the contemplation of 'nature' In China there was a clear distinction between town and country, reflected in the division made with walls that clearly separated the political and economic center from the surrounding productive land. Elsewhere was the country that, from the point of view of nobles, was perceived as nature. From this perspective, the work of peasants who 'ordered nature' through their intervention in the landscape was invisibilized

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²¹⁸ Author's translation from the text in French. (Berque 2010, p.94)

²¹⁹ Berque, Augustin (2010). "Histoire de l'habitat idéal : De l'Orient vers l'Occident". Editions du Félin, Paris.

(Berque 2010). This practice can still be found in modern tourism as a search to leave one's *ecumene* in order to experience an *eremos*. The focus is placed on the contemplation of beautiful landscapes and 'domesticated nature', while invisibilizing the human work that brings these landscapes into existence.

The *eremos* is opposite to *ecumene*. Etymologically, in Greek *eremos* means desert, uninhabited land. In this context, it is used as the place that is foreign, that attracts and that evokes curiosity, while not being the familiar place or "the place of our being" (Berque 1996). This eremetic practice is a reference for modern tourism, especially that one practiced when climbing mountains. This same perception of the 5th century China and the 16th century Europe, where urban visitors see rural areas as 'nature', is being reproduced nowadays. Although the peasants' work is not invisibilized, it is seen as picturesque. In the words of V4 about the PAO and the Inca Sacred Valley:

I enjoyed the farms, and I enjoyed seeing the... probably, the way, originally houses and stuff people were living in and they build them... So I enjoyed seeing that... 220

"Enjoy seeing" refers to the act of contemplation and implies the idea of distancing. Visitors appreciate the rural customs of the other: "Seeing it, but living here, not any more" The landscape, the people and their practices become pictures, part of the stage of their trip to rural life, which results as the *eremos* of urbans dwellers.

In the case of these mountain sites, the urban/rural dichotomy plays an important role in their appreciation. Even if this dichotomy is blurred through the process of urbanization, differences can still be felt, not only due to the size of the rural towns, but also because of their different pace. People living in the cities develop a positive feeling towards peasant environments, albeit only as a temporary escape from the acceleration of urbanity. In this sense, these cultural landscapes become shots of remnants of the past.

Visitors refer and approach landscape from an aesthetical perspective referred to approach [1]. The practice of landscape painting brought about a new perception of the environment in Europe, which influenced the whole world. This attitude of distancing in order to represent is the product of what I already refer to in Chapter 3 as 'the retreat of the modern

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²²⁰ (IntVis PAO V1V2V3V4V5V6, p. 29).

V7 feelings about the rural life in Torla in the PNOMP. Author's translation from the transcript in Spanish. (IntVis PNOMP V7V8V9V10, p. 4).

subject', conceptualized by Berque. The detachment of humans from the environment in the context of tourism can be associated to the idea of the museum.

Museums illustrate the attitude of objectification of the world: the museum display assigns a new meaning to objects and generates a distance between the observer and what is observed. This attitude is reproduced by visitors who "musealize" landscapes when visiting the PNOMP and the PAO.

Nonetheless, the definition of landscape given by V1 in the PAO shows the intention of overcoming this tourist gaze in order to feel "part of the landscape":

I think in some ways maybe you could think about it as an ecosystem, in that it's made up of a lot of parts, and lot of not just parts but also, what is this? Not activities, but, like processes... that create a place, so there is the scene that is visual, and then the processes which are included, climate, and aspect, and maybe things we don't understand, you know, as humans... You know, the Chinese talk about Fengshui, many cultures have these different ideas about what else is going on. I think that it's worth appreciating the power of just be on the scene, just be on the function of the landscape... 'cause, as humans, we think in terms of the landscape being something for us to use, but it's beyond that... ²²²

This definition attempts to integrate different approaches. There is a general idea of landscape bringing together understandings from the natural sciences with those from the social sciences and humanities. The complexity of landscape is expressed in this testimony. On the one hand, landscape is explained as the ecosystems and processes that refer to approach [3]. Landscape is a physical reality that combines geographical conditions such as climate and aspect. This can also be associated with approach [2]. However, this physical existence of the landscape sums to its spiritual existence referring to approach [4], whereby landscape appears as a subjective experience. Accordingly, the idea of "creating a place" through all the processes existing in physical and other dimensions, "maybe things we don't understand as humans", comes from the phenomenological approach within which landscape is an experience of the space and changes according to the meanings assign by observers. The "power of being on the scene" expresses the process of entering into what is observed as external and alien, feeling that empowers the observer. Connected to the idea of a "scene that is visual", from approach [1] landscape results as the environment produced by a variety of forces (physical and "beyond

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²²² (IntVis PAO V1V2V3V4V5V6, p. 12).

that"), which the observer (in this case, the visitor) puts a frame and plays in between being on the scene and seeing the scene.

The ideas of "being on the scene" and "being on the function of the landscape" reflect the search for "authenticity" in the tourist experience explained by MacCannell²²³, namely the search of feeling "like a local" whilst not being from the place. This leads to the need to enter into the "back regions", to discover what is original and to be part of the world that is being visited. To illustrate this idea, V3, a visitor in the PAO, explains his visit to the peasant community of Huillog:

Huilloq? I... It's cool, it's more original, like old times village, yeah, exactly... But it's really great to get out from the touristic area, I like that, to get out from the touristic areas and to see the culture of the country. So I really really enjoyed it. And then yesterday their son, eleven years old took me up like a half a day walking up in the mountains to a little *laguna*, a lake. ²²⁴

For such a visitor, "to get out from the touristic area" represents an accomplishment, through which one could really see "the culture of the country". The further from the "tourist setting", the closer one can get to the "back region". As remarked by MacCannell:

Touristic consciousness is motivated by its desire for authentic experiences, and the tourist may believe that he is moving in this direction, but often it is very difficult to tell for sure if the experience is authentic in fact. (MacCannell 1973, p.597)

Even when arriving at an apparently remote area, locals are already prepared for offering visitors the experience they are looking for. This is illustrated by the trip to the lake, which, as mentioned in the previous section, "is what tourists want more", according to the *comuneros* (cf. p. 187). The visit to the lake has been already determined as a tourist route when visitors arrive at the localities of Huilloq, Patacancha or Rumira Sondormayo. Each community has a lake where they take visitors. Nevertheless, when asked if they frequent these lakes, they affirm that they only visit those areas accompanying tourists. In contrast to the visitor experience, T1, a local of Ollantaytambo, explains how Huilloq has changed due to the development of tourism, with the "authenticity" of these peasant villages being lost:

²²⁴ (IntVis_PAO_V1V2V3V4V5V6, p. 21).

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²²³ MacCannel, Dean. (1973). "Staged Authenticity: Arrangements of Social Space in Tourist Settings". American Journal of Sociology, 79(3), pp.589–603.

I mean, if you went to Huilloq, Huilloq in 1987 was a village, I don't know, with a dozen of little houses, all in stone and hay roofs. And, there was nothing else, there was a small school, and that's it. And there are pictures, no? The photographic register is there. And now you go, and there are, I don't know, a hundred houses all in adobe and tiles roofs, or calamina, no? And people went there because it was... If you mix it with tourism it is an irony, no? Because tourists at the beginning come because that's the attraction, no? It has the cultural interest. But they generate the transformation of this same interest. So local people are not aware that the people that are coming here, are coming precisely because of the things they are destroying for giving them the service they want. It's like, I don't know... it's a big irony.²²⁵

The same place that is highly appreciated by a visitor is seen as damaged and in process of alienation from a local's perspective. This shows how both perceptions and understandings of heritage, landscape and conservation are distanced.

Similar contrasts are visible in the PNOMP, illustrated by the perception of locals about mountaineers who visited the Spanish Pyrenees at the beginning of last century:

(M: And what do the highlanders think about these people [mountaineers of the beginning of the 20th century] that come to experience [the mountains]?) SHT: Well, I don't know what they think about it now, but in that time [beginning of the 20th century] is that, well, the people of the villages did not climb those peaks [Mount Perdu and others] because they did not lose anything there, you understand me? The people from before [that time] only did things for something... they did not do it for... for nothing... They did go somewhere because they had to, no...? Then, climbing those peaks there... there's no house, there's nothing, what would you climb there for? ²²⁶

Mountaineers were led by locals to the peaks. These foreign explorers were willing to reach the mountain peaks in order to consecrate themselves as the first to climb them, and in some cases in order to conduct scientific research (the naturalists). Locals knew the best ways to traverse those paths even if they "did not lose anything there" and rarely went there. This reflects the difference in the respective approach of the visitors and locals: whereas locals are in "the function of the landscape", visitors contemplate it.

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²²⁵ Author's transaation from the transcript in Spanish. (IntLC_PAO_T1, p.3)

Author's translation from the transcript in Spanish. (IntLC_PNOMP_SHT, p.64)

8.2 Musealization of the landscape

Three images have been found the most significant for the visitors when appreciating these landscapes: those of the mountain, the forest and the ruins. However, based on an "aesthetic distancing" (Bourdieu 1984), these "romantic" images for visitors represent complexities for the locals, for whom the sites are their habitats.

8.2.1 The image of the mountain

Visitors to the PNOMP and the PAO are searching for the image of the mountain. As with mountaineers in the 19th and 20th centuries, the practice of visiting mountains was an escape from the urban area, an escape from their ecumene, in some cases based on a scientific interest as explorers of "unreached lands". Now, in the context of these sites, three feelings towards mountains have been found, namely those of difference, magic, and contrast.

The first refers to the admiration of the differences in a similar place to one's own ecumene, as illustrated by the admiration of V2 in the PAO:

And then there's also, you look up to the mountains and, one of the strata lines is, is built, by people, and that's, that's, we have mountains at home, but... not quite this big, but not with ruins. 227

Visitors are not impressed by the mountains themselves, as physical realities, because they "have mountains at home", rather; their salient feature is the cultural landscape generated through the intervention of humans in that environment, marking the difference from the "mountains back home".

The feeling of magic refers to the need for an experience of sublimation. V3 in the PAO explained why the feature he liked the most was the mountains:

When you get, well it's, when you get up in the mountains like real high, and then I don't know, it's, it feels like kind of magical, somehow... 228

Mountaineering, initiated by scientific explorers, is not the only practice exercised in the mountains, with pilgrimage having also been connected to mountains as spiritual centers.

²²⁷ (IntVis_PAO_V1V2V3V4V5V6, p. 2) ²²⁸ (Ibid., p. 22).

Eremite practices have developed in the case of both the Pyrenees and the Andes. The mountain has the function of an ascending pilgrimage and balcony. The idea of magic, being in the top of a mountain, closer to the sky, connects people to "what we don't understand as humans" (cf. p. 232), although it is felt in the landscape as the *comunero* CFS3 defined it (cf. p. 192):

Landscape is when there are, higher, going, then more landscape, wider, then, wider, then more air, also, no?

Difficult to explain in scientific terms yet described by the arts (literature and painting), the feelings of the "wider and higher" landscape are one of the main sources of attraction to visitors in the mountains.

Finally, the feeling of contrast refers to the admiration of what contrasts to one's own *ecumene*. V9 comments on this opposition in the PNOMP in relation to his homeland, the Netherlands:

And yeah, most, we mostly go South because of the weather... temperature... and another nature.... and the mountains. It's overwhelming. It's so beautiful. We have flat country. Very flat, and this is rough. ²²⁹

However, for the local population, the mountain, their *ecumene*, is their space of being, their habitat. They work and live in the mountain environment. Each mountain is named, recognized and represents a collection of memories for them. The 'authentic experience' of the mountains as lived by locals differs from what visitors seek to experience as "authentic", namely the "difference", "magic" and "contrast". For locals, "authentic" is work and habitat. However, the transfer of this experience is impossible: being part of the landscape means working on it, not trekking or photographing it.

8.2.2 The image of the forest

In the PNOMP, where nature is the attraction, the most important characteristic is the forest. However, the forest has two very opposite impressions for the locals and visitors. For visitors, the forest represents aesthetic pleasure, "wilderness". On the other hand, for the locals, forest is synonymous with fire and fear. Moreover, the increasing presence of the forest represents 'dirtiness' and a lack of work in the fields. In the following fragment, MPST

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²²⁹ (IntVis PNOMP V7V8V9V10, p. 8-11).

summarizes the perception of stockbreeders of the villages surrounding the park towards the forest:

You see all those terraces? If there would still be cattle and people in the town, this would be clean, eh? There's no people, it is becoming worse, worse, and one day that there would be a fire, really, everything will burn, everything the same day... Because there's no way, how would you enter there, inside that forest if there is a fire? It's impossible... ²³⁰

For locals, the *conservation of nature* means the conservation of the fields and the continuous care of the forest. Visitors do not grasp the true feeling of locals regarding the forest and the causes of landscape abandonment, because for them, this abandonment represents the nature that they are looking for. The image of the forest represents nature. The definition of nature is woods, whether or not they are being harvested. The wilder, the better, and they would not perceive that this wilderness is negatively appreciated by locals who see it as danger, a lack of care and maintenance. MTS explains that it is impossible for a visitor to understand what a local sees in the landscape. Its distancing makes the visitor perceive the forest as positive and worthy of conserving, because they do not have a memory of the place:

No man, I think that for the one who comes from outside and knows it like it is, well, they like it as it is. Currently not, there could be some that have some knowledge through pictures of how it was, but, in general, the one who visits, well, he/she admires what there is. It is very difficult that a person who comes here as a tourist, perceive these singularities that are very local. I, for example, I know where the fields are, and, where is forest now, but the one who does not, the one who is not from here, well, he/she can't perceive it... Moreover, I think that they like there's a lot of forest. I would like for example that there would be belts around of one hundred meters, two hundred meters of fields. Fire is a very dangerous element and sometimes the forest needs to be cut for being able to conserve.²³¹

Hence, what might seem conserved for the visitors – the forests not being harvested –is badly conserved, for the locals because there is no exploitation, no human work. Again, in this sense, the approach of locals to the landscape is labour, yet that of the tourists is enjoyment and pleasure. What for visitors seems to have been conserved as nature, i.e. the process of forestation in the Pyrenees, is the lack of conservation of landscape for locals.

 $^{^{230}}$ Author's translation from the transcript in Spanish. (IntLC_PNOMP_MPST, p. 6)

²³¹ Author's translation from the transcript in Spanish. (IntLC_PNOMP_MTS, p.12)

8.2.3 The image of the ruins

'The ruins' of the Inca constructions are the attraction in the archaeological park, symbols of the region's glorious past. However, the people who inhabit these structures have altered these historical testimonies by subdividing, demolishing or constructing over them. Dwellers have remodeled Inca structures according to new needs. Peasants use some of the Inca walls as farmyards where cattle graze, and some of the constructions have been kept as sacred spaces for Andean rituals.

What for visitors are sculptures in landscape might be a burden for locals. The presence of heritage in their properties sometimes becomes a problem, because it limits their possibilities of development, building new and creating lodges.

Describing the changing landscape in Ollantaytambo in the past 30 years, T1 explains how people spontaneously took the vacant spaces of agricultural land, with archaeological commitment, for urban development:

Then, this is it, a physical change of the space, a change of use. I mean if you see what was the agricultural use thirty years ago and what is the agricultural use now, it has been progressively reduced. And here it's more complicated because it's not only an agricultural area but these are Inca terraces, and not, even, for example, in this zone, now it's inside of what it is the urban expansion. Then, we are here and all this part that goes up to the town. But if you see San Isidro, for example, if you go to the ruins, you see downhill, there was a stable, or an entire *chacra* that was more or less designated, I don't know... in an informal manner, because there was no planning at that time, but more or less, they have established, that is a zone for urban expansion. And the same in Pillcohuasi, no? They made an urban center, they divided everything into lots and more or less it stayed. ²³²

The weak implemention of the regulations has affected the landscape in Ollantaytambo, where the occupation of agricultural fields cannot be halted. However, visitors cannot perceive these changes or the informal occupation of fields that correspond to landscape capital and protected heritage. Visitors assume that the place is "intact", showing the priority they give to "authenticity":

²³² Author's translation from the transcript in Spanish. (IntLC_PAO_T1, p.1)

we wanted to be here, uhm, to see the ruins, and also because the town is very beautiful and intact... you know? from pre-colonial times... which we were very interested in.²³³

Most of the archaeological 'ruins' in the Fortress have been cleaned from vegetation. Indeed, some were not visible until they were cleaned and restored. What is now appreciated by visitors is the 'official' practice of conservation of the archaeological heritage (which interprets how the constructions could have been), albeit assuming it is "original" or as it was in precolonial times. Moreover, not only are the ruins significant, but also the Andean worldview behind, which is also sold as a traditional knowledge that has had a continuity since pre-colonial times, and is interpreted as based on an idea of harmony with nature:

I think [that the most striking feature in the landscape here] the combination of the mountains with the, uhm, heritage, with the ruins, and the... we, I think we both really appreciate the history of the idea that the land is sacred. Not religious, but just about nature. Cause we're both very, we both love nature...²³⁴

"The idea that the land is sacred" comes from the interpretations already mentioned, by chroniclers and later by scientists (anthropologists and archaeologists) who have worked with these documents, connecting them to the local knowledge found in the Andes mountains. As explained in the previous section, the Andean worldview considers some elements of the landscape, e.g. mountains, lakes, the soil, as sacred and people embedded in this worldview perform rituals in order to relate to them.

Tourist businesses use this discourse when showing the Inca archaeological sites to visitors:

[what impressed me the most] were the ruins, today I went to Pisaq, and I loved it, and, Ollantaytambo also, and all the history behind, eh, to see the constructions that have so many years, so, so, it's very beautiful. 235

Moreover, this discourse accompanies people before they start the trip, since they are already informed about the ruins and their history:

 $^{^{233}}$ Testimony of V1 in the PAO. (IntVis_PAO_V1V2V3V4V5V6, p.1) 234 V1. (Ibid., p.4)

²³⁵ V6. Author's translation from the transcript in Spanish. (Ibid., p. 31)

If we had more time yes, but, we're more interested in the ruins, and the history, and... then, just, we're not, we'd like to hike in the mountains, but we're not, mountaineers...

In the above fragment, the difference between the people who visit the PNOMP and those who visit the PAO is clarified. Visitors to PAO are more interested "in the history and the ruins", whereas visitors to PNOMP are interested in "seeing nature" and enjoy the rural areas, rather than being focused on the history. This relates to the way in which these sites are "offered" to tourists through advertising:

[In Ollantaytambo, what I like the most was] eh, all the view from the Valley, I found it amazing, ehm, and the ruins too, I found them really impressive... I still have not gone to Machu Picchu that **it is supposed to be the most impressive**, but, but yes I loved the view... it's a beautiful place, really it's a beautiful place.²³⁷

Machu Pichu is supposed to be the "most impressive" ruins, according to how it has been advertised around the world (e.g. World Heritage site, Wonder of the Modern World). Visitors enjoy the landscape as a picture ("view from the Valley") and the ruins that are built in unreachable places from the perspective of urban people.

However, the ruins that are so admired by the visitors signify constraints for the locals who find their land inside the protected area, marked by 'archaeological commitment'. Moreover, most of the land is normed for agricultural use by law, although locals are interested in transforming these agricultural areas into hotels, because these are more profitable:

If you have an agricultural plot, here, and the Municipality says that that plot is agricultural or the INC says that the plot is agricultural, then, the value, is intangible, no? Then the value of the plot is zero. As an agricultural plot it costs, something like S/.1 the meter [€ 0.30]. As a plot where you can build, there are plots that are sold for \$100 the meter [€75]. So, that difference, it's a huge change in the value, no? Then, if you accept that your plot is intangible²³⁸, and that you can't build there, and quietly you accept that law, then you are renouncing to, if you have 1,000 meters it could cost \$100,000 or it could cost S/.1,000. If you give up to the option of building there, you

²³⁶ V1. (Ibid., p.7)

V6. Author's translation from the transcript in Spanish. Text in bold is from the author. (Ibid., p.31)

²³⁸ This term is used in Spanish for qualifying the plots or areas that are not possible to be built or affected in any manner, but it does not refer to the ICH.

say, ok, I won't build, I will respect it as agricultural plot, you will lose, 99.9% of the economic value, no? ²³⁹

According, for a local who owns a plot that is considered "intangible" and could have archaeological heritage buried inside, this (heritage) does not represent an added value, but rather a limitation for economic gain. However, the place has become interesting to be built, due to the increasing number of visitors. However, these visitors arrive to see the ruins, which become the limitation for the urban expansion and construction of hotels to host them.

These three images are like the pieces in a museum: the pictures (the landscapes) and the objects (elements such as mountains, forests and ruins). Visitors come to these heritage sites to contemplate these pieces in an open museum, where even local people can become objectified and part of the landscape. For visitors, the trail into these sites means their access to the picture and being part of it.

8.3 Time travel

The ruins evoke the idea of time travel: added to the environment of the rural village, the concept of backwardness is present. People visiting, in many cases from urban centers in developed countries, feel like traveling in time when entering these mountain environments, where history is part of everyday life.

V3 talks about Huilloq as a village "like in the old times", which is more "original" ²⁴⁰. V4 mentions how he enjoyed seeing "the way, originally houses and stuff, people were living in" ²⁴¹. What visitors see as "old times", is the current manner in which rural people live in developing countries such as Peru. In the case of the visitors to the PNOMP, there is no such a contrast between visitors and the rural villages, because these are not seen as precarious or poor. On the contrary, Peruvian hamlets and villages in the mountains are seen as poor and extremely precarious because due to simplicity of constructions, the lack of urban habilitation (water system and electricity) and the presence of the cattle and animals (such as guinea pigs) inside the houses.

²⁴⁰ "Huilloq? I... It's cool, it's more original, like old times village, yeah, exactly..." (quoted in p. 233)

²³⁹ T1. Author's translation from the transcript in Spanish. (IntLC_PAO_T1, p.5)

²⁴¹ "I enjoyed the farms, and I enjoyed seeing the... probably, the way, originally houses and stuff people were living in and they build them... So I enjoyed seeing that..." (quoted in p. 231).

Although the rural areas in the most remote and small villages in the Pyrenees are more developed than those in the Andes (better infrastructure, services, roads, etc.), people who travel to the mountains search for a 'lost time' symbolized by rural life. In this process, local people become objectified as museum displays. Accordingly, the search for "authenticity", representing a search for the past, has generated a vicious circle, whereby the tourist gaze influences local practices in such a manner that these become an exhibition displayed for the purpose of being observed in a way that can be appreciated by the visitors.

Local people subsequently become part of the scenery like in a landscape painting. The tourist gaze transforms people into landscape as part of the setting of time travel. The objectification of the environment goes further and reaches fellow humans who also become objectified, and as part of the environment perceived as landscape. In the words of Berque:

This principle [of the retreat of the subject] is far from dealing only about material things; it concerns as well the other, and even the subjects's own body. The objectification of the other is what has rendered possible the emergence and development of the social sciences (from the 19th century), and that of the body is what has permitted the rise of modern medicine. On every object of knowledge, essentially distinct from its own consciousness, the modern subject has started to place the same gaze detached than with other inanimated things.²⁴²

The detachment from the others, and the gaze placed on them explains how visitors approach the place they visit following a process of distancing where peasants become part of the scenery:

but in the past the people they were dressed with the real costumes, you know, on this place. But here, you know, there are only some that you can see and say, 'Oh!', but we don't see with that typical dress. I saw some become a... Oh no! they don't dress like this. They have some people, there are still dressing. (...) Although that people are a kind of modern, but in certain places they need to be dressed, if they want to attract the tourist, they need to try to conserve as it used to be.²⁴³

This comment from V5 illustrates the "folklorization" of traditions. The way in which people dress (peasants or tourists) responds to their way of life and needs. However, visitors have expectations over locals. They want to see them as part of the rural landscape, as frozen in the past. Locals have to be part of the picture and they need to "dress" in order to "attract the

²⁴² Author's translation from the original text in French. (Berque 1996, p.23)

²⁴³ V5, tourist in the PAO that visited the place also 30 years ago. (IntVis_PAO_V1V2V3V4V5V6, p. 28)

tourist". Nevertheless, the visitor who demands this from the locals does not stop to reflect upon why people could or not dress "like in the past". Moreover, this perception extends to other events, such as festivities or rituals. In a process of folklorization and patrimonialization, traditions referring to religious feelings that serve to renew community ties lose their meaning, with their content becoming void. They become part of the scenery and are transformed into shows. Similar to what happens with the "Paso a Francia", which I explained in Chapter 7, the traditional event becomes folklorized and the participants are no longer necessarily linked to the agropastoral communities or stockbreeding practices. "Soon, there will be more people than cows", stockbreeders were saying during the event in 2012.

The process of folklorization is necessarily connected to the concept of "authenticity". The visitors search for "authenticity" in the place they visit, the same "authenticity" recognized in international documents indicating the principles of heritage conservation (referred to in Chapter 2). However, this very search is what progressively transforms the traditions of local communities in the sites into folkloric performances, and what transforms traditional handicrafts into industrialized products. Locals accommodate their offers (of place and products) in order to satisfy and please visitors. Accordingly, "authenticity", understood as the quality of being truthful and original, is eroded. Nevertheless, "authenticity" could also be interpreted as the result of what happens in this process of folklorization, since it is what locals "authentically" do after being influenced by external agents such as visitors. Subsequently, the question that emerges is whether the adaptation to the new circumstance produces something "authentic". Culture is a process of negotiation, construction and re-construction of values; therefore, it cannot be understood as a static product.

All these processes – patrimonialization, musealization and folklorization – are connected to the detachment of the subject from the environment. In the context of heritage, this detachment reflects the objectification of landscapes, cultures, traditions and people. When everything becomes objectified, it also becomes subject to the process of commodification.

8.4 The commodification of landscapes

In the observation of the visitors' practices and the interviews undertaken with visitors and people in charge of tourist offices in the towns of Torla and Ollantaytambo, it emerged that four main types of visitors are concurring these sites.

These basic types are differentiated according to their interests and activities, as follows:

- The sightseer who is interested in both nature and culture, but does not spend much time in the place in order to gain a deeper understanding of the local culture. Sightseers come in tours, in groups, and for reduced time. Essentially their main activity involves taking pictures of the emblematic places visited.
- The traveler who is interested in the culture of the place. This can not only be associated with time travel to the ruins, but also to to traditions from the past, regenerated by local communities (e.g. festivities like the *Fiesta de Choquequilca* in the PAO). Travelers are interested in communicating with locals and search to enter in the "back regions". They attend festivities, and in some cases they will try to walk by themselves, because they know that by coming in tours they will be unable to reach the "back regions".
- The trekker who is interested in nature, and engaging in long walks around the forest, or historical trails (e.g. the Inca trail). Trekkers are motivated to travel with tents, to walk long distances and not take tours unless necessary.
- The experts who are generally related to the tourism of nature, and are focused in one specific thing that can be found in the place visited (e.g. birds, a type of plant).

Even if each type of visitors has diverse interests and undertakes different activities, their visit to heritage sites entails the commodification of landscapes. Their appreciation centers on the search of contemplation, with this aesthetic experience implying photographing. Visitors do not appreciate the "original" agropastoral way of life insofar as this implies contact with cattle and their waste. The commodification of landscape results in the banalization of culture and the loss of the "authenticity" that is being searched by visitors. In the process of adapting the place to be visited, this loses its "originality". The traditional way of life is neglected because it involves living with animals, for instance. Thus, landscape needs to be "sterilized".

In the case of the town of Torla and others surrounding the PNOMP, this process of "sterilization" of villages has already been achieved. In the case of Ollantaytambo and the settlements inside the PAO, this is still in process, occurring progressively and spontaneously. One example is how the peasants from the highlands are starting to build small bungalows next to their houses or in a different plot (not necessarily close to their house), far from their ranches or where their animals are located. This is called rural tourism. However, the visitors who intend to experience rural life are not prepared to experience it in its real dimensions (with a precarious water system or living with guinea pigs).

Hence, the effect of visitors' practices on the sites they visit is remarkable, and even though it is not radical but progressive, the change is drastic:

And on the other hand you have all this tourist pressure, that even though, maybe, well, there is a lot that is permanent infrastructure like hotels, like the one I have. If you see, from here, the train station until the town, all that, it was an agricultural zone and now it is almost a continuum of hotels, no? From the station until the town. Then when my parents re-opened this hotel [1980s], because this hotel is from 1925, there were in the town, there is a picture in the reception if you wanna see, from 1930 more or less... Then, there were in the town, only two hotels.²⁴⁴

The impact of tourism implies the transformation of the landscape and the way of life, which becomes oriented to satisfy visitors' needs. This means enhancing tourist infrastructure (i.e. hotels, restaurants, tour offers) and avoiding traditional activities (i.e. agriculture and stockbreeding). In the case of the PAO, the landscape of the "living Inca town" is progressively becoming a tourist landscape where one in two buildings is a hostel, tourist agency or restaurant. The instrument, even for NGOs, is to develop tourist offers that connect to their main purpose (e.g. if the main purpose is to conserve a native forest, then the alternative route to visit that forest). In the case of the PNOMP, Torla, a typical agropastoral town of the Pyrenees, has progressively become a scenery for visitors. Similar to Ollantaytambo, the town is packed with hotels, restaurants, bars and tourist agencies. Little remains of agropastoralism, and the bordas have been transformed to rural houses and the fields to gardens (or forests).

These places are transformed into pictures, which in turn, like postcards, have been transformed into commodities. The picturesqueness of these towns is appreciated as a capital to be exploited.

Thus, while exercising their right to heritage by appropriating the "World Heritage sites", visitors generate their transformation through their access. The resulting problems include the erosion of heritage by means of folklorization and commodification. The life of the others becomes a commodity. Their *ecumene* becomes landscape capital.

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²⁴⁴ T1. Author's translation from the transcript in Spanish. (IntLC_PAO_T1, p.1)

8.5 Synthesis: the conservation of the landscape as a picture

The visitors' approach to landscape is representative of the classic and original definition of the landscape: a cultural frame through which the environment becomes an object. In Table 6, I summarize the understandings and values of visitors in both sites. The relationship with the place they visit is based on the distancing between the observer and the objects surrounding them. This distancing plays with the dialectic of "being part of the landscape" and "seeing the landscape". However, there is a difference in terms of whether visitors are searching for nature (PNOMP) or culture (PAO). In the case of the cultural site, visitors enter and go out of landscape while searching for "authenticity" and the local culture. They maintain a distance that is difficult to overcome, due to the inherent fact of not "being in the function of the landscape".

	PAO	PNOMP
	Archaeological Park	National Park
LANDSCAPE	- Picture	- Picture
	- Mountains	- Mountains
	- "Ruins" (terraces, Inca	- Nature
	constructions)	- Forests
	- Lakes	
	- Native people (costumes)	
	- ICH	
VALUES	- Aesthetic	- Aesthetic
	- Authenticity	- Scientific
	- Historical	- Recreational
	- Time travel	- Difference, magic, contrast
	- Difference, magic, contrast	

Table 6: Comparative table of the understanding and values of "landscape as picture" in the archaeological park and the national park.

Even if visitors search for an "authentic" experience, they do not grasp the real problematic of the place. Their visit focuses on the elements they admire: the mountains, the forest and the ruins. Their practices in the site are centered in a contemplative attitude to the environment (Table 7). The tourist gaze composes images in visitors' minds (mountains, forest, ruins) whereby landscapes, people and nature become objectified. Through this objectification, they contribute to the emerging musealization of cultural landscapes. But how authentic can a 'musealized' visit be?

In the context of modernization and conservation, even though the practices of locals to the sites are recognized as important for the safeguarding of heritage, a contradiction is maintained when the *will to conserve* a landscape does not take into account that modernization and musealization transform the modes of production and therefore, the same landscape cannot be reproduced. The tourist gaze can only feed a "non-authentic" performance through the production of tourist settings where locals become landscape and landscapes undergo processes of folklorization and commodification. The relationship between locals and visitors is mediated by the state through tourist policies impacting upon both sides. Nevertheless, the question is, how could an "authentic" dialogue between locals and visitors be achieved?

	PAO		PNOMP
Elements	Practices	Elements	Practices
Mountains	Contemplation	Mountains	Contemplation
	Trekking		Trekking
			Hiking
Ruins	Contemplation	Forests	Contemplation
	Visit		
Lakes	Visit		
	Fishing		
ICH	Contemplation		
	Observation		
	Participation		

Table 7: Landscape management in the "landscape as picture" in the archaeological park and the national park.

9 Emergent landscape management

In the previous three chapters, I have described and analyzed the different understandings of landscape according to the different groups of actors that play a role in the landscape management of heritage sites. Through the analysis of their practices, represented by policies, cultural and social practices, their approaches to landscape have been clarified. Moreover, the impacts of the processes occurring at a social and political level have been found critical for the changes in the landscape.

In this chapter, the objective is to interrelate the practices of the State, local communities and visitors in order to clarify how the emergent landscapes are products of the synergies of these groups' actions.

However, the three landscapes defined as landscape as container, landscape as habitat and landscape as picture do not represent closed categories; rather members of the different groups could be integrating concepts and ideas from one to the other. The categories established only represent a broad interpretation of how the state, local communities and visitors construct three landscapes, informed by different epistemological positions. The aim has been to reveal these epistemological positions towards landscape in order to explain why and how the different groups of actors are constantly being confronted in the processes of landscape management and heritage conservation.

How can these three landscapes be reconciled?

Based on the data collected through interviews and documents, I first present three maps for each site, showing the significant places to be conserved according to each group of actors. Through these maps, the landscape of the state, the landscape of agropastoralists (stockbreeders in the case of the PNOMP) and the landscape of the visitors are illustrated. They make visible whether or not the values assigned to places that are important from each perspective are similar. A fourth map shows the places that are valued by the three groups.

Secondly, I analyze how these values connect with the emergent landscapes. An emergent landscape is a biophysical consequence of the combination of the practices of the three groups of actors. In the case of the PAO there is the emergence of an unplanned urbanization; while in the case of the PNOMP, there is the emergence of an unplanned

forestation of the mountains. Both emergent landscapes are linked to the abandonment of traditional agropastoral practices.

Thirdly, I present the conflicts that are reflected in these emergent landscapes. In the sites there is confrontation between conservation and development. There are local events and situations in each site that affect the implementation of conservation plans for heritage. In these processes, the emergence of key stakeholders playing a role in the different groups results as a way of reconciling the three landscapes.

Following this analysis, the discussion concerning the viability or unviability of integrating the local communities in the conservation of the cultural landscapes is outlined. It is important to recall that the results of this study show a specific moment in the evolution of these landscapes.

9.1 Emergent landscapes

The maps developed for this analysis have not resulted as expected by the researcher, with the assumption that the groups would give more value to specific sites in the landscape having been refuted during the development of the interviews. Particularly in the case of the agropastoralists and visitors, the significant places in the landscape belong to broader categories such as the mountain ports ("puertos"), the agricultural fields ("chacras" for the Andes or "campos" for the Pyrenees) in the case of agropastoralists, as well as the mountains, the lakes and ruins as generics for the visitors. Moreover, some aspects of the preferences are impossible to illustrate, such as the feelings that climbing the mountains might provoke. On the other hand, having already made an inventory of the places, the state has indeed given more priority to certain areas and specific sites for conservation in the documents. Hence, I have found that there are some generic categories that appear for every group, albeit each group assigning a different value to these. The values found are aesthetic, recreational, economic, historical, cultural, scientific and symbolic. For the case of the agropastoralists and the visitors, there might be some other categories of values that cannot be described with these terms, generally used in the official documents.

For the two sites together, the results of this analysis are presented in Table 8 and Table 9. The most general categories are given by the perspective of visitors, who do not know the place in detail and thus use generic terms to identify what they appreciate the most: mountains, water sources, forests, ruins (see Table 8). Subsequently, the categories are specified for the

case of the locals, who in some cases have specified names for the places of value. In the case of the state, places of value are inventoried.

The generic categories have been extracted in order to relate them to the values assigned by the different groups of actors. As can be seen in Table 9, the values assigned by the different groups differ in most of the categories; nevertheless, they coincide in some categories. The aesthetic and recreational values are mostly given by the visitors. Instead, the local communities value more the places, especially the landscape capital (terraces, agricultural fields, irrigation canals, pastures) for their economic, social and cultural values. Moreover, most of the features in landscapes are valued by locals due to their symbolic significance, which is shared in some cases with the state. Nevertheless, the state gives to most of the categories a scientific, aesthetic, and historical value. However, due to the possibilities for tourism exploitation, economic value is also assigned. Moreover, the state also gives a symbolic value in terms of some specific aspects, such as the ICH and some of the cultural elements (ruins in the case of the PAO). This also applies to the mountains, and the peaks, which do not only have a symbolic value for the locals, but also for the state, in the line of affirming an idea of identity, national or regional.

The situation for each case study is specified in the following sections.

Table 8: Categories of significant places in relation to the actors. Orange marks places for the PAO, green for the PNOMP. (The table has been divided following the categories of Nature and Culture in order to facilitate its reading)

CATEGORIES	NATURE											
	Mountains	Mountains						Water				
	Peaks					Lake	Waterfalls	River	Valleys			
	Mont Perdu						Cotatuero		Ordesa			
VISITORS							Cola de Caballo					
							Soaso steps					
		Pastures	Ports		Mirador							
										Pines	Huallata	
	Perdido	Suaso de Linas	Bujaruelo port	Hunting Reserve	Santa Maria	Bernatuara		Cinca	Ordesa	Beech		
	Tres Serols	Usona	Goriz port		Revilla			Ara	Anisclo			
	Castillo Mayor		Tella					Cinqueta	Pineta			
	Peña del Reloj		Revilla					Arazas	Escuain			
	Soum de Ramond		Fanlo						Tena			
	Sestrales								Canfranc			
									Otal			
LOCAL									Bujaruelo			
COMMUNITIES	Veronica					Ypsayqocha		Urubamba		Queñuales		
	Pinkuylluna					Azulqocha		Patacancha		Chiqeuchaca		
AGRO	Bandolista							Pachar				
PASTORALISTS	Qosqoqahuarina							Rio Blanco				
	Alancoma							Azulqocha				
	Rantamayu							Sondor				
	Yamachichna							Ypsay				
	Cuchillo											
	Huayhuayoq orqo											
	Yanachinchana											
	Huayrunruyuq											
	Poca Orqo											
	Saqsa											
											Biodiversity	
	Casteret Frozen Cavern										Diodiversity	
STATE	Odstelet i lozeli Odvelli										Sarrios	
SIAIL											Quebrantahuesos	
											Butterflies	
											Bucardo	
											Ducaluo	

CATEGORIES	CULTURE														
	Agricultural Fields			Villages		Paths		Ruins					ICH		
	Terraces			Architecture	Rural										
						Trails		Terraces	Structures				Festivities		
				Qosqo Ayllu	Huilloq	Senda d	е		The "Fortress"						
VISITORS				Araccama	Patacancha	Cazadores									
						Faja d	e								
						Pelay									
		Fields	Irrigation canals				Livestock Paths							Tradional practices	
	Bancales	Campos		Chapels	Rumira								Romerias	Paso a Francia	
	Bestue	Chacras		Santa Elena	Sondormayo				Dolmen				Festivities of the	Dia de la Suetla	
				chapel									towns		
				Abandoned									Torla Carnival		
LOCAL				villages											
COMMUNITIES				Bordas											
														"Pagos"	
AGRO													Fiesta de	Pachamama	
PASTORALISTS	Choquebamba	Pacaritampu											Choquequilca	Cargos	
	Pumamarca												Cruz Velacuy	Muyuy	
	Musqapuqllo												Compadres	Ayni	
	Marcacocha												Carnival	Faena	
													San Isitro	Seed selection	
													Labrador	Dresses	
														Respect	
										Bridges	Canalizations	Reservoirs			
						Torla-			Ñaupa Iglesia		Vilcanota river				
						Gavarnie			Cachiccata		Patacancha				
						Pre-hispani	c		Masqabamba		river				
STATE						roads			Punku Punkullo						
									Intipunku						
									Quelloraccay						
		1		1					1		1				

CATEGORIES						VALUES				
			Aesthetic	Scientific	Recreational	Economic	Historical	Cultural/Social	Symbolic	Others
NATURE	Mountains		V	ST	V		V-LC-ST	LC	LC-ST	LC
		Peaks	V	V-ST				LC-ST	LC-ST	
		Pastures				LC		LC-ST		
		Ports				LC		LC		
		Mirador	V		ST-LC					
	Water	Lakes	V	ST	V			LC	LC	LC
		Waterfalls	V	ST	V-ST				LC	
		River		ST	V-ST-LC			LC	LC-ST	
		Valleys			V			LC	LC	
	Forests		V			LC-ST		LC		LC
		Native	ST					LC	LC	
	Flora &	Biodiversity		ST		LC		LC		LC
	Fauna									
CULTURE	Agricultural		V			LC	LC	LC		LC
	Fields	Terraces	V	ST		LC	LC	LC	LC	
		Fields	V			LC	LC	LC		
		Irrigation				LC		LC	LC	
		canals								
	Villages		V		V		LC	LC-ST	LC	LC
		Architecture						LC	LC	
		Rural						V-LC		
	Paths	Trails		ST	V	LC-ST	LC	LC-ST	ST	LC
		Livestock					LC	LC		
		paths				LC				
	Ruins	_		ST		LC-ST	ST	LC-ST	LC-ST	LC
		Terraces		ST		LC-ST	ST		ST	
		Structures		ST		ST	ST		ST	
		Bridges		ST		ST	ST		ST	
		Canalizations		ST		ST	ST			
	1011	Reservoirs		ST	V	ST	ST	1/10	10.07	10
	ICH	Festivities			V	LC-ST	V-LC-ST	V-LC	LC-ST	LC
		Traditional				LC-ST	V-LC-ST	V-LC	LC	
		practices								

Table 9: Categories of significant places in the landscape in relation to the values given by the different group of actors (V-visitors; LC-local communities; ST-State)

9.1.1 Three landscapes in the PAO

The landscape of the state has been determined based on the legal documents that protect the site, as well as the testimonies of managers, which represent the implementation of the regulations set out in the Management Plan and the laws to which the PAO refers. As discussed in the previous chapters, what are more significant to the state are the Inca archaeological remains (all the architectural structures such as terraces, rooms, reservoirs, canals and roads). The site located next to the town is the most appreciated, due to its architectural characteristics (fine stonework) and its situation, at the top of the mountain next to the valley floor (Figure 28). The analogy to Western monuments has transformed the site into a "Fortress" and "Monument", as has been explained in Chapter 6. According to the Chief of the park:

the valuation of a site is also given by the quantity of effort, work, resources, that it has had. Then, the ones that have architecture, they deserve a little bit more resources for its

maintenance, conservation. Hence, for many, from the point of view of planning, they think it is much more important and they value it more. ²⁴⁵

This confirms the priority given to tangible heritage based on modern conservation practices that defined the "objects for conservation" as the architectural monuments (ICOMOS 1965). Even if this tradition is in process of change by also considering the ICH (Australia ICOMOS 1999; ICOMOS New Zealand 2010), the priority given to architectural structures remains deeply rooted in the laws and management plans of sites, as well as in the mind of the experts in charge.

This archaeological park contains hundreds of architectural structures of Inca manufacture but the ones that receive more attention from the administration are those located near the "Fortress". The "Monument" represents the core of the PAO, and next to it, the Inca town of Qosqo Ayllu and Araccama Ayllu.

For example, the sites that are close, here to the Monument that is our headquarters, they are well conserved. Those that are located farther, they have already some problems. And I have found that those that are located at a certain distance (...) what happens? there are sites that are located farther where our employees are not [present] or our posts of work are destroyed, no? ²⁴⁶

Added to this, the ICH of the communities of the PAO is starting to be exploited by the state as a tourist resource. This is how the traditional *Fiesta de Choquequilca* was promoted in 2012 in the Plaza de Armas of Cusco city. As it had never previously been done, a show was organized some weeks before the festivity in order to make it visible. Moreover, the traditions of the *Wayruro* communities in the Patacancha river ravine are being publicized by the state, tourist agencies and NGOs that work for the development of these communities. However, tourist promotion and development aids are progressively eroding these peasant communities' traditional way of life (thus the same ICH being promoted).

The agropastoral communities of the PAO give priority to Inca terraces as most significant (Figure 29). While they consider the "Fortress" as valuable, what is more significant to them is what is useful. The landscape capital that the terraces and agricultural fields represent is the most significant element in the environment. In the words of FST, a *comunero* of the peasant community Ollanta:

²⁴⁶ (Ibid., p. 1).

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²⁴⁵ Chief of the PAO. Author's translation from the transcript in Spanish. (IntSt_PAO_ChiefPark, pp. 1-2).

For me, everything is important. Now, it depends on the point of view of production.²⁴⁷

As referred to in Chapter 7, the landscape is the agropastoralists' habitat and is related to labour and subsistence. Accordingly, everything might be significant in the habitat as a system, and at the same time, from the perspective of production, some specific landscape capital might be more significant than others. The aesthetics do not play an important role in the definition of what is valuable in the landscape. Unlike the visitors, for whom the most relevant criterion for valuing a site is connected to the aesthetic and recreational characteristics of a place, locals are part of the landscape.

For the visitors, the most significant features of the landscape are the mountains, the villages, the Inca town and the agricultural fields (Figure 30). This means that what they enjoy is the cultural landscape itself. Nevertheless, what dominates their interest is the travel to the past, which represents visiting the rural villages, especially the small hamlets of the peasant communities. They admire the Andean communities' way of life as something more connected to the natural world, simple and harmonic.

However, the visit to a significant place is not an everyday practice of the locals. Like the visitors, peasants consider the mountains and the lakes, as well as other features of the landscape such as forest, as significant, valuable and spiritually important for their communities (Figure 29). However, this is not reflected in a practice of "visiting". They make offerings to the places that are the dwellings of the spirits, according to their worldview, although this does not imply trekking to the snow peak or visiting the lake, unless they need to go hunting or fishing, for example, or in a special occasion.

By contrast, the practice of visiting the places is what makes them valuable, from the visitors' perspective. The places that they consider valuable are those that they want to visit. The consumption of the places as they were commodities brings about the change in the traditional ways of living the habitats for the locals, generating new practices such as tourist services for "visiting" (explained in Chapter 7 and 8).

²⁴⁷ Author's translation from Spanish. (FST, unrecorded conversation)

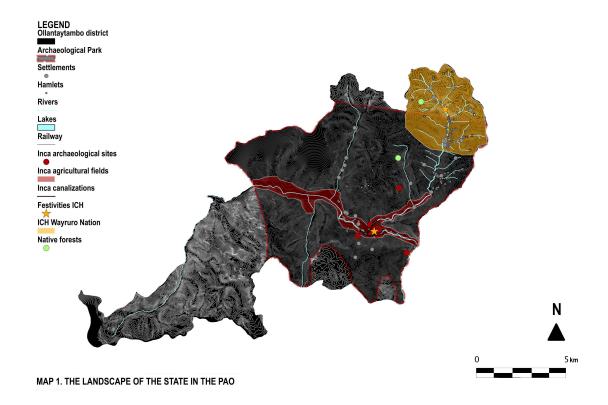


Figure 28: Map 1 of the PAO. The landscape of the state

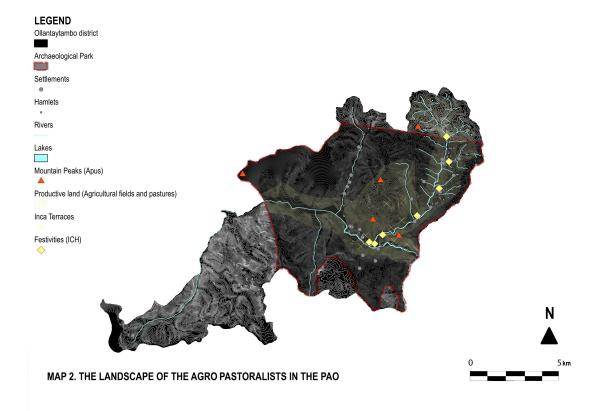


Figure 29: Map 2 of the PAO. The landscape of the agropastoralists

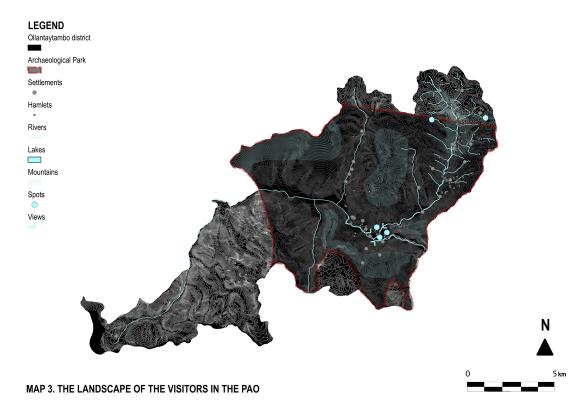


Figure 30: Map 3 of the PAO. The landscape of the visitors

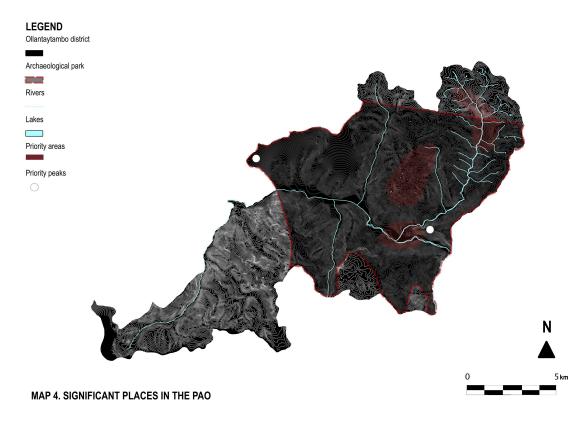


Figure 31: Map 4 of the PAO. Significant places in the three landscapes

The three groups coincide in terms of valuing the Inca terraces and agricultural fields, namely the landscape capital. The visitors would assign them an aesthetic value for the appreciation of the landscape as a whole. However, the locals and the state would value it for economic reasons. Nonetheless, the locals, even if valuing the agricultural fields, consider them a matter of subsistence, to build over them and over other archaeological remains, even if it is forbidden by the law. The practices of the state and the locals subsequently result in a conflict, whereas the practices of the state and visitors, as well as those of the locals and visitors, are rather collaborative.

9.1.2 The fourth landscape in the PAO: Urbanization. Becoming a city?

The emergent landscape of urbanization is the result of the state' promotion of tourism. The increase in tourism has provoked locals to develop infrastructure to fulfil the demand of services. This situation inevitably leads to the progressive abandonment of agricultural and stockbreeding practices. Even if the state's protective measures intend to halt the urban growth of the settlements inside the archaeological park, the promotion of tourism intensifies it. The regulations established in the protected area forbid the occupation of the agricultural fields that have 'archaeological commitment' constraining the organic growth of the villages. The result is an unplanned, spontaneous and illegal urbanization that affects the archaeological heritage and reduces the agricultural areas (Figure 32).

The interrelations of the practices of the state, local communities and visitors result in the fragmentation of the landscape, the loss of landscape capital (fields and terraces) and the 'disfigurement' of the cultural landscape explained in Figure 33. The state applies policies of promotion of tourism on the one hand, and policies of conservation of Inca structures on the other. Local communities adopt tourism as primary activity, abandoning agropastoral practices and occupying areas with 'archaeological commitment'. The visitors enter sites, show preferences, accept and contribute to the folklorization of traditions by searching for 'authentic' experiences.

²⁴⁸ Almost 90% of the agricultural fields in the district according to the Director of Urban Development in the Municipality (Int St PAO DirUrbDev02, p. 6).



Figure 32: Fragmentation in the landscape of the PAO, the urbanization of Inca terraces in Bandolista mountain. April 2012©Author

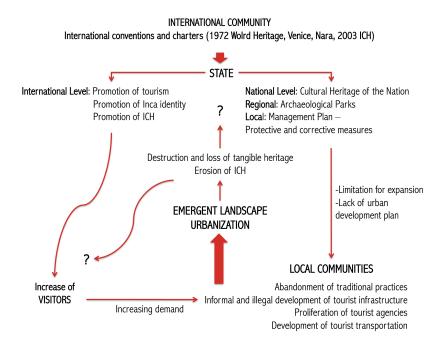


Figure 33: Emergent landscape management in the PAO.

However, the phenomenon in the PAO is not unique to this archaeological park; rather, it reflects the general situation in the Inca Sacred Valley, which is currently in a process of metropolization linked to Cusco city. The growth of villages triggered by tourism development during the past 20 years obeys a larger context of neo-liberalization of the country. Even if the Inca Sacred Valley was declared Cultural Heritage of the Nation in 2006, providing regulations that intend to control the unplanned urban growth, their implementation has been weak. Furthermore, these regulations were set when the cultural landscape was already highly disturbed and the habitat fragmentation was already advanced.

9.1.3 Three landscapes in the PNOMP

The most significant places for the state have been identified based on the legal documents and through their implementation. First, provided that it is embedded inside the region of Sobrarbe, the national park itself is the most significant place for this region (Figure 34), serving as an essential instrument for development. The national park is not only a significant area for the state in terms of natural values (as representative of a type of ecosystem and landscape in the whole Spain), but it is also significant as an institution that provides working positions to the locals, generates possibilities for economic development through tourism and brings an integrative identity for the populations in the area. The national park has produced ties with locals and between locals.

Secondly, the stockbreeding landscape has been recognized as the most significant value. Stockbreeding culture is referred to in the documents and implementation as the most salient feature of this protected area, because it has been instrumental in shaping the landscape and its biodiversity. The protection of the stockbreeding tradition is established in the Management Plan (PRUG):

The Law 52/1982, from July 13th, of the reclassification and extension of the Ordesa and Monte Perdido National Park, establishes special legal regulations for protecting the integrity of the landscape, gea, flora and fauna, waters and atmosphere and, in definitive, the ensemble of ecosystems of the park, due to its aesthetic, educational, scientific, cultural, recreational, tourist and socioeconomic interests. Additionally it establishes the special protection of the stockbreeding traditional activities compatible with the conservation, which have contributed to shape the landscape of the park and to configure some of its most characteristic ecosystems.

(Ministerio de Agricultura, Pesca y Alimentación 1995) ²⁴⁹

Hence, a high value has been assigned to the places and structures related to stockbreeding practices: pastures, fields, architecture (*bordas*, farms and troughs), cattle paths, as well as the traditions related to it (transhumance and festivities).

Thirdly, some places have become vulnerable due to climate change or public overuse. Protection has been reinforced for these areas, whose value has increased due to their vulnerability. For instance, this is the case of the Ordesa Valley, the most frequented place in the park. In terms of climate change, some places are the focus of monitoring and are totally

²⁴⁹ Author's translation from the original text in Spanish. Text in bold is from the author.

forbidden from public use, especially those where temperature changes are dramatic, including the Shaded zone of Ordesa, the Casteret Frozen Cavern, and the Glaciars of Monte Perdido and Soum de Ramond, which have been defined as 'reserve zones'. Nevertheless, in the opinion of the head of the conservation department of the park, conservation practices cannot disregard reality:

It's a personal opinion. For me what is lost, well, the landscape changes but what is lost is the part of the cultural heritage, that is the coexistence between human beings in the space, in that space, because that testimony disappears... All that are the stockbreeding ranches (bordas), the management of the cattle... the relationship between the people and the nature, with their territory, that will change and there is no way back, besides. I mean, all that cultural heritage disappears, cultural and natural. Because when the stockbreeders have their stockbreeding exploitations, they spend the summer in the ports... there is a cultural heritage of that way of life that has disappeared but there is, after that, a landscape that is also associated to that, that disappears, both things. But maybe, look, I, I do not give so much value to the natural as to the cultural. Because if it disappears, it has no sense to maintain the natural heritage, if there is not (...) a real relationship. Because we cannot put civil servant-shepherds neither civil servantsheep... what for? For what will we maintain a landscape that does not exist anymore? It's like maintaining a glacier, to create a microclimate to maintain a glacier of the Perdido [Mount Perdu], if we are at 40° around. It is going against... or you favor that the socio-cultural change is reverted to maintain the natural biodiversity that you have, or if the natural biodiversity changes, as a consequence of the cultural change, well, that is the normal thing. There's no sense in holding a natural heritage if it's falling on its own weight. It has no sense. 250

This fragment clarifies the main issue for the conservation of cultural landscapes that I have been discussing in this work. The loss of "nature" is directly linked to the loss of "culture". Given that the understanding of nature is based on the cultural values of the group that relates to it, the *conservation of nature* cannot be sustained if there are irreversible socio-cultural changes. Socio-cultural changes can be compared to environmental changes. Intending to conserve when environmental or socio-cultural conditions are dramatically changing, interventions might be counterproductive. Everything forms part of a larger whole and when some element of this larger system is modified, it is inevitable that the larger whole is transformed. The interrelations between cultural and natural values that form an entire system are evident and the conditions cannot be forced to maintain a system that is "falling on its own weight". Furthermore, the

²⁵⁰ Author's translation from the transcript in Spanish. (IntSt_PNOMP_DirCons, p. 6)

socio-cultural and environmental changes are not dependent on the conservation practice or conservation practitioners.

Indeed, stockbreeders prioritize the landscape of agropastoralism (Figure 35). The landscape capital, comprising terraces, fields, and pastures in the ports, is the most important feature in the environment. They would like to conserve the landscape "as they know it", i.e. with fields, pastures and a harvested forest. Nevertheless, the process where the forest and scrubs take over this landscape capital seems irreversible:

What happens is that, what it's occurring, according to the transformation that it takes... well here we'll live, if it is because of the tourism, they will live, the precise industries related to the services that are needed will survive, nothing else. And maybe some worker in the park, somewhere. But of course, if the activities of agriculture and stockbreeding stop, that part will remain non-existent.²⁵¹

Moreover, as seen in the previous chapter, this would not be important for the visitors, because they do not partake the evolution of the landscape, and hence do not know what has changed. For the visitors, the most significant features are the mountains, and especially Mont Perdu (Figure 36). The national park is what attracts the visitors, albeit essentially due to the geological context in which it is embedded. People visiting this park are looking for contemplating mountains and engaging in treks in the "wild nature". The stockbreeding landscape is not significant to them, since they are not aware that they are observing a landscape shaped throughout the centuries based on agropastoral practices. They can only be informed about this when they are already in the site and looking around the visitors' centers. This is clear for locals such as S1, who sees the town of Torla dying, despite tourism being exploited:

Let's go to the point. Someone that arrives here and don't see any cow, won't give any value to it. Because they don't know this, they don't know what it is about. It would be different if the fields were worked, and clean, and maybe, I think that if they don't know that the fields are under the scrubs, they won't give it any importance. The consequences will be for the ones who are here. The ones that will be here. Because it is unfortunate that when there was no tourism and we worked in stockbreeding, we were more people living in the town than now. That's a little unfortunate. And now with tourism, and other assistances that there are, well, it results that we are much less people, in the town. Well, people, not longer because we came down as a family, but in

²⁵¹ S1. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S1, p. 17)

families. There are entire houses that I have seen with people, and today they are closed. And they have no descendants. 252

Visitors cannot notice the progress of the agropastoral landscape's disappearance. They appreciate what they find, providing that it represents a difference, magic, a contrast or a time travel. Local people only are able to notice the change. This disappearance extends to towns whose houses are closing one by one.

Regarding the ICH of agropastoralist culture, locals most value the tradition of the passing of the cattle ("Paso a Francia"). The most important value of the event for locals now relies on the encounter and renewal of the relationship between the Spanish and French stockbreeders. However, this tradition is already undergoing a process of folklorization.

Even when all the fields have a name (Luis Villar and Federico Fillat²⁵³, personal communication), surveying the names of all the fields linked to the Area of socio-economic influence of the PNOMP takes time and resources that were not available to the researcher. Nevertheless, it is important to recognize that the locals have names for every piece of land in the area. Stockbreeders, and especially the elders, know where the fields were before, to whom they belonged and how they were named (personal communications with several stockbreeders). I consider the naming of the places as an indicator of their significance and importance for the locals, although this could be a topic for further study.

²⁵³ Researchers from the Pyrenean Institute of Ecology.

 $^{^{252}\,}S1.$ Author's translation from the transcript in Spanish. (IntLC_PNOMP_S1, p. 8)

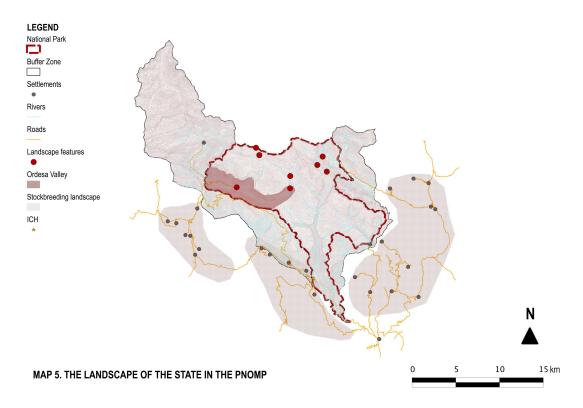


Figure 34: Map 5 of the PNOMP. The landscape of the state

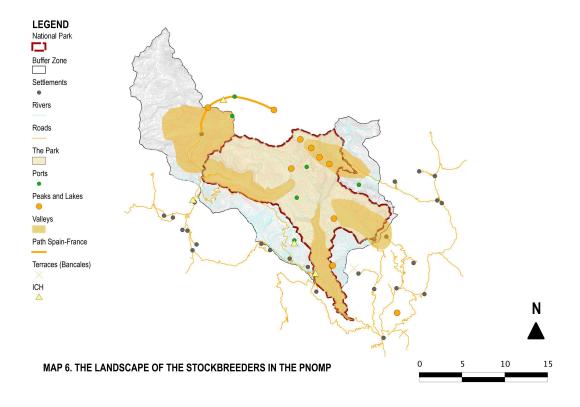


Figure 35: Map 6 of the PNOMP. The landscape of the stockbreeders

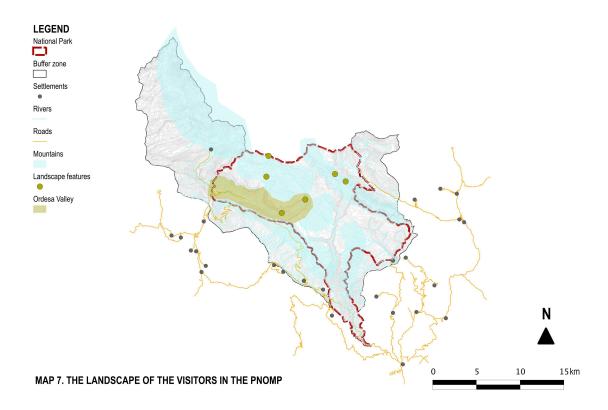


Figure 36: Map 7 of the PNOMP. The landscape of the visitors

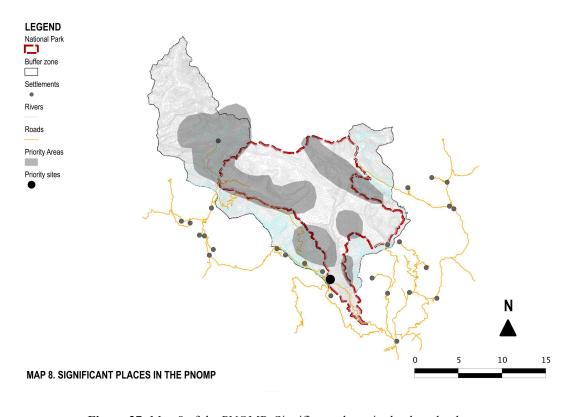


Figure 37: Map 8 of the PNOMP. Significant places in the three landscapes

9.1.4 The fourth landscape in the PNOMP: Forestation. Becoming ruins?

Forestation is the emergent landscape in the PNOMP, resulting from long processes of socio-cultural and economical changes. The present situation is presented in Figure 38.

The state has promoted migration to lower lands and urban centers in order to keep the mountain areas as containers of resources. The patrimonialization of nature has served as a tool to control the practices of local communities in the Sobrarbe (and other regions of the Pyrenees), as well as expropriating these territories. Moreover, the processes of industrialization have offered the possibility to lower the value of timber, significantly reducing its exploitation and increasing the forest populations. The plantation of trees has been a state policy, especially concerning pines used to retain the silt in the soils for the reservoir projects. The practices of harvesting the forests were reduced at the same time that stockbreeding entered into crisis. The presence of cattle diminished, principally sheep and goats that ate the pine sprouts, "cleaning the landscape". Thus, forestation (Figure 39) obeys the interrelation between policies established by the state – legal regulations for protecting nature, plantation of trees for the operation of reservoirs, the reduced profits of timbering - and the changes in the agropastoral practices – migration, which represents a major loss of population, abandonment of traditional agropastoral practices, change of cattle from sheep and goats to cows, loss of the practice of timbering.

However, this emergent landscape is admired by visitors who do not know how this place used to be and how the forest affects the life of locals.

Vegetation is covering the terraces of Bestue like it once covered Machu Picchu. Eventually, these could be re-used after cleaning and restoration, as has been done with Inca archaeological remains. The terraces and surroundings of the PNOMP are in a process of becoming what the Inca archaeological sites are (or were until restoration), albeit with the difference that the terraces in the Pyrenees do not have the stone structures that make the Inca terraces more resistant, thus conserving their shape. The image of these landscapes as ruins is the Solana Valley (Figure 40), which is fixed in local stockbreeders' minds.

INTERNATIONAL COMMUNITY International conventions and charters (1972 Wolrd Heritage, EU normatives, MaB Program 2003 ICH)

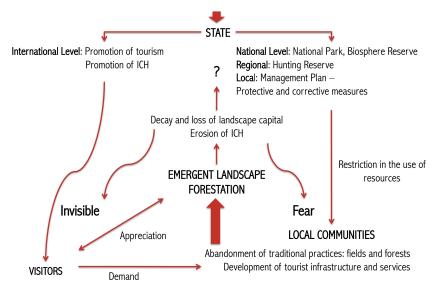


Figure 38: Emergent landscape management in the PNOMP.



Figure 39: Habitat loss in the landscape of the PNOMP, the forestation of the mountains in Fragen, Huesca. August 2012 ©Author

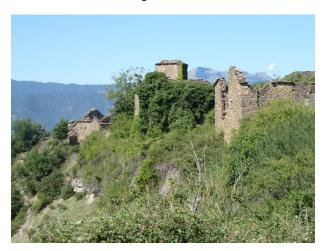


Figure 40: Abandoned town in the Solana Valley, July 2012. ©Author

To summarize, in the case of the PNOMP, the presence of the park is clearly important for local communities. In the case of the PAO, the presence of the park is almost non-existent in the minds of locals, and especially for those in the highlands. Only the area enclosed (the "Fortress") is acknowledged. The rest is not seen as important for the state due the lack of protection in terms of visible delimitation, such as being fenced.

The relations between the institution in charge of the *conservation of nature* and stockbreeders in the case of the national park are collaborative and mostly positive. However, the opposite is true in the case of the archaeological park, where the local communities and the institutions in charge of the *conservation of the past* are in constant conflict. This is linked to the principles of both models of conservation. Settlements are excluded in the case of the national park; therefore, the management focuses on an uninhabited area that is easy to control. In the archaeological park, the settlements are inside, dynamic and subject to change. Thus, management becomes problematic due to the number of variables that need to be considered.

9.2 Conservation vs. development?

Following the previous discussion concerning the difference between one model and the other, as well as the synergies they provoke among the different group of actors, in this section of the chapter, I revise the issues that have evolved from the confrontation between conservation practices and the emergent landscape management in these sites. Both sites have evolved, with the cultural landscapes that were originally declared as National heritage in processes of change. As previously seen, these changes are linked to socio-economic and cultural changes that inevitably influence the way in which the landscape is managed. However, these emergent landscapes are not necessarily sustainable for human habitat, especially, for the agropastoral communities, already defined as an "endangered culture" in Chapter 7. Here, I discuss the emerging issues in order to confront them with conservation practices.

In the case of the PAO, as previously mentioned, the *conservation of the past* has focused on the restoration and preservation of Inca architecture, as well as the protection of the archaeological remains that might not have been explored and researched yet. This basic principle of conservation unleashes several problems in relation to the development of the settlements growing inside the park. Accordingly, the question emerges as to whether it would be possible to integrate the conservation of archaeological remains to the urban development in a heritage site. Or does any settlement need to be excluded from a protected area?

In the case of the PNOMP, issues relate to the access to traditional exploitations by locals. The main problem is the growing forest. Seen as an attraction for visitors, the forest not only renders the fields useless; moreover, it also represents a danger to the villages that are being taken by it. The question is whether the state's practice of timbering needs to be subsidized like stockbreeding. Alternatively, can the "cleaning of fields" become an activity that might represent job opportunities for the locals?

In the case of the PAO, the existence of settlements inside the park forces the elaboration of plans that not only establish criteria for protecting heritage, but also for urban development. Indeed, this is the main challenge in this heritage site.

Several conflicts exist involving different actors. Here, I describe four main issues, related to landscape management strategies, which render difficult an effective conservation of the site. These issues are connected to two problems: the transport system and the population growth.

Regarding the transport systems, the first issue is the train station functioning next to the Urubamba River. The construction of the rail track started in 1913, yet only arrived in Machu Picchu town in 1928. The objective of this rail track is to connect Cusco city with the city of Quillabamba in the entrance to the rainforest. The station of Ollantaytambo comprised a platform, a small waiting area and a hotel built next to this platform in 1925. Over the years, and especially since Machu Picchu has become more visited, the station has been remodeled in order to be more effective.

There are two ways to leave this station. The first option is a narrow path that passes through the farms and agricultural fields, following Inca structures, with this route seldom used by locals. The second option, the one used by visitors, comprises a road that runs parallel to the Patacancha river, connecting the railtrack to the town center. While agricultural fields and farms surrounded this road twenty years ago, it is now one of the busiest areas of the town, and is occupied on both sides by hotels and restaurants. The traffic includes public small and large buses, private tourist buses, taxis and motorbikes (tuk style, called *mototaxis*), while some people transit it by foot. The entrance to the platform is closed by a gate that is controlled by a guard. Once out, there are several hundred meters covered by open stands, like a market, with street sellers. On the way, there is a bus station, with the box office for train tickets in front. This road has been affirmed with pavement and decorated with gardens along the river. Nevertheless, the constructions next to the river are precarious and illegal (Figure 41), given

that they do not respect the minimum distance from riverbanks determined by the Regulations of the Law of Hydrological Resources²⁵⁴ (Law N°29338 passed in 2009).



Figure 41: Constructions along the riverbanks of the Patacancha river. On the way to the train station. March 2011. ©Author



Figure 42: View from the "Fortress" to the neighborhood of San Isidro, built over agricultural fields with 'archaeological commitment'. May 2012 ©Author

The train station is one of the sources of growth in the town. It brings visitors to the town, and attracts traders, buses, tourist agencies, taxis and business. By 2012, when the fieldwork was conducted, it was only possible to take the train to Machu Picchu from this station, with this fact having transformed the town into an unexpected tourist transportation hub.

²⁵⁴ The regulations for the riverbanks are specificied in the Title V Chapter III Art N°113 of the Regulations of the Law of Hydrological Resources.

Since the town has not been designed to receive the traffic and the number of visitors arriving in recent years, it has had to organically adapt, resulting in the proliferation of hotels, restaurants and tourist agencies. Furthermore, the increasing traffic has altered the atmosphere and pace of the town (air and sound pollution), as well as the archaeological foundations upon which the town is standing (Inca terraces).

The second problem is the alternative road. There are only two ways to arrive to Quillabamba from Cusco city: one is the railtrack that goes to Machu Picchu, while the other is a road that passes through the town of Ollantaytambo. The traffic through the town is inevitable for ground transportation (except the train), even if the destiny is not Ollantaytambo. Hence, a large number of trucks transporting merchandising, as well as construction trucks, buses and private vehicles unnecessarily cross it every day. Alternative roads to divert the traffic to the outskirts of the town have been planned for more than 20 years. Nevertheless, only one option seems possible, namely to build the road next to the railtrack. However, the main problem resides in the fact that Ollantaytambo is located just next to the Urubamba River, and because it is constructed over Inca platforms, these cannot be demolished or modified to enlarge the railtrack's platform. According to the Director of the Urban Development Department in the Municipality, the Inca planning consisted of:

We suppose, that's [not just] a supposition, it's a proved study already, the river before covered all this [all the town]. (...) Thousands of years ago. And then a space of hillside of the riverbed has remained, and, what did the Incas do to build the city of Ollantaytambo? First, they built these *andenes* [stone terraces] in order to canalize the river, they built these *andenes* and the stones have even been brought from Pisaq, Chinchero, in order to make all this system of *andenes*, and the soil too, and they have made a platform. This is the platform, from here. And in the top of it, they have built the city. And in the contiguous part of this platform they have made the agricultural fields. In all this sector. And it's beautiful, no? It seems like a model, well done. Then, we [think that] it's stupid and an absurdity to bury andenes. When you bury it, is the *anden* protected? It's not protected, because there will be high-tonnage vehicles that will pass over and the seism effect that is provoked, this will destroy it progressively and worse.

The railtrack has been built next to and over the Inca platforms that have served as the canalization of the Urubamba River. One of the proposals involved burying the *andenes* in order to use them as a platform. Unfortunately, it has been difficult to define what is the best

²⁵⁵ Director of Urban Development, Municipality of Ollantaytambo. Author's translation from the transcript in Spanish. (IntSt PAO DirUrbDev01, p. 33)

alternative that works technically, allowing the preservation of the Inca *andenes*. This issue shows how cultural heritage can signify both a blessing and a curse.

The third problem is the continuous alteration of the Inca structures (*kanchas*) in the town neighborhood of Qosqo ayllu, Aracama ayllu and Manyarique square. People who inhabit these neighborhoods are mostly *comuneros* of the Peasant Community Ollanta. However, due to increasing tourism, migration has brought not only people from the vicinities and Cusco city, to Ollantaytambo town but also foreigners, foreign investors and workers from other regions (Puno, Apurímac, etc.). The Inca *kanchas* are being divided without permission. In the next extract, the Chief of the park summarizes the situation with these *kanchas*:

One *kancha* belonged to one family, at the beginning. A familiar group that started to be sub-divided, it was rented, it was sold, then the kancha formed a harmonic, symmetric ensemble that had a function, something that it doesn't now, no? Everyone wants to have an exit door closer to the main architectural ensemble [the "Fortress"]. Then, like here, each of the four sides belongs to a different family everyone wants to get a door to the street. That is a degree of the problem because we have there, doors that have never existed and that have disfigured all that that Inca plot generated, no? The same has happened not only in Qosqo Ayllu but also in Araccama, no? And in other zones, no? Then, and everyone would like to build in their own way, with their own style, that kind of things. Even when our plan existed, no? And all this about guardianship and everything else is very nice, but there are problems because we did not understand what all this is about. I mean, we cannot be restrictive and do not give solutions. ²⁵⁶

Moreover, even when there was funding to restore the "living Inca town", the project could not proceed due to the poor collaboration between dwellers that fear losing their properties owing to the lack of an individual title deed:

We had the opportunity here in the town to have a very big amount of resources for restoration. Let's start with the *kancha* 1 and the *kancha* 2. Perfect. It was done, and they were really good, no? In Patacalle, the first of the *kanchas*, where there is a school and all the rest. That *kancha*. It's perfect, it's beautiful. Very good. When we tried to replicate it, because there was still money, we said, Mr. yes, this kancha looks very good, please, the four families... then, can we start the works? Yes, perfect. Ok, then you have to evacuate it. Ah, no, no, we do not evacuate it. But we are going to give

²⁵⁶ Chief of the PAO. Author's translation from the transcript in Spanish. (IntSt_PAO_ChiefPark, pp. 9-10)

you... No, no, we can't, because if we get out of here, we would never go back. [Those are the] Exact words from the people who live there. ²⁵⁷

This lack of trust in the conservation authorities contrasts with some of the objectives stated in the Management Plan. The first strategic objective, which refers specifically to the cultural heritage, states:

1. To make an inventory, to elaborate the update of the land registry, to investigate, to conserve, to protect and to value and to disseminate the Pre-Hispanic Archaeological Goods with the aim of protecting the Archaeological heritage, attaining the contribution of the population assigned to it and committing them in the actions for the protection of the archaeological resources. (Instituto Nacional de Cultura 2006) ²⁵⁸

In this sense, the collaboration between dwellers of Inca neighborhoods has not been achieved, and locals are not involved in the protection of the archaeological resources, primarily because they are concerned with their human development, for which the archaeological remains only represent constraints in their eyes.

Moreover, in the second objective, the Management Plan states:

2. To promote and implement programs and projects of conservation, recovering and valuing the natural heritage, **involving local populations**, promoting and implementing scientific and technological research studies of all the resources that the Archaeological Park possess and exist inside its area. (Ibid.) ²⁵⁹

Here, not only is the natural heritage also considered part of the task of protecting the park; moreover, the population's involvement is mentioned as an important instrument for implementing the projects of conservation. Furthermore, the law requires the participation of the citizens in the conservation endeavor:

The state, the holders of the rights over the goods integrating the Cultural Heritage of the Nation and the citizens in general have the common responsibility of obeying and look after the due performance of the legal regime established in the present Law. (Law of the Cultural Heritage of the Nation. Article V. Protection) ²⁶⁰

²⁵⁷ Author's translation from the transcript in Spanish. (Ibid., p. 12)

 $^{^{258}\,\}mathrm{Author's}$ translation from the original text in Spanish.

²⁵⁹ Author's translation from the original text in Spanish.

²⁶⁰ Author's translation from the original text in Spanish.

The idea of local communities' involvement in the protection of their heritage is already established in this law. Protecting heritage is a "common responsibility" shared by the citizens and the state, both of whom need to collaborate to ensure that this law is respected, as well as also respecting it. However, this does not happen, as already shown in the case study of the PAO. The role of citizens has not been clarified; it is unclear how citizens are required to participate in conservation. A participatory approach has not been promoted in order to include the vision of citizens in the decision-making process regarding heritage.

Consequently, there is a lack of locals' involvement in the conservation practice. This is illustrated by the unplanned growth in the Inca *kanchas* and the agricultural fields with 'archaeological commitment' (San Isidro and Pillcohuasi, see Figure 42).

Added to this, there is a growth of peasant communities that used to live spread in their mountains and not concentrated in hamlets. Nowadays, the *Wayruro* communities of the Patacancha river are already establishing cores of populations — Patacancha, Rumira Sondormayo, Huilloq — that are being expanded over agricultural fields. Parcels assigned for each *comunero* are subsequently being reduced, with the area for agricultural production significantly decreasing.

These issues are causes of the deterioration of the cultural landscape in the PAO. The Vilcanota River Project, started in 2004 under the funding of the World Bank and the Ministry of Commerce and Tourism, intended to solve these. However, the project was closed in 2012, and the last projects were delivered in the past year. The situation of the road that is also linked to the situation of the train station has not been solved due to the project's lack of awareness-raising strategies. As previously explained, locals see the train station as the main source for economic development. The solution of moving the train station to another locality, down river, was considered as a loss for the town. Local populations consider the train station economically more profitable than the "Fortress". Hence, the problem is not what locals consider significant in their landscape, but rather what they consider important for their economic development. Even though the majority of visitors arrive to the town for its own value, local people believe that they only pass on their forced way to Machu Picchu.

T1, local and owner/manager of a hotel, explains an alternative for stopping the destruction of the cultural heritage:

I mean, they could designate urban expansion areas and they should do it outside the town. Then, it should be like a second urbanization and all with good services and a

new public square and all that and say, ok, here we build, we give you all the facilities, you can build in concrete, you can do, I don't know, and you make it beautiful anyway, but here in the town, not any more. (...) Look, what they should have done here in Ollantaytambo, and this nobody wants to accept it and I would be the first one affected, but they should have say, ok, Ollantaytambo is growing, we have an economic boom, we have all this. But this, it is all historical area. Then, we are going to conserve it. All the hotels, all the restaurants, all those things, and the train station, the bus station, everything, pum! we take it out, 3kms from the town, where there are not Inca *andenes*, where there is no landscape that will be affected and a planning is made and the plans, the designs, everything, and ok, we plan it from zero. And all this stays. And they give facilities for everybody so they can get it, no? If you, if me, or anybody else, if I have a hotel here and I will be harmed, then, ok well, give me something there. And they have to invest a lot of money at one time, and that's it... Maybe it's still not too late.²⁶¹

This proposal sets the exclusion of populations from heritage sites as an alternative. The main suggestion is to relocate the expansion of business out of the "Monumental Zone" defined according to the zoning in the Management Plan (see Annex 8). However, this alternative needs to be worked between the Municipality, the Ministry of Culture and the locals. In the PAO, local people trust the Municipality. The current mayor and the Municipality employees are locals of the town, thus contributing to the communication between local population and authorities. However, the relationship between locals and the Ministry of Culture is conflictive. Even though the Direction of the park is located in the "Fortress" there is a lack of locals' awareness regarding the labour of the Ministry.

The conflict between conservation and development in this case study refers to the lack of an urban development plan that could integrate the maintenance of heritage and the development of tourist infrastructure. Furthermore, this case is not isolated, with similar situations occurring in the other parks of the Inca Sacred Valley. The fundamental question is where to habilitate land for urban expansion, and under which criteria. Moreover, the participation of inhabitants in this planning is essential in order to adapt conservation strategies to provide facilities for visits and business development.

In the case of the PNOMP, the role played by agropastoral traditions in the construction of the landscape is evidently significant. In the Pyrenees, there is a rapid loss of traditions that are still resilient in the Andes. The structures from the past are not as visible as in the Inca sites, with forests and scrubs progressively hiding them.

²⁶¹ T1. Author's translation from the transcript in Spanish. (IntLC_PAO_T1, p.7, p. 11)

Thus far, the stockbreeding practice has been sustained by state subsidies. Apart from fire, stockbreeders fear the loss of these subsidies. "The day they take the subsidy out, stockbreeding disappears", ²⁶² says MPST.

Agropastoralism as a way of life has already been replaced by stockbreeding as a business. In this sense, the continuity of stockbreeding is dependent on economic variables that are not manageable at the level of the conservation practice.

ST2 explains how the traditions have changed and, in his account, he demonstrates the importance of economic variables for the sustainability of stockbreeding:

Here, as I remember, from [the time of] my grandparents already, they had cattle, cows, sheep... In the past we had mules, because when there was no machinery in the low land, they raised here, the mules that are the, the draft animals with which they worked, before the tractors arrived... and they raised them three years, so that, after the three years, they took them to the fairies so the farmers would tame them and they could start working, to cultivate... That was lost when mechanization arrived, when the tractors arrived. Well then, they started with the bovine. We had some years when we had to work with everything, we arrived to milk more or less in the winter because in the summer they take them to the mountains and you cannot milk, but in the winter, when we sold the calves maybe, eh, in three or four months, well we milk and they pick the milk up from the milk centrals and they took them for trading. That has been lost already because there were some quotas and so, and well, we stopped milking and now we are dedicated to raise calves. The calves are born here in the exploitation, we look at them so they are born at home, in case there are any problems and they go to the mountains with the small calf, they are all the summer and now when they go down in September or October, well, the offsprings that are already five months are taken away. And well, that is the cycle of the cows, and they rear again the next year, and like that it goes... what happens is that now, calves are sold too cheap. We can defend ourselves because there are assistances, the subsidies that are given by the European Union, eh, the government, the Ministry of Agriculture, and well, the subsidies mean a lot, because if not, it would not be profitable. At the price we are selling the calves it would not be profitable to have stockbreeding exploitations.²⁶³

To summarize, three main processes directed the abandonment of traditional practices in these rural areas. First, industrialization pulled young people to the cities of Zaragoza and Barcelona, as well as France, generating the rapid depopulation of the area. Second, the

²⁶³ ST2. Author's translation from the transcript in Spanish. (IntLC_PNOMP_ST2, p.1)

²⁶² MPST. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S2, p. 16)

mechanization of agriculture required less human labour, with traditional practices overridden, which caused the reduction of familiar activities. Finally, the liberalization of the market facilitated the acquirement of fodders, reducing the need for producing cattle's food, and transhumance. These processes were, of course, interlinked. In addition to these economical processes, this site had undergone the process of patrimonialization. The question would be whether the current practice of stockbreeding, the one that does not imply transhumance and consists of a semi-estabulated activity, regenerates the agropastoral cultural landscape. Is the emergent landscape already a result of this?

Because when the migration left, 40 years ago, sort to say, well, yes, approximately, they have been stopped to be cultivated and the brushes have grown and the pines. It's for example there, in the zone there, there where the pines are... I have not seen one pine or half. And now... well, I lie, there were there, up there in one of those little points, four, five trees, numbered, big. There were no more than that, and now one cannot pass. Yes, yes. That's it. Now in that town there, only in that town there, there were 5,000 sheep. There were five "casas" and... [now there is none] ²⁶⁴

S2 links the depopulation to the abandonment of agropastoral practices. The lack of work turned the mountains into forests and the towns into leisure places for summer. This is the emergent landscape.

According to stockbreeders, the cattle prone to cleaning the fields and especially the forest sprouts were the sheep. As has already been discussed, the cattle of sheep are being progressively reduced, and few stockbreeders work with sheep or goats at present. Hence, it could be said that the semi-estabulated stockbreeding practices would lead to a different cultural landscape, one that corresponds to that practice in combination with the tourist industry development.

According to MTS:

The only alternative for the conservation of the mountains, in case that the stockbreeding pressure and the number of stockbreeders in the towns decrease too much, is to bring cattle. There is no other way. ²⁶⁵

²⁶⁵ MTS. Author's translation from the transcript in Spanish. (IntLC_PNOMP_MTS, p. 30)

²⁶⁴ S2. Author's translation from the transcript in Spanish. (IntLC_PNOMP_S2, p. 37)

However, does it make sense to "clean the fields" with foreign cattle for the sake of the conservation of the cultural landscape? As the Director of the Conservation Department of the PNOMP mentioned (cf. p. 261), maintaining an environment whose conditions no longer exist would not be sustainable.

For instance, the situation of the terraces of Bestue is not unique to this town. Indeed, the whole area is losing this landscape capital, with the lack of profitability of the cultivation practices rendering the work in the terraces worthless. Besides, due to their shape, size and slope, they can only be worked by hand. This practice is unthinkable with the consumption of fodder having become much more convenient (being directly delivered to the ranches). On the other hand, there is a lack of workforce. Since the 1970s, migration to lowlands has depopulated the area to such a degree that some towns remained abandoned while others have kept only one or two houses open. However, the economic crisis in Spain is changing the picture. At present, this area is attracting workers for the tourist sector. Moreover, stockbreeding is also becoming an alternative to unemployment in the cities.

In this case, the conflict between conservation and development is related to the mechanization of agriculture and stockbreeding. It is a process of industrial development that is not particular to this region, but rather to the changes in the rural European environment and other industrialized countries. However, what makes this region different is the dramatic depopulation, which has also rendered the sustainability of inhabitation difficult. It is clear that, as Capra (2004) says, for any activity to be sustainable requires a community of humans working in a network. The park itself, as a means of employment, subsidies and tourism, seems to be the only viable way to continue inhabiting the Area of socio-economic influence of the PNOMP, although tourism and subsidies do not represent sustainable alternatives.

In both case studies, it has been clarified that the causes influencing the continuity of the agropastoral traditions are not dependent on the models of protection or the conservation practice *per se*.

In the case of the PAO, the model of protection of the archaeological park is problematic insofar that the conservation of heritage is continuously confronted with economic development, which focuses on tourism and not the continuity of the agropastoral culture. The construction of tourist infrastructure over agricultural fields is highly profitable in the short-term, raising the value of communities' land. Added to this, an urban development plan has not been foreseen on time. The emergent landscape of unplanned urbanization relates to the priority

given to tourism, prompting the question of whether tourist exploitation would remain sustainable in the long run.

In the case of the PNOMP, the model of protection of the national park has been positive for the dynamics of the region in the context of industrialization. The park did not directly affect the depopulation and crisis of agropastoralism. Although it might have contributed to the abandonment of timbering, this has not been the main cause for the "forestation" of the mountains. Several variables linked to national and international economic processes played a role in the emergence of this forested landscape: the reduced price of wood, which rendered timbering non-profitable; the crisis of agropastoralism, which reduced the amount of ovine cattle in the mountains; and the depopulation of the region, which reduced the labour force for traditional activities.

Agropastoralism has become non-profitable in both sites. This way of life has been sustainable as long as it was connected to a close system. However, the opening of these systems to market economies has rendered them unviable. Moreover, this way of life and the landscapes it used to produce have become commodities in the same market economy.

The models of protection work as instruments for the commodification of this way of life and its cultural landscapes. Thus far, these models have been effective for the conservation of tangible and "static" elements such as archaeological sites, like the case of the "Fortress", or geological features of the Pyrenees mountains from where people are precluded. Nevertheless, they cannot be effective for the conservation of places in continuous relation to human communities.

Both models have limitations when conservation needs to coexist with inhabitation and settlements' development. To be effective in a cultural landscape approach, which inherently implies the relation to human communities, these models need to develop adjustments that allow the continuity of the cultures related to them.

In terms of conservation the menaces differ according to the focus of interest of the models of protection. In the case of the PNOMP, the main menace for the *conservation of nature* is climate change. In the PAO, the threats to the *conservation of the past* are anthropic factors that result in the destruction of the archaeological heritage. Moreover, even if both sites contemplate the significance and consequent protection of agropastoral traditions as being instrumental for the cultural landscape, their maintenance is not dependent on these models that, on the other hand, might prove counterproductive.

9.3 Integrating the locals: same people, different roles

At an early stage in the research, I found that a complex system was behind the production of cultural landscapes' interrelating practices of the state, the agropastoralists (stockbreeders) and visitors. During fieldwork and data analysis, I have found that, not uncommonly, some people share the vision of two or three of these main groups. Key emergent stakeholders in the landscape management have been found, as identified by people who play roles in the different groups and integrate the three landscapes in Chapters 6, 7 and 8. In this section, I discuss these cases as alternatives found for the involvement of local communities in conservation practices that are not contemplated in the management plans of these models of protection.

In the case of the PAO, there is one persistent figure: the farmer-stockbreeder (FST) that works in tourism. This is also a repetitive figure in the PNOMP: stockbreeders that run rural houses (ST). This combination results in an alternative for continuing the traditional practices with a complementary profitable activity, namely tourism. However, the most interesting figures are those that combine the relation between the state and the local communities. In the PAO, an expert, local and employee in the Municipality, as well as one farmer-stockbreeder working as a guard in the park, have been found as key stakeholders for the development of conservation plans.

The biologist of the town, and also director of the department of Environment in the Municipality, is a figure who forms part of the local community. Everyone would recognize him in the street and greet him.²⁶⁶ His work in the Municipality covers relations with the whole district, its hamlets and peasant communities. Added to his local knowledge, his expertise gives him a holistic understanding of the situation in the PAO, as well as a will to improve it, because he identifies himself with local people, the place and their heritage, both cultural (including intangible) and natural. In the following fragment, he explains how the problem of the *andenes* is similar to what happens with the *bancales* in the PNOMP:

If one wants to come here to cultivate, he/she can do it. There, a little bit more uphill, in the riverbank, there is, there is one family that lives there. Then, because they live there, they use little plots that are in the area. They usufruct. But the rest, because they are very narrow *andenes*, the work is with *chaquitaqlla*²⁶⁷, a yoke or the oxes can't enter. Then the work becomes difficult. And on the top of this, the site of Choquebamba,

²⁶⁶ This was experienced during the interview that consisted on a walk from the main square of the town following the Patacancha river ravine until the *andenes* of Musqapuqllo.

Traditional tool from pre-Hispanic origin, used for the cultivation of the fields.

where there are some *andenes*, much wider, that the soil is very good, well but the *comuneros* don't go anymore. Because it's far, in spite of the road, mmm, and also, it is not so profitable economically, well, in comparison with the sale of handicraft and other products here in the town.²⁶⁸

The difficulties of labouring the *andenes* (Figure 43) recall the problems of the *bancales* in Bestue: the need to work them by hand (with the *chaquitaqlla* see Figure 44, or the scythe see Figure 45), and the impossibility of using the oxen or the tractor (cf. Chapter 7.3, p. 206). In the case of the PAO, not even the tractor has been integrated in the farming-stockbreeding practice, owing to the technical problems with slopes and altitude. In the case of the PNOMP, the use of mules (the equivalent of the oxen) was already abandoned in the 1960s. Unlike the testimonies of all the *comuneros* consulted, who did not complain about the non-profitability of traditional practices, the local expert explains that the use of *andenes* is non-profitable, even if "the soil is very good". For instance, he explains that even if the site of Choquebamba is composed of *andenes*, fertile soil and an access road, the *comuneros* consider it more convenient to work in the Valley floor, focusing their efforts on the tourist business, because Choquebamba is located at a considerable high altitude (on the way to the snowpeak Halancoma) and requires more labour. What is happening regarding agropastoral traditions in the PAO seems to be an accelerated process of what took place in the PNOMP in one century.

Nonetheless, he considers that even if farming and stockbreeding practices are being progressively abandoned, with only few people entering the market based on these activities, there are still symbolic relations that tie locals with their agricultural fields, called *chacras* in Quechua language:

For example, there is one family that the whole family, all the brothers are working in tourism and they are doing very well, in the sale of handicrafts. But they have a small *chacra* here, that it could be around thousand five hundred meters, at most. And they use that *chacra* as a recreational place and for union, because they come, all the family together with the mother, to sow, to make the first hoe, the second hoe, the harvest. It does not bring them anything, but it brings them... it does not bring them economically, but it brings them a lot at the family level... more about the familiar connection. But of those there are very few. There are, the majority of *comuneros* that work in the Ministry of Culture, in the transportation business or, as construction workers, they have pieces of land in this part of Pumamarca, Lahuanaca, or some in Choquebamba, that they continue to cultivate, here in Muris, that is where they cultivate maize.²⁶⁹

 $^{^{268}}$ Biol. Author's translation from the transcript in Spanish. (IntLC_PAO_Biol, p. 1)



Figure 43: Andenes of Musqapuqllo, Ollantaytambo. April 2012. ©Author

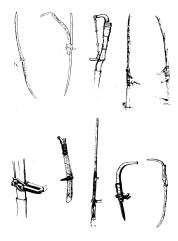


Figure 44: Types of *chaquitaqlla*, traditional tool of the Andean agriculture. Source: Morlon, P. (coordinator), 1996. "Comprender la agricultura campesina en los Andes Centrales (Perú-Bolivia)". IFEA Lima / CBC Cuzco, p.80.



Figure 45: Scythe used for cutting grass in the terraces of Fragen, Broto Valley. August 2012. ©Author

The maintenance of the agricultural fields is related to a cultural, social and symbolic relation with the *chacra*, *Pachamama* and the products themselves (e.g. maize or *Mamasara*). Economic development and change have not eliminated these familiar customs. Accordingly,

what contains an economic value, such as the agricultural fields, primarily has a symbolic, social and recreational value. Nevertheless, he also makes a clear distinction between the *comuneros* of the Valley floor and those in the highlands. Some traditional practices that have been overtaken by tourism or the monoculture of white maize in the Valley floor are maintained:

In the highland communities, they cultivate in certain spaces that are limited by the topography. And in this space of five hundred to thousand meters at most, they cultivate different species, different varieties of potato. But why? These are 15 varieties or 16 varieties of potato or more that are there, but this is the traditional technology that we have since the Incas, because it help us to guarantee the harvest. Because one potato would be attacked by one animal, another potato would be more sensitive to the weather, but the others not. Then you will always have a harvest. ²⁷⁰

This explanation highlights the need to maintain biodiversity (in this case of potatoes), which apparently does not seem profitable because these varieties are not traded in the market. These are cultivated for self-consumption and bartering ("trueque") in exchange for other products, such as maize. He clarifies that "up there they do more a subsistence agriculture. Here [in the Valley floor] is already commercial."²⁷¹ Nonetheless, an important difference of the management of soil between the Valley floor and the highlands lies on climate and topographic conditions. In the highlands, the use of soils rotates because they depend on rainwater:

This is called the *muyuy* or *tijirays*, every time that, every certain amount of years the plots are changed, the cultivation plots, then, they are recovered, with the native flora of the area, with grass specially. (...) they grow by themselves. Then they leave [them] eight years, six years, depending, and they turn them. That's why it is called *muyuy* [going round], they turn them. (...) Here [in the valley] the plots are managed yearly. They are used all year around. They are making two harvests per year, in some [plots], one. Because here there is water. But in the highlands, they depend on the rain. And, they only grow tubers, they don't grow anything else. 272

This expert's testimony confirms the data obtained through the testimonies of peasants of the highlands and the Valley floor. He shares the perspective of a local with that of the state through his work in the planning of the *conservation of nature* in the district. This permits the

²⁷⁰ Author's translation from the transcript in Spanish. (Ibid., p. 5)

²⁷¹ Author's translation from the transcript in Spanish. (Ibid., p. 6)

Author's translation from the transcript in Spanish. (Ibid., p. 7)

connection between the *conservation of the past* and the *conservation of nature*, which he relates to traditions (symbolic relation to *chacras*, selection of seeds, *muyuy*, biodiversity conservation). Based upon his local knowledge and trust with *comuneros*, this key actor can play the role of connector between the *conservation of nature and the past* and local communities' involvement.

On the other hand, the guards and maintenance workers of the park are in many cases, as in the PNOMP, people from the vicinities. The following case involves a guard who is a member of the Peasant Community Ollanta. He is an inhabitant of the neighborhood Qosqo Ayllu, and considers its conservation essential for the sustainability of the site's tourist exploitation. For him, the heritage left from "our ancestors" needs to be preserved. Nevertheless, he notices that the changes are affecting its conservation:

For me, like I always say, no? Eh, to conserve the most of our heritage, no? What our ancestors have left [us]. Although, the truth is that, today, we practically are not directing ourselves to agriculture, we almost don't work it... Why? Because tourism comes a lot... but if in any moment we end up affecting our heritage, the tourism won't come. They won't come to the buildings we are constructing with "noble" material [bricks and cement]. Then, ourselves, the population of Ollantaytambo has to become conscious that our heritage, we are destroying it ourselves. Now the Ministry of Culture does the surveillance, everything that is possible but unfortunately, the population rejects the Ministry of Culture. They hate the workers that go to notify, they want to kick them, they want to throw them water, no? But also the worker that is a guard and a clerk, is also accomplishing his duty. He is not doing [it] because he wants to, but he is guarding what is our heritage. ²⁷³

Agriculture is recognized as part of tradition, a part of the heritage left by the ancestors. Nevertheless, this heritage is being neglected due to the importance given to tourism, which reflects the most viable way of increasing incomes. The idea of progress is illustrated through the "enhancement" of houses and the education given to children. This might signify the loss of tangible and intangible heritage.

He confirms the progressive replacement of traditional agriculture for monoculture:

The agriculture we are working on is for sports practically, also, our products don't cost too much. It costs us more the investment than selling the product. (...) Before we worked a lot with dryland farming lands, no? Right here [Community Ollanta] we

²⁷³ FSP. Author's translation from the transcript in Spanish. (IntLC_PAO_FSP, p. 3)

worked with native potato, with ecological potato, no? We are talking about Pumamarca, Choquebamba, Cruzmoqo, we worked potato, *olluco*, beans, but now you see? The majority don't work. Then we have already abandoned part of the agriculture. We are dedicating ourselves to the [cultivation of] maize, for trade now. ²⁷⁴

The change from a traditional way of farming to a commercial one is similar to what has happened in the PNOMP in relation to the changes from the traditional transhumant stockbreeding to the current semi-estabulated stockbreeding. The equivalent to the stockbreeding of native species of sheep and goats in the PNOMP would be the native potatoes and maize species that were cultivated in the PAO. Biodiversity has been replaced by monoculture of maize for trade, like the breeding of bovine cattle has replaced the traditional breeds of the Pyrenees mountains in the PNOMP. The species adapted to these mountains – Pyrenees and Andes – are being replaced by seeds and breeds that have been produced for maximizing the yields for exportation and not for consumption. All such aspects characterize the emergent landscapes in both sites.

Furthermore, FSP describes the problems between locals and the Ministry of Culture, which may be connected to the complexities of restoration works that locals cannot afford. Subsequently, this result in the lack of maintenance of the archaeological remains where locals live:

Well, I think that, you know, with "noble" material, the work is easier, no? Very easy. Because placing a stone is very costly, no? And there are few restorers in Ollantaytambo, and it also, maybe, it would be good that the people would get more capacity building in stone work, no? Because, you know, part of the archaeology, there are a lot here, and codifying the stones, there is the need of reticulating, of taking away, of assembling the beacons, take the points, then, it is a little bit complicated... I don't know, that part maybe, the municipality, the municipality has a lot of budget, maybe they could intervene because I think that also the Ministry of Culture contributes a lot to the municipality, no? Apart from the income of the tourist tickets ²⁷⁵... ²⁷⁶

Maintaining these structures is costly and, for the dwellers that do not receive subsidies or assistances, it becomes more profitable to build with concrete. Concrete requires less maintenance than *adobe* and less expertise than the restoration works required for building with Inca stones. A viable strategy for conserving this cultural landscape might be to give capacity

²⁷⁴ Author's translation from the transcript in Spanish. (Ibid., p. 6)

²⁷⁵ Tourist tickets cost S/.130 (€32,50) per person permitting the entrance to 16 sites in Cusco city and the neighbor valleys (Inca Sacred Valley and Huatanay River Valley- called South Valley), the PAO being among these sites.

²⁷⁶ Author's translation from the transcript in Spanish. (Ibid., p.4)

building to the dwellers in themes related to restoration, plus financial assistance for the preservation of those structures. *Comuneros* such as FSP might function as a bridge for the communication between the Ministry and the locals.

In the PNOMP, the key actor is a stockbreeder, guard in the park, and also mayor of one of the Municipalities in the Area of socio-economic influence of the park, which also runs a tourist business. For the case of this key actor, it is only possible to manage all these activities because he has a family supporting him. In the case of other stockbreeders, the majority are single and do not have descendance. Hence, there is neither generational changeover nor help for stockbreeding work:

It's what I said to you, it's a tough and constrained life. You have to be [with the animals] always, you don't have a free day, you have to give food... animals eat every day, and you have to take care of them every day, yes... Here we have the very big advantage that they leave in summer to the mountain ports, and they are there three months, between three and four months that they don't give any work practically...²⁷⁷

However, this was not the case when young people decided to leave the towns of the Sobrarbe. Most of the young people were willing to change their lives and not continue agropastoralism, which implied a dependence on the cattle. Moreover, stockbreeding is now economically insufficient, which is how MPST explains his complementary activities:

Stockbreeding, with the stockbreeding it is not possible to live. (...) Stockbreeder and hostelier, yes. But [only] after the park was declared, because the attraction, I mean people come here, because of the national park. Before the national park, almost nobody came, there were few tourists, no? ²⁷⁸

Nonetheless, this alternative activity of tourism has only become profitable in the other valleys (apart from Broto Valley) since 1982, when the park was extended. Accordingly, only the people who remained in the towns until then could start diversifying their activities. Therefore, even when there is such an alternative to stockbreeding, the towns are empty. One of his major tasks as mayor is to stop their depopulation:

You can see it clearly. The towns are dying for the people to live the whole year, no? The neighbors that are living outside and so, they arranged their house like SE, like we have seen them now. They come 15 days in August, 20, they come for the Eastern

 278 Author's translation from the transcript in Spanish. (Ibid., p.7)

 $^{^{277}}$ Author's translation from the transcript in Spanish. (IntLC_PNOMP_MPST, p. 4)

Week, they come to stay few days in the town... But, it would be most elegant if the people would live in the town the whole year, no? ²⁷⁹

The park currently represents the most important alternative for retaining people the whole year, whether working as guards or in tourism. Stockbreeding might no longer be the center, but it could complement well the activities related to the visit to the park:

I think that stockbreeding has to be side by side with hostelry, always, in the towns. In a town, eh. Because when people come to stay in your rural house or in your restaurant, they love to see the fields that are clean, that are conserved, no? (...) And from that, they like to see the animals. There are a lot of people that when they see the sheep in the prarie, before eating they stay quarter of an hour taking pictures, looking at them, you know? They like them and apart from the fact they like them, is what I already said, they clean the mountain, they clean it. They are eating continuously you know? ²⁸⁰

In this case, the local adopts the vision of the visitor, and hence transforms its own life into a landscape. The sheep that attract visitors are also the "cleaners" of the landscape; therefore, he considers it necessary to keep stockbreeding even when running tourism services. However, the persistence of the stockbreeding practice is also connected to the existence of the subsidies, in his eyes:

If you have ten hectares, the one who has ten hectares is paid for ten hectares, the one who has 500 sheep, charges for 500 sheep, the one who has a 100 sheep, charges for 100 sheep, no? Everybody gets paid. And then, there are other subsidies that are for the endangered species, that are the autochthone species of this area and that are species that have been lost, because they are species that are not profitable, smaller... [They are] more adapted to the mountain, to mountain sites, you know? Yes. And the people, many they have stopped breeding those species less productive, for others that are bigger, that lamb grows faster, they have made crossings, more, for commercializing better, you know? Now the endangered species are coming back a little. I have for example two: the *Pyrenaic goat* and the *churreta encina*. And it's what I think cleans more the mountain also. The sheep and the goat. Because the sheep, you see that all that is very steep and the sheep and the goat, they pass anywhere. The cow in many places, the cow weights 600 kilos and the cow, there are many places where they can't pass and graze. In those flat places is perfect, but if you put it in the slopes there, it can't anymore, it can't pass. ²⁸¹

²⁸¹ Author's translation from the transcript in Spanish. (Ibid., pp. 9-11)

²⁷⁹ Author's translation from the transcript in Spanish. (Ibid., p. 8)

²⁸⁰ Author's translation from the transcript in Spanish. (Ibid., p. 9)

The conservation of ovine stockbreeding upon which MPST defends also relates to the adaptation of this species to the environment. As previously mentioned, the species that are best adapted to these have been abandoned due to their lack of profitability. Moreover, it is the same with the mountain people. Life in the mountains is hard. Nevertheless, the conditions have changed and the mountains of the Pyrenees are now connected with all the services that did not exist 40 years ago, and previously made life "tough", as the testimonies have shown.

However, even if the economic and political contexts are not appropriate for the continuity of stockbreeding, it is still the most important issue in the site, independent of the position that MPST takes. He considers it essential from whichever perspective: as tourist entrepreneur, mayor, guard and stockbreeder:

I think stockbreeding is an essential topic for everyone, I mean, essential for the park and for the towns of the park, no? That is first. Then, I, as a mayor of Tella-Sin, my main worry is the settlement of the population, because I see that every year there are less people, there is not generational replacement and people leave...²⁸²

The depopulation started in the beginning of industrialization and urbanization in Spain, now continues and relates to the lack of job offers for locals. When asked about the future of the towns he says:

"I think it is complicated, it's complicated, and... more in the times that we are in, no? What we have clear is that, we have to do something to try it at least, no? And what we are doing this year is to give a course on nature guiding. We are in an area where we have a lot of things that the tourist can see, no? And that we could make guided tours, also, no? Also, eh. We have things like the Museum of the Bear in Tella, the cave of the Bear where rests of bears of long time ago have been found, no? Eh. We have a wooden saw that functions with water, we have a dolmen, we have a Museum of Electricity, and well, I think that preparing the people a little in this topic, a little, well prepared, no? Then we can sell trips and a cooperative, or something similar, that could exploit those things we have here, no? And as much as possible, that the people are people that actually want to live here and be here, no? That they have a preference... I mean, a preference, people that is prepared and... that the one who is prepared can have an [opportunity]. 283

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²⁸² Author's translation from the transcript in Spanish. (Ibid., p. 26)

 $^{^{283}}$ Author's translation from the transcript in Spanish. (Ibid., p. 31)

Thus, tourism seems to be the only alternative for attracting people to stay in the towns. For instance, this alternative is already being exploited in the PAO and other towns in the Inca Sacred Valley. The *comuneros* undertake courses in tourism and work as guides, cooks and porters in the Inca trails tours. Hence, the loss of inhabitants in this area is not an issue. Because the conditions in the Pyrenees are different and much better than 40 years ago, it could be possible that young people decide to stay in the mountain towns of the PNOMP. Moreover, the crisis in the urban centers, where jobs are now precarious, presents life in the mountain towns as an alternative for subsistence.

What remains more important is that all the actors concerned with stockbreeding in the PNOMP agree that its continuity is essential for the maintenance of the landscape:

The Park is interested in the continuity of stockbreeding, also we all think the same, that is fundamental the stockbreeding in the national park, eh. Making profit of the pastures, everything stays in the mountain very clean... The day that these animals are not here, well everything is going to be scrubs.²⁸⁴

Even if the interests of the groups seem different, they ultimately all agree in both sites concerning the importance of conserving heritage, as well as conserving the agropastoral cultural landscape and its traditions. However, the continuity of the agropastoral practices that permit the maintenance of cultural landscapes is not dependent on the models of protection, nor on the locals; rather, it depends on the economic possibilities that the system allows. In these two cases, it has been demonstrated that the changes in the system, represented by modernization, industrialization and an increase in tourism, are the main causes for the loss of heritage, both cultural and natural. Moreover, it has been clarified that both cultural and natural heritage are interlinked and mutually dependent. When cultural heritage is lost, this will be accompanied by a loss in natural heritage, and vice versa. Furthermore, tangible heritage, especially that linked to a cultural landscape, is highly dependent on the continuity of traditions.

9.4 Synthesis about the emergent landscapes

The concept of emergence has been used to explain a landscape that has not been planned, yet results from the interrelation of different practices. The emergent landscapes analyzed, as biophysical realities, are dependent on long processes of socio-cultural and

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²⁸⁴ Author's translation from the transcript in Spanish. (Ibid., p. 29)

economic changes occurring in the areas in which they are embedded (the Inca Sacred Valley for the PAO and the Sobrarbe region for the PNOMP).

My assumption for this study has been that three groups of actors influence the landscape through the interrelations of their practices. Accordingly, the hypothesis has been that the understanding of the synergies between the perceptions of these three groups over landscape and their practices can explicate the sustainability or unviability of the cultural landscapes.

In this chapter, the values assigned by each group to the significant places found in these heritage sites have been analyzed. It has been found that the appreciation focuses on the same categories in the landscape, although these are valued in different ways according to the group. The categories used by visitors (more general) provide a layout for the more specific places valued by locals and the state, which assign names to significant places.

Apart from the case of the forest, which has a different significance for the visitors and the locals in the PNOMP, the places appreciated are the same or belong to the same categories. This is explained by the following:

- 1. The state promotes a site based on the scientific and historical values assigned to it. Accordingly, what the visitors will search and appreciate the most is also related to these places and aspects of the site.
- 2. The offer in the site is continuously being re-adapted to the visitors' demands, with new routes and trails created by locals, agencies and experts.
- 3. The visitors that go to these mountain regions are evidently looking for the categories of mountains, glaciers, lakes, rivers and forests, elements characterizing mountain landscapes.

The most important value assigned to these landscapes, from the point of view of visitors and experts, is the aesthetic. On the other hand, the aesthetic value is not important for the locals. In order to give an aesthetic value to a site, one needs to be distanced from it. However, locals are not distant but rather embedded in the site, and hence give more importance to symbolic and economic values.

The emergent landscapes that arise from the interrelations of these values and the practices of the three groups obey global trends. Even though the two sites were produced by a similar culture (agropastoralism) in similar geographical contexts (the mountains), they are now

experiencing opposite forms of transformation. "Urbanization" and "forestation" represent two trends of the transformation of the landscape. Despite similarities in the processes affecting them (patrimonialization, modernization, industrialization, tourism), the emergent landscapes obey different demographic tendencies. In the first case, an over-population of a site is produced, and in the second, its abandonment. The continuity of agropastoralism is not viable in an isolated space; rather, it demands a vibrant community life. However, in both cases, the continuity of agropastoralism as such seems unlikely, although in the case of the PAO local culture still greatly relies on this for subsistence.

To achieve sustainability, the interconnection between different interests needs to be foreseen in order to create networks, recognizing the interdependence between traditions and the market. The strong bet of tourism relates to a short-term choice based on profit. This process of "touristification" of sites brings conflicts between conservation and development. Nevertheless, key emergent stakeholders have been found as possible mediators between the different groups. The presence of actors who can manage the interests of the three groups could serve as a way of promoting synergies in conflicts.

10 Conclusions: The scope and limits of the models of protection for the conservation of cultural landscapes

With culture seeming more changeable, debated, and marketed, many of us feel a greater desire for heritage as an anchor against change.²⁸⁵

The conservation of cultural landscapes intends to help human groups (national, social or cultural) to regenerate values and knowledge developed by former generations in their adaptation to environment. Cultural landscapes acknowledge the importance of designed, continuous and relict organically evolved, as well as associative landscapes around the world, as representatives of the interactions between man and nature.

Twenty years have passed since Tongariro National Park was the first site to be inscribed as a cultural landscape in the World Heritage List, with almost 90 properties having been since added to the World Heritage List under these categories²⁸⁶. With one cultural landscape, the only cultural property been delisted (Dresden Elbe Valley, inscribed in 2004, delisted in 2009), the category has become emblematic, prompting discussion concerning the confrontations between inevitable change and heritage conservation. A new conservation paradigm seems to be under construction, one that needs to incorporate and adapt conservation to cultural, environmental, and socio-economic changes.

Cultural landscapes have been used as part of the strategy to open the List to non-Western countries in order to include heritage sites that could be interpreted neither as natural heritage nor monumental heritage. Functioning as an instrument of the Global Strategy for a Representative, Balanced and Credible World Heritage List – an initiative launched by the World Heritage Center in 1994, cultural landscapes also serve for calling attention about ICH and the inextricable relationships between tangible and intangible, cultural and natural heritage.

However, cultural landscapes do not represent a model of management. Systems of protection are based on the conservation of tangible heritage and the division between cultural and natural heritage. This represents a constraint when the intention of the categories is to overcome the nature/culture and tangible/intangible divides. Cultural landscapes invite

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²⁸⁵ (Mason & Avrami 2002, p.14)

The list of cultural landscapes is being updated each year in the website of the World Heritage Center: http://whc.unesco.org/en/culturallandscape

reflecting upon alternatives for comprehensive heritage management.

The purpose of this dissertation has been to explore how the conservation practice is developed in the context of World Heritage Cultural Landscapes through the analysis of the emergent landscape management in order to elucidate strengths and deficiencies in the classical models of protection based on the culture/nature divide. The main research question addressed four fundamental issues in the development of current conservation practices:

- 1. Sustainability;
- 2. Interrelations between cultural, natural, tangible and intangible heritage;
- 3. Adaptation and change; and
- 4. Local communities involvement in conservation practices.

The question that guided this work is how can cultural landscapes be sustainably conserved, considering their natural and cultural values as well as tangible and intangible heritage, allowing change and respecting the continuity of local cultures?

For this, I have developed a comparative study of how landscape management is performed in two exemplary heritage sites: the Archaeological Park of Ollantaytambo in Peru, and the Ordesa and Monte Perdido National Park in Spain, whose focuses of protection differ. The first model is dedicated to the protection of culture through the preservation of archaeological remains and the second to the protection of nature. Both cultural landscapes have been formed through the adaptation of agropastoral groups to the mountains and its valleys. These sites have been selected by experts in the context of the 1972 Convention because their agropastoral traditions have been conserved throughout the centuries, yet are now considered endangered and in need of protection. Nonetheless, following the reflection of Mason and Avrami in the epigraph, are these cultural landscapes viable in a context of cultural change? Alternatively, are they being forced to be anchors against change?

10.1 Summary of results

Within this study, I have discussed the modern conflict between conservation and change, as well as the limits of conservation when the socio-cultural and environmental contexts undergo irreversible trends. I have started with the assumption that the paradigms used for establishing protected areas do not necessarily fit within the cultural spaces where these are established, and that conservation strategies are established externally to the communities

traditionally inhabiting these areas. Through this research, it has been found that the models of protection established would not necessarily be effective when the traditions - related to the production of the landscape – change obeying socio-economic processes. This shows how the three pillars of sustainability are interconnected and not possible to dissect in the study of heritage conservation: society, environment and economy are interdependent and mutually influencing. Moreover, these interdependences influence cultural changes.

Within the process of research, it was found that local communities alone are not responsible for landscape change; rather, it is due to the process of an emergent landscape management comprising actions of different actors. Three main groups of actors were found instrumental in the process of the emergent landscape management: the state, local communities and visitors. I have worked based upon a conceptual model of landscape management (see Figure 1) for understanding the relationships between the actors involved in this process.

Through the analysis of these two heritage sites, I have attempted to demonstrate that even if the current system has intensified initiatives for conserving heritage, in its very essence, it implies its transformation. Moreover, the culture/nature divide in the foundation of the conservation practice limits the possibilities of integrating protective measures that could cover all types of heritage.

Cultural landscapes are valued based upon international criteria, assessed by experts who are alien to the landscapes in question. These assessments, based on scientific analysis of the landscapes, are later used by the state in the protection systems established (inventories, protected areas and regulations). However, these assessments overlook the relationship between people inhabiting the sites, their landscape and their heritage.

First, in order to clarify how the system of landscape management and landscape conservation work, it is necessary to identify what are the understandings towards landscape according to each group of actors. Second, the practices that these understandings entail need to be identified. Finally, the value systems embedded in these perceptions of landscape, the practices performed over it and the differences among them highlight the source of conflicts in these heritage sites. The confronting and diverse value systems lead to the failure of heritage conservation in terms of the landscape or the lack of local communities' involvement. Nevertheless, the elements valued in the landscape by the three groups of actors are contained in the same categories, although the values assigned to them differ (cf. Chapter 9).

Based on the classification developed by French philosopher Jean Marc Besse (2009), who defines five approaches (or 'entrance doors') to landscape (cf. Chapter 3, p. 56), I have analyzed under which of these approaches (summarized in Table 10) each group of actors refers to the concept of landscape.

I have summarized the findings for the three groups that have been developed in Chapters 6, 7 and 8, in Table 11, specifying from which approach - among those presented in Table 10 - they perceive landscape, as well as what are their understanding, practices and values over it, according to each site. Three landscapes have been found: the landscape of the state, characterized as the landscape as a container; the landscape of agropastoralists (representing the local communities that have a major impact in the landscape), characterized as the landscape as habitat; and the landscape of visitors, characterized as the landscape as picture. However, these three landscapes are not closed categories; rather, the groups are open and overlapping (see Figure 46).

Approach	Disciplines	Definition
[1]	Art History	Landscape as a cultural
		and social representation
		with an aesthetic
		dimension.
[2]	Human Geography,	Landscape as a territory
	History, and Archaeology	fabricated, inhabited and
		transformed by humans.
[3]	Earth Sciences: Physical	Landscape as a systemic
	Geography, Geology,	complex that articulates
	Pedology, Climatology,	natural and cultural
	Ecology	elements in an objective
		wholeness.
[4]	Phenomenology. Used in	Landscape as a subjective
	Archaeology and	apprehension and
	Anthropology	sensitive experience.
[5]	Landscape architecture	Landscape as a site or
	and planning	context for the project.

Table 10: Five approaches to landscape according to Jean Marc Besse (2009), *Le goût du monde. Exercices de paysage*, Actes Sud/ENSP, 230 pp.

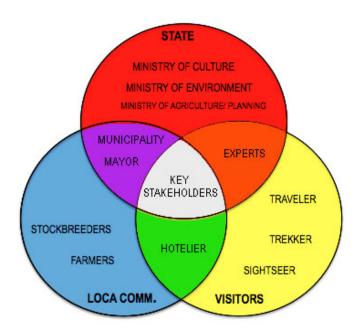


Figure 46: Actors in the emergent landscape management.

The landscape of the state, conserved through the model of protection of the past and the model for the protection of nature, sees landscape as an aesthetic capital, used for recreation and tourism

The landscape of agropastoralists shows that the interest of local communities is to conserve its landscape capital, as work of ancestors that has been bequeathed as land and productive structures in the landscape (terraces and fields).

The landscape of the visitors is comparable to a museum display whereby an external meaning is assigned to landscapes, creating a division between observer and the object observed, primarly by giving an aesthetic value based on contemplation. This image illustrates the objectification of the environment.

The difference between the local communities and the visitors in their relationship to landscape is evident: being part of the landscape is labouring it. Even if visitors intend to "be part of the landscape", working the landscape is the opposite of trekking, photographing or looking for rare species of fauna and flora. A good example is the case of the birdwatchers that

are visitors to both sites ²⁸⁷. Whereas the birdwatcher searches for an aesthetic experience and the feeling of "having been there", "having seen something" and observing the species in question, when a local watches a bird their purpose is to understand what this means in the context: the behavior of the bird can explain/predict something related to the functioning of the ecosystem. While the birdwatcher might have a deep knowledge of the observed species' behavior, this knowledge is not interpreted within the environmental context and its significance inside the habitat. In order to assign scientific and aesthetic values to landscape, it is necessary to take distance from it.

Therefore, the landscape that society wants to conserve is not homogenous or unique. There are different groups in society that construct different landscapes, and thus their intentions in conservation can vary.

Even if the appreciation for the three groups focuses on the same categories of elements in the landscape, these are valued in different ways according to the group of actors (cf. Chapter 9, Table 8 and Table 9). The categories used by visitors provide the layout for the more specific places valued by locals and the state. Nonetheless, there are two elements that prompt major discrepancies: the forest (PNOMP) and the ruins (PAO). Paradoxically, these are the elements that characterize these protected areas: the national park represents forests, and the archaeological park, ruins. Nevertheless, their significance for the visitors and the locals are opposed. What the three groups coincide regarding is in valuing the landscape capital: the Inca terraces and the agricultural fields of the PAO, and the agropastoral landscape of meadows and fields of the PNOMP. However, whereas the visitors give an aesthetic value to the landscape as a whole, the locals and the state value it from the economic perspective.

The process of "touristification" (the replacement of traditional activities with tourist services based upon to their immediate profit) represents the interdependence between traditions and the market, bringing about conflicts between conservation and development. Key emergent stakeholders have been found as possible mediators between the different groups and are shown in the center of Figure 46. The presence of actors that can manage the interests of the three groups could serve as a way of promoting synergies between the conservation of nature, past and traditions.

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²⁸⁷ In the case of the PAO, birdwatchers search for the *Royal Synclor* whose habitats are the Andean native forests of *Polylepis*. In the PNOMP, birdwatchers search for the *Gypaetus barbatus*, found in the Pyrenean mountains. Both species are endangered.

The role of the state in landscape management has been found crucial. In the case of the *conservation of the past*, at the state level, the landscape is a frame for heritage. In the case of the *conservation of nature*, landscape is the central focus of conservation, reduced to its ecosystemic interpretation. In both situations, landscape is understood as a frame formed by natural heritage, which contains cultural heritage and resources. In the case of the PAO, landscape is secondary to conservation; however, in the PNOMP it is the primary object of conservation, even if it is not specifically mentioned as such. However, landscape has been neither been defined as heritage in the legal documents nor in the management plans of these sites.

Furthermore, both sites are embedded in a process of "intangibilization of heritage", i.e. the evolution from the ideas of protection of natural and cultural tangible monuments to consider traditions and knowledge systems as heritage in need of conservation. These heritage sites represent a shift from the preservation paradigm to heritage paradigm (Ashworth 1997). The focus is the *use* of heritage to promote the economic development of local communities through tourism. The use of heritage as a commodity in the market is conceived as instrumental for the development of rural environments. However, the use of heritage focused on tourism is not sustainable, because it tends to erode and folklorize culture and traditions, provoking the transformation of practices. Moreover, as a practice dependent on processes external to the site, it is unreliable. Nonetheless, the use of heritage as a tourist attraction demonstrates that in order to promote the involvement of locals in the conservation practice, it is necessary to present it as a profitable venture. Indeed, this is the main problem of the conservation practice. In the current socio-economic context, if an activity that requires effort does not represent a direct economic benefit to the individual or group carrying out that effort, it is not considered viable.

In Table 12, I have summarized the emergent landscape management processes occurring under both models of protection as affecting the conservation of the cultural landscapes.

The patrimonialization processes of the past and nature have been found similar. They both consist first in the expropriation of a site from the local communities inhabiting it by suppressing their autonomy in their relationship to environment and heritage. The "authenticity" of the relationship between people and their environment is affected when the access to land is restricted and the use of resources regulated. Moreover, the interpretation of heritage is managed by experts who do not necessarily include local knowledge and local value systems.

The models of conservation of these sites were established before they received the designation as cultural landscapes. Hence they are based on value systems that do not fulfil the needs of protecting intangible heritage, instrumental component for the conservation of the agropastoral landscape.

The 'baseline' of conservation, characterized by the agropastoral land use, is in the process of transformation. In the case of the PAO, crops, pastures, forest and villages are maintained, although the emergent landscape is the urbanization of agricultural fields. In the case of the PNOMP, the agropastoral land use has been lost, with only meadows and some fields remaining; however, the terraces and fields in the slopes have been abandoned due to their lack of profitability. This provokes the emergence of the forested landscape. Both cultural landscapes have undergone and continue to undergo processes that lead to the change of the agropastoral 'baseline'. Accordingly, the cultural landscape has changed as the result of how the environment is occupied by the people (cf. Table 10, approach [2]).

The path of development of the landscape is guided by norms determined by the state, even if locals are those directly influencing the environment in their everyday life. The sites have become centers for research and tourist visits. Furthermore, local practices that represent alternatives for the conservation of the landscape are only being reproduced in the highlands of the PAO. In the PNOMP, most of the traditional local practices have been abandoned and only few related to transhumance are still carried out by the few stockbreeders remaining in the area. The resilience of these certain practices and their adaptation to new socio-economic contexts illustrate the possibility of a conservation practice from the bottom and based on locals' way of life.

The emergent landscapes that arise from the interrelations between the understandings, values and practices of the three groups obey socio-cultural changes led by global trends. Even though the two sites were produced by agropastoralist cultures in comparable mountain areas, they experience two opposite trends in the transformation of the landscape: "urbanization" and "forestation". Despite similarities in the processes of patrimonialization, modernization, industrialization and tourism, the emergent landscapes obey different evolutions of the relationships between human communities and their environment. In the first case, an overpopulation of a site is produced, and in the second, its abandonment. However, the continuity of agropastoralism seems unlikely in both cases, and is not dependent on the models of protection or the conservation practice *per se*.

		STATE	LOCAL COMMUNITIES		VISITORS	ISSUES	EMERGENT LANDSCAPE
	APPROACH	[1] [2] [5]	[3]		[1] [2] [4] [5]		
PAO	Understanding	Landscape as container. Natural landscape as frame of archaeological heritage. Landscape: natural environment, environment, natural landscape, natural heritage, context, ecosystem.	Landscape as habitat. Landscape as inheritance. Structures in the landscape as heritage and capital.	Habitat fragmention.	Landscape as picture. Local people as part of landscape.		Conserved as living Inca Museum
	Practices	Inventory. Patrimonialization. Expropiation. Establishment of legal protection system: corrective and protective measures. Management systems based on zoning, restoration, cleaning, and maintenance. Research. Official scientific interpretation of site.	Continuous use of landscape capital (terraces, fields, canals). Occupation of agricultural fields with building structures. Conservation of native forests. Celebration of agropastoral calendar festivities.	In the valley floor: use of pesticides. Monoculture of maize for trading. In the highlands: cultivation of biodiversity (potato) for self-consumption. Relative use of pesticides and trade seeds. Use of manure. Conservation of traditional seeds and species proper to local ecosystem. Fallow system Muyuy. Dryland farming.	Tours. Contemplation. Trekking. Attendance to local festivities.	Property of heritage. Disappropiation. Conservation of heritage as limitation to locals' development. Loss of autonomy for locals over their reritory. Modification of traditional access to territory. Site becomes centre of research and tourist attraction. Commodification of landscape and traditions. Folklorization of traditions	
	Values	AUTHENTICITY; Sceintific value; Historical value; Economical value; Cultural value; Aesthetic value; Symbolic value	Economical value; cultural value; symbolic value; social value		Aesthetic value; Recreational value		Urbanization
	APPROACH	[1] [2] [3]	[2] [3]		[1] [4]		
РИОМР	Understanding	Landscape as container. Landscape as representation. Landscape as ecosystem. Landscape: focus of protection. Landscape: nature.	Landscape as habitat	Habitat loss.			Conserved as wilderness
	Practices	Inventory. Patrimonialization. Territorialization. Establishment of legal protection systems: corrective and protective measures. Management systems based on zoning, restoration, cleaning, and maintenance. Control over traditional activities: stockbreeding, timbering, agriculture, fishing. Research. Official scientific interpretation of site.	Continuous use of landscape capital (fields and meadows) Progressive abandonment of traditional stockbreeding, Abandonment of terraces. Abandonment of forest management (timbering). Abandonment of transhumance.	Change of cattle: sheep to cows. Change from susbsitence stockbreeding to commercial stockbreeding. Maintenance of traditions of Paso a Francia and Dia de la suelta.	Trekkings. Contemplation. Attendance to local festivities.	Disappropiation. Loss of traditional interrelations between human communities and their environment. Site becomes centre of research and tourist attratction. Commodification of landscape. Folklorization of traditions.	
	Values	INTEGRITY; Scientific value; Historical value; Economical value; Cultural value; Aesthetic value; Symbolic value	Economical value; cultural value; symbolic value; social value		Aesthetic value; Recreational value		Forestation

Table 11: Approaches, understandings, practices and values in the emergent landscape management.

		PAO	PNOMP
		Archaeological Park	National Park
		FOCUS: CULTURE	FOCUS: NATURE
Landscape as container	Conservation	Conservation of landscape	Conservation of landscape
		as a living Inca museum.	as result from
			conservation of natural
			habitats, wild flora and
			fauna.
	Use of heritage	Research, recreation and	Research, recreation and
		economic development	economic development
Landscape as habitat		Habitat fragmentation by	Habitat loss by
		land use change	succession.
Landscape as picture		Mountains and ruins	Mountains and forests
Emergent Lanscapes		Urbanization:	Forestation:
		Occupation of agricultural	Abandonment of
		fields and terraces.	[agricultural] fields and
			terraces.

Table 12: Emergent landscape management impact on conservation of cultural landscapes in the archaeological park and the national park.

Both emergent landscapes are characterized by the loss of the traditional biodiversity of the sites (potato and maize in the case of the PAO/goats and sheep in the case of the PNOMP). Furthermore, both emergent landscapes are characterized by their vocation to the transformation of dwellings into hotels. This translates into a transformation from agropastoral cultures to tourist-oriented cultures, subject to the folklorization of their traditions. Even though the sites differ in terms of population dynamics (depopulation in the PNOMP vs. urban population growth in the PAO), both situations influence the sustainability of these regions. Whether the protected area is devoid of population or the population inside the protected area is growing, in neither case is there a sustainable conservation of the cultural landscape: if there is no community, the work of the landscape cannot be performed (PNOMP); whereas if the communities exceed the carrying capacity of the place, the land use changes and hence, also the cultural landscape (PAO).

10.2 Sustainability or unviability of the conservation of cultural landscapes?

The models of protection studied are products of the dichotomy between nature and culture. In their essence, the *conservation of the past* and *conservation of nature* go against change. Currently efforts are applied to the flexibilization of the foundations of the culture/nature divide. The preservation paradigm has given inherent value to history and nature, without necessarily considering the relationship between the holders of heritage and their traditions. The modern conservation of heritage has aimed at arresting change by selecting and maintaining some part of life independent from the 'natural' process of change.

Modern conservation practices have not caused, but rather have collaborated with, the disappearance of these traditional cultures. The models of protection established for these sites have inevitably undermined the autonomy of local people in relation to their habitats. Patrimonialization has contributed to the abandonment of traditional practices and their folklorization. The unviability of these modes of life is accentuated by the global processes of commodification and neo-liberalization.

Agropastoral traditions represent the engine for the persistence of the cultural landscapes that have been valued in the context of the World Heritage. However, these traditions are struggling to be maintained. Agropastoral communities of both mountain ranges have adapted to structural economic changes that are part of a global transition from tradition to modernity, from rural to urban ways of life.

In this context, the conservation of these agropastoral landscapes can only make sense if they are economically viable for local communities. These landscapes make sense to the extent that they represent exploitable resources. Nonetheless, the complexity of how people identified themselves with their landscapes is fundamental and also intervenes in the conservation of the traditions and local knowledge. It is connected to an ancestral way of living, which represents a historical way of relating to those mountain environments, familiar to the locals and extending beyond economy.

Despite this, local communities are integrated to conservation in the case of the PNOMP, through the role of guards in the national park and the hunting reserve. By contrast, in the PAO, few local people work as guards and the relationship between locals and the regulations for the conservation of the archaeological sites has been rather conflictive due to limits imposed on the use of their land.

Two questions remain open for the viability of the conservation of these cultural landscapes through the involvement of local communities.

The first such question refers to the possibility of their integration into the archaeological park. Due to the inevitable need for growth of the settlements located inside the park, the habitat fragmentation through land use change is likely to keep its actual trend, i.e. locals will continue to occupy the agricultural fields with 'archaeological commitment' that are of their property. Halting the urban development inside the park would need the disposition of areas for growing that might be located at larger distances from the main cultural attractions, thus reducing the economic benefits for those who have to build outside the park. Strategies for compromising locals need to be developed in order to demonstrate that the constant "destruction" of their heritage by occupying agricultural fields and terraces might also influence their possibilities of economic development through tourism. The problem with this solution is that it might artificialize the landscape (converting it into a theme park?), stopping its continuous regeneration by organic inhabitation. To study this possibility, it would be recommended to find similar cases among heritage sites.

The second question refers to the solution for halting the imminent process of habitat loss through forest succession in the vicinities of the national park. Since this is the most important concern for locals and is directly connected to the agropastoral tradition and the conservation of the cultural landscape, strategies for maintaining the forests need to be conceived. One option could be subsidies for forestry practices, as it is being carried out with the stockbreeding activities. A second option is to generate a system of cleaning fields as a paid activity for the local population, funded by the Municipality, the PNOMP and the Autonomous Community. A third option could be the reintegration of the traditional mountain species: the sheep and goats that "clean" the fields. Indeed, it could be that the three options combined could generate new dynamics in the evolution of this region.

The carrying capacity depends on the practices performed by the local communities, and not only on the population dynamics. The communities and their practices combined with the systems established by the state in the heritage sites are key to understanding the possibilities of the sites' sustainable occupation. Nevertheless, the idea of conservation of the cultural landscape comes from an external view and understanding of landscape. Local communities are connected to these cultural landscapes symbolically and through memory, but when the practices allowing those cultural landscapes to exist become non-profitable, they cannot persist in practicing them.

Landscape has been found to have a variety of connotations. If we assume that landscape does not exist in itself, as an independent entity from the observer and its existence depends on who is observing it, it cannot be conserved as a physical reality. What could be 'conserved' are the practices related to the shaping of the environment. For this, the way in which people acting over the environment perceive it would also need to be 'conserved'. This would refer to the safeguarding of intangible heritage.

The conservation of the cultural landscape, as understood in the modern practice, makes sense when landscape is understood from a geographical perspective (cf. Table 10, approach [2]). Accordingly, landscape conservation depends on the constant regeneration of a certain[s] way[s] of seeing the **landscape/environment** and the practices generated by those ways of seeing it as landscape. Nonetheless, it is essential that those understandings and practices are updated in order to be relevant and profitable for the present inhabitants of sites.

The problem currently relies on the definition of the object of conservation and what are the values of it to be conserved. Accordingly, recalling the definition of cultural landscape used in the framework of the 1972 Convention, the conservation of the relationship between nature and man that produces landscapes as heritages can be viable as long as this relationship is viable in the socio-economic context. As cultural landscapes have been defined in the OG, the term relates to values that are not necessarily connected to how the people living in the landscape relate to it; rather it is related to an external image of it. The three categories based their value upon different understandings of landscape.

In the case of the designed cultural landscape, the first category, the conservation practice implies the artificial maintenance of a design, e.g. a garden, which originally obeys to certain historical context, when it had significance and resources for its creation and maintenance were available.

In the case of the cultural landscape that has organically evolved yet is presently relict, the conservation practice implies the artificial maintenance of a design whose context is past. The design remains as "ruins" that can eventually be re-used (terraces in the Andes), yet generally (due to their vulnerability) might be in need of being enclosed with continuous maintenance.

In the case of the cultural landscape that has organically evolved and continues to evolve, the conservation practice implies the maintenance of traditional practices that produced

and regenerate the resulting design. Here, the traditional understanding of conservation goes against the natural process of change and adaptation that is inevitable in a continuous evolution.

In the case of the associative cultural landscape, the conservation practice implies the maintenance of certain value systems and practices related to a site (e.g. religious, identity); hence, it is dynamic in nature and might be subject to external influences of the socio-political and socio-economic environments.

Consequently, in the first two cases, the conservation practice, as it has been traditionally conceived, related to the maintenance of tangible structures, is applicable, although not necessarily involving the local communities but rather a large amount of resources. In the two latter cases, which are represented by the case studies selected in this research, the traditional conservation practice is not applicable because the models of protection conceived and used do not solve the problem of the regeneration of the ICH. The safeguarding of ICH calls for the reformulation of the conservation practice, questioning the characteristics that are intended to be conserved in a cultural landscape. The cultural landscape is the result of practices that are not always viable, as we have seen with these two examples.

In this sense, the methodology used in this work allowed us to deconstruct the different understandings of landscape, identifying the aims of conservation and its viability. The conservation practice for tangible heritage and managed by experts proves costly and only possible if external resources are available. Nonetheless, ICH and cultural landscapes imply the regeneration of a certain way of relating to the environment.

The methodological design of this study permitted confronting the different understandings of landscape and how these are sources for the conflicts in heritage management. However, it also reflects results specific to certain places, which, despite showing similarities that can be associated to other heritage sites, ²⁸⁸ cannot be generalized.

While the qualitative approach has allowed exploring opinions and feelings of managers, locals and visitors in depth, it lacks a precise quantification of the implications of these qualitative perspectives. Based on these qualitative findings, further quantitative studies might be developed in the areas of land use change (for the habitats transformations) and population dynamics (for the abandonment and change of traditional practices). However, this

²⁸⁸ See for example the case studies in (Simonič 2006).

type of study serves as a basis for an understanding of the complexities of the conservation of cultural landscapes from an interdisciplinary perspective.

10.3 Recommendations: what about conservation?

When thinking about conservation, the inescapable questions center upon what to conserve and why we want to conserve it. The patrimonialization of objects/places/traditions entails the loss of their "authenticity" connected to their reasons of existence. Objects/places/traditions can only be "authentically" maintained through their continuous *use*. How can object/places/traditions be conserved if these are not used? In the case of the cultural landscapes, *use* means the regeneration of the landscape capital that is directly connected to practices related to its exploitation. However, the traditional paradigms of modern conservation consider *use* as damaging heritage. The safeguarding of the ICH questions this static understanding of conservation, since the only possible way of keeping ICH "alive" is by its "use", translated in the practice of traditions.

Both models studied have limitations for the links between conservation and *use*, reflected in the inhabitation of the sites. The use of heritage as an alternative for a sustainable conservation confronts the traditional principle of heritage isolation (enclosure, exclusion of human communities). The concept of cultural landscapes in essence implies the presence of human communities (especially in the organically evolving ones such as the case studies of this work). Hence, in both models, there is the need to develop adjustments for the continuity of the cultures related to them.

Accordingly, the concept of *conservation* in relation to cultural landscapes cannot presuppose the ban of change: land use, environmental, socio-economic and cultural changes need to be integrated. Managing the protection of a cultural landscape signifies the management of change that can be understood through the processes leading to the emergent landscapes. The *conservation* of cultural landscapes involving local communities cannot be put into practice if *conservation* is not part of their way of life. Hence, the concept of landescape management, that implies maintenance but at the same time adaptation to change in relation to practices could be more adequate for cultural landscapes that present the complexity of the tangible and intangible heritage.

Moreover, as Harrison (2010) states when citing Smith: "all 'objects of heritage' need to be constantly re-evaluated and tested by social practices, needs and desires" (Harrison 2010,

pp.25–6). Therefore, conservation needs to be conceived as a process of re-negotiation of values. Otherwise, the traditional approach to conservation is only meaningful from the point of view of visitors who would not notice the artificialization of landscapes entailed by the regulations imposed over the organic relationship of locals to their environment. This would mean conserving landscapes as postcards.

On the other hand, the integration of culture and nature in the context of conservation has proven so complex and difficult to achieve because it not only implies a change in the paradigm of conservation policies and their implementation, but beyond policies, it also involves a deep reflection on the predominant ontology dominating sciences, the naturalist ontology, which presupposes this division between culture and nature. The questioning of this understanding not only implies a change of approach in the modern conservation practice, but it might also imply a radically different approach of inhabiting the Earth, thus leading to the reorganization of governance structures.

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Annexes

Annex 1: List of documents.

A. In the Archaeological Park (PAO)

- LEY No. 6634, Ley del Patronato de Arqueología, junio 1929 (LAW No. 6634, Law of the Archaeological Board, June 1929)
- LEY No. 23765, diciembre 1983: Declara como Patrimonio Cultural de la Nación a varios lugares de la ciudad del Cusco. (LAW No. 23765, December 1983: Declares as Cultural Heritage of the Nation several places of the City of Cusco)
- LEY No. 24047, Ley General de Amparo al Patrimonio Cultural de la Nación, enero 1985 (LAW No. 24047, General Law of Protection of the Cultural Heritage of the Nation, January 1985)
- Reglamento de Investigaciones Arqueológicas RESOLUCION SUPREMA Nº 004-2000-ED, 24 de enero del 2000 (Archaeological Research Regulations SUPREME RESOLUTION Nº004-2000-ED, January 24th, 2000).
- LEY No. 28296, Ley General del Patrimonio Cultural de la Nación, julio 2004 (LAW No. 28296, General Law of the Cultural Heritage of the Nation, July 2004)
- The Management Plan for the Archaeological Park of Ollantaytambo, 2006.
- DECRETO SUPREMO Nº 002-2011-MC, Declaratoria y Gestión de los Paisajes Culturales como Patrimonio Cultural de la Nación, Mayo 2011 (SUPREME DECREE Nº 002-2011-MC, Declaration and Management of Cultural Landscapes as Cultural Heritage of the Nation, May 2011)

B. In the National Park (PNOMP)

- LEY 52/1982, de 13 de julio de reclasificación y ampliación del Parque Nacional de Ordesa y Monte Perdido. (LAW 52/1982, of July 13th of reclassifying and extension of the Nationa Park Ordesa and Monte Perdido)
- LEY 4/1989, de 27 de marzo, de Conservación de los Espacios Naturales y de la Flora y Fauna Silvestres. (Law 4/1989, of March 27th, of the Conservation of Natural Spaces and the Wild Flora and Fauna)
- REAL DECRETO 409/1995, de 17 de marzo, por el que se aprueba el Plan Rector de Uso y Gestión del Parque Nacional de Ordesa y Monte Perdido (ROYAL DECREE 409/1995, of March 17th, that approves the Guiding Plan of Use and Management of the National Park Ordesa and Monte Perdido)
- LEY 43/2003, de 21 de noviembre, de Montes (LAW 43/2003, of November 21st, of Forests)

Annex 2: List of respondents.

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Annex 3: Interviews

Questions to State respondents:

Landscape values:

- What are the elements important to be protected, conserved in this area?
- What are the sites in the (National/Archaeological Park of major importance, scientific or cultural value?
- How is "heritage" defined? How is it defined the concept of "cultural landscape" and in which measure is the landscape and its natural/cultural values considered important?
- What are the most important changes? How is the conservation being achieved through this protection model?

Landscape management:

- How does the system of protection work? How are the important sites protected?
- How are the boundaries of protected areas defined?
- Ownership of areas in the (National/Atchaeological) Park
- Is agropastoralism comtemplated in the conservation of the landscape?

Landscape conservation:

- When did you start the administration of the Park and how did you find its state of conservation?
- Which are the sites with major need of protection? Not because of their value but because of their vulnerability? Which are the main threats to the site?
- Are there development projects planned in or in the vicinities of the Park?
- How is the local population integrated in the heritage protection? How do local communities intervene in the conservation management? How is the control over local communities' access in these areas?
- How is the management for the protection of the important elements established (criteria) and by whom?
- Is tourism affecting the conservation of the landscape? How?
- What is the relationship between local authorities and the Park? What are the projects related to the Park or to heritage conservation?

Box 5: List of questions to State's group respondents.

Questions to local communities respondents:

Landscape values:

- What are the elements of the environment/landscape that are important for the community? Why?
- How is landscape defined? How is it interpreted?
- How is "heritage" defined?
- Is there a difference between the cultural and the natural landscape?
- How has the landscape changed?

Landscape management:

- How are the significant places/elements managed?
- What are the seasonal activities related to farming/stockbreeding?
- Which of these practices are traditional? How practices have changed?
- Are practices promoting the renewability of resources? What is the relationship to resources?
- Are there institutions or principles for accessing resources? Since when are they applied?
- Are communal areas conserved? How are they managed?
- Who are the members of the community?
- How are the boundaries perceived by the community?

Landscape conservation:

- When did you start the administration of the Park and how did you find its state of conservation?
- Which are the sites with major need of protection? Not because of their value but because of their vulnerability? Which are the main threats to the site?
- Are there development projects planned in or in the vicinities of the Park?
- How is the local population integrated in the heritage protection? How do local communities intervene in the conservation management? How is the control over local communities' access in these areas?
- How is the management for the protection of the important elements established (criteria) and by whom?
- Is tourism affecting the conservation of the landscape? How?
- What is the relationship to the Park? With the authorities?
- What are the problems confronted by the commnuity in order to achieve sustainability and conservation of the landscape?

Box 6: List of questions to local communities' group respondents.

Questions to visitor respondents:

Landscape values:

- What is the element of the landscape that you liked the most? Why?
- How do you understand the landscape?

Landscape management:

- When did you arrive? How long have you been here? How long are you planning to stay?
- Which places did you visit? Why did you choose those places?
- Are practices promoting the renewability of resources? What is the relationship to resources?
- How were you informed about this site?

Landscape conservation:

- What do you think about the conservation of the landscape in the Park?
- How do you perceive local population?
- How do you perceive the tourist services offered?

Box 7: List of questions to visitors' group respondents.

Annex 4: Matrix of codes

		CATEGORIES	
FAMILIES	Conservation of the past PAO	Cultural landscapes	Conservation of nature PNOMP
Concepts		Relationship human/environment	
	"monumental zones" or "monuments"	Boundaries	Biosphere Reserve
	National monument		Conservation of nature/EUROPARC format Conservation of nature/EUROPARC model
		Access Buffer zone	
		1972 Convention	
	Archaeological site (deposit/yacimiento)	Tangible heritage value	
	Archaeological commitment		
	Architecture Architecture: Inka Architecture = more investment		Stockbreeding architecture Bordas Abrevaderos Nave
	Cultural goods Cultural heritage as goods Inmovable Cultural Goods		
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		Definition Landscape Definition Landscape/ Natural	Natural Landscape
		Definition Nature Natural Resources	Endangered species Vulnerable species
		Cultural Landscape Culture	
	Inca Inca andenes Inca identity	Heritage as development Heritage Protection Heritage Protection/ Funding Heritage Protection/ Taxing Benefits	
		State of Conservation State of Conservation Bad State of Conservation Good	
Landscape Management	Close to the monument Close to the monument: SOC Good Far to the monument Far to the monument: Destruction Far to the monument: Problem Far to the monument: SOC Bad	Criteria of landscape management	
	Catastro Building regulations Intangibility	Planning	
	INC Patronato Nacional de Arqueología (National Archaeological Board) Role of Anthropologist PAO	Local Level Regional Level National Level Management organization	Junta Rectora PNOMP Patronato PNOMP

	Role of Chief of PAO		
	Master Plan		Master Plan PRUG
			Master Plan PRUG/ New
	Master Plan Vilcanota Valley		
	Relationship to Machu Picchu		Proposal
	Urban study project		
	Via de evitamiento		
	Regulations:	Regulations	Regulations/Spain-EU
	destruction/modern building	_	
	Regulations: huaqueo		
	forbidden		
Landscape	Agricultural tradition	Agropastoralism	
Lundoupe	Agricultural tradition	Natural pastures	
	Agrarian Reform	Natural pastares	"Pastores funcionarios y ovejas
	Agranan Nelonn		funcionarias"
	A grieviture levy profit		Turicionarias
	Agriculture low profit		
	Auto-consumption		
	Farming		
	Andenes	Landscape capital	Bancales
	Canalization		bancales/non profitable
	Qollgas		
	·		Forest
		Landscape as Container	
		Landscape as Habitat	
		Landscape as Picture	
		Landscape change	
		Landscape evolution	
		Landscape management	
		Landscape restoration	
		Vegetation management	
Change	Destruction: Anthropic factor	Destruction	Destruction: Climatic factor
	·		Destruction: Natural factor
	Kancha change process	Human impact in	
	rtanona onango process	landscape	
		Menaces: global change	
		Menaces: land use	
		change	
		Menaces: Realities	B : 1
	Illegal constructions	Landscape change	Dying towns
	Impeding		Forestation
	chaos/growth+business		Forested terraces
	Distorsion		Field vs. Forest
	Loss of public space		Paths to roads
	Urban sprawl		
	Urbanization		
	Urbanized terraces		
	New water channeling	Erosion	
	The state of the s	Pollution	
		Risks	
	Change is a seisultural	Change in access	Transhumanas with wahist -
	Change in agricultural	Change of activity	Transhumance with vehicles
	practices	New practice	stockbreeding abandonment
	Agriculture vs. tourism	New practice/old practice	stockbreeding/before
			stockbreeding/change
			stockbreeding/change/increase
			in cattle heads
			Ordesa/decline stockbreeding
	Increasing use of water	Change of use	-
		Heritage structure to hotel	
		Change of way of life	Closing houses
	Population increase	Population change	No generational change
	Change in dresses	Non-urban population	Depopulation
		Non-urbari population	
	Farmer to Porteador		Depopulation/lack of job
		F :	Unemployement
		Environmental change	
		Glaciar recession	
		Cultural/economic change	Cow vs. sheeps and goats

		_	Value of cows before
		Traumatic change	
Drivers of change	Tourism	Modernization	Mechanization Migration
Landscape Values	Criteria of value: budget		g.ca.e
	A-C-C1V-1	Aesthetical Value	
	Artistical Value	Natural value	
		Nature	
		Economical Value	
		Symbolic Value Historical Value	
		Educational Value	
		Spiritual Value	
		Scientific Value	
		Same value	
		Heritage value	
		Different value	
Local communities	Ancestral community Becoming a comunero	Social organization	Towns
	Ayni		
	Caserío Cooperative		
	Imprescriptible Inalienable		
Biodiversity	Biodiversity/cultural	Biodiversity/species	Biodiversity/jabalí
	Рара		Diversity of grass Diversity of trees
andscape Conservation		Conservation of heritage	"Landscape as we know it"
		Conservation of	
		landscape Sources	
		Conservation ethics	
		conservation practice	
		conservation practice/no	
		sense	
		Development vs. Conservation	
		Research	Longterm Environmental
Tauriam	Conital Turistics del Deru		Research
Tourism	Capital Turistica del Peru Ciudad Inka viviente		Torla tourist town
	Inca living town		
	Construction fever	Tourist pressure	
	Construction permits	·	
	Tourist boom	Economic growth	
,,,,,		Type of tourist	
ICH		ICH ownership	
		ICH ownership ICH protection	
	Choquequilca	TOTT PROGRAMM	Dia de la Suelta
	Compadres		Paso de Vacas
	·		Witchcraft
			Romerías
	Story of town/community	Story of town	Sendero
	Ollanta	,	Transhumance
		Identity	Hanshumance
		Idiosincrasy	
Practices	State vs. LC	State	
		State practice	
		Zoning	
		Inventory ICH	

		World Heritage	
	Expropiation of cultural goods	World Heritage/brand	
	Expropiation of land		
	Restoration: rain season constraints	Restoration	Planting of pines Progressive introduction of
	Restoration: reassigned	Controls	species
		Evacuation	
Li	11-21	Utilitarianism	Outhors were reliefed the
Ideas	Heritage as commodity Conservation of generating	Need of protection	Culture more valuable than natural Natural processes (there's
	idea		nothing we can do)
	Lack of awareness of heritage	Community involvement Heritage/ Raising awareness	
		Cooperation Participation	Transnational heritage
		Private sector participation in conservation	
	Idea over Peasant Communities		
Practices	Sharing tourism /agriculture	Local communities	Cleaning of fields Weeding of pastures Timbering Sowing pastures in summer Orchards
			Stockbreeders associations Stockbreeders in the Park Stockbreeding Stockbreeding practice Stockbreeding/consequences abandonment Stockbreeding/Tella Renting fields Exploitations
	Use of pesticides		Cycle of sheeps and goats
	Permits Destroying heritage Offense to heritage		
Ideas		Population ideas	Stockbreeding/tough Stockbreeding/slave Stockbreeding/problem Stockbreeding/not enough to live Stockbreeding/importance Stockbreeding/less but better conditions Stockbreeding/need
	Idea of progress Need of cement "Sembrar cemento"		National Park/main attraction Conservation of existing landscape Fear of fire
	Fear of evacuation Social organization/segregation Diference lowland/highland		Interest as major
			Subsistence is not enough in towns Sheep more job than cow Sheep more profitable than cow sheep Jabalí
	Ser comunero	Personal story	The last sheperd
	Sor comunició	. S. Sorial Story	Last transhumant sheperds

	Non-profit agriculture	Profit	Price of lamb Non profitable herb from towns
		Labour value	•
Practices	Demand for inca remains in hotel	Visitors Tourist practice Folklorization	
ldeas		Season constraints	
Synergies/Conflicts	LC-St cooperation/ INC bad seen LC-St cooperation/ INC prohibitive Lack of deal Conflict	LC-St cooperation LC practice Local and State	Subsidies Labour categories PNOMP Park & stockbreeders/collaboration
	Tourism/norms to build hotels	Tour-LC relations Tour-ST relations Tourism increase Tourism/access	Tourism/feeling towards tourists Tourism & stockbreeding
	NGO	International cooperation International Level	
	Train station		
	Teatrín		
	Ownership/ CH Ownership/ Posesionarios Ownership/ Pre-Hispanic CH Ownership/ Private Post- hispanic Ownership/ Qosqo Ayllu Ownership/ Restoration	Land tenure ownership Ownership/ Private Ownership/ private or public	
		Present generations' needs	
		Material use	
		Development	
		Significant places	

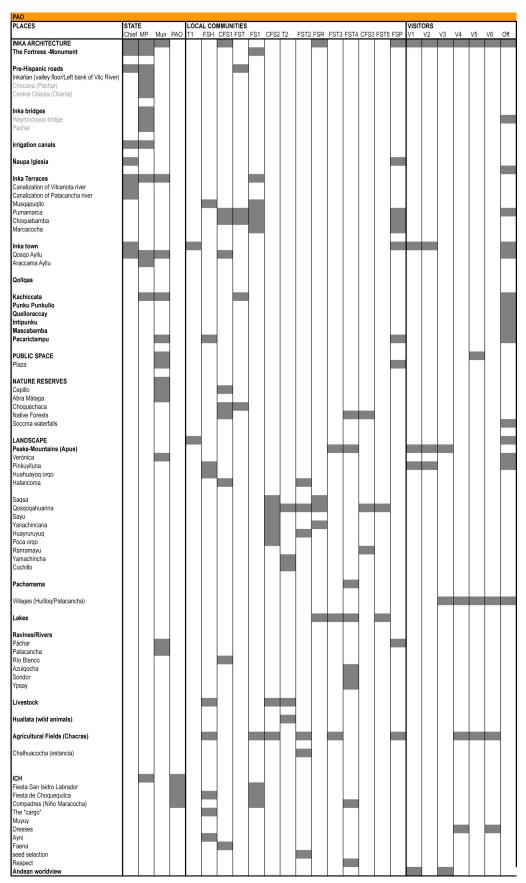
Annex 5: Criteria used for the nomination of the sites as World Heritage cultural landscapes.

Criteria used	Criterion description	PYRENEES/MONT PERDU	QHAPAQ ÑAN
(i)	To represent a masterpiece of human creative genius.		(ANDEAN ROAD SYSTEM) The outstanding aspects of this road network are the routes and building techniques used to cover one of the planet's most complex mountain systems. The construction of this network represents the synthesis of cultural development in South America. The Qhapaq Ñan Andean Road and some of the pre-Hispanic sites inscribed have been located and admired since the sixteenth century by many chroniclers, explorers and travellers who traversed this major engineering work of the pre-Inca and Inca eras.
(ii)	To exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.		The features and archaeological evidence of the Andean Road network reflect a dynamic exchange of values, the use of architectural elements and political structures existing in the pre-Inca and Inca eras, such as the maintenance of strategic lines related to production and land occupancy in different altitude tiers, through the use of an agricultural system known as "vertical control".
(iii)	To bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.	The Pyrénées-Mont Perdu area between France and Spain is an outstanding cultural landscape which combines scenic beauty with a socio-economic structure that has its roots in the past and illustrates a mountain way of life that has become rare in Europe.	The Inca stood amidst this panorama, their most notable achievement perhaps being that of having discovered the specificities of each of these peoples and applying a very strict system of organization enabling the exchange of social, political and economic values among them in the pre-Inca and Inca eras.
(iv)	To be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.	The Pyrénées-Mont Perdu area between France and Spain is an outstanding cultural landscape which combines scenic beauty with a socio-economic structure that has its roots in the past and illustrates a mountain way of life	The road network has characteristic features in its different architectural elements, in terms of its walls, roads, steps, roadside ditches, sewage pipes, drains, etc., with construction

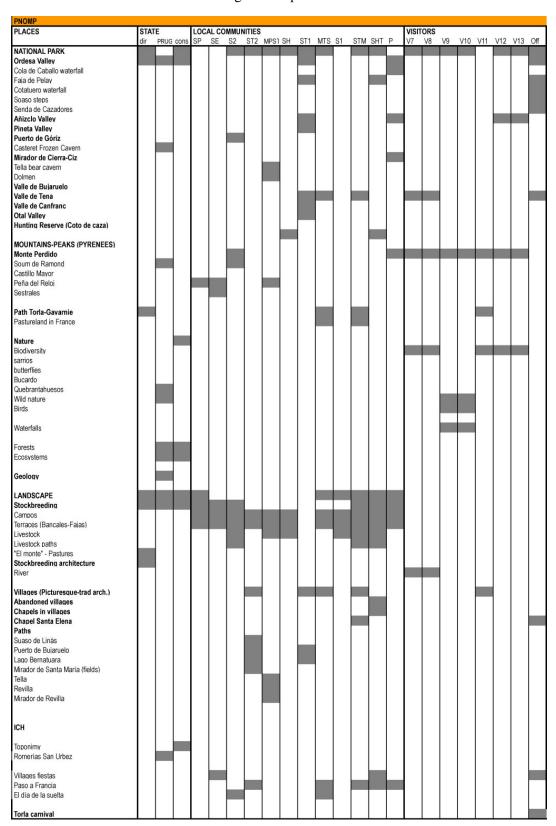
		that has become rare in Europe.	methods that vary adapting to progression and region. To this must be added the construction of a State infrastructure with standardized architectural elements for the control, protection and management of the area and use of the products of the mountains, coast and Amazonia. The archaeological sites selected portray this magnificent infrastructure: administrative and political centers, resting places (inns), cairns, chasquiwasis (resting places for messengers), military fortresses used in wars caused by the expansion of the Inca Empire (Tawantinsuyu), silos, ushnus (ceremonial platforms), earth mounds and petroglyphs, with a diverse landscape associated with natural elements: mountains, lakes, jungles and flora and fauna showing how populations coexisted with
(v)	To be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.	The Pyrénées-Mont Perdu area between France and Spain is an outstanding cultural landscape which combines scenic beauty with a socio-economic structure that has its roots in the past and illustrates a mountain way of life that has become rare in Europe.	The road system reflects the interrelation of communities with their geographical and natural environment such as mountains, lakes and water. The altitude of the network varies from 28 meters to 6,700 meters encompassing coastal areas, plains, plateaus, ridges and valleys. The road and architectural infrastructure works maintain a relationship with the surrounding landscape such as water resources, mountains, lakes, etc. The topography of the network is very uneven. Similarly, interregional use via mountain passes determines its relationship and the exchange of products and the use of resources of the three zones (coast, mountains, Amazonia) as well as regional exchange with the other suyus (areas).

(vi)	To be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria)		It connects living communities which still use the Road and keep it in their memory. Through language and oral tradition, it lives on as part of their world view and it is indirectly associated with ancestral traditions and techniques passed on from generation to generation. The respect and appropriate use of the different elements of nature: hills, water, animals and plants, create a world which nourishes part of their knowledge and wisdom in their desire to establish harmony, a balance between human beings and the natural environment.
(vii)	To contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.	It is also an outstanding scenic landscape with meadows, lakes, caves and forests on mountain slopes.	
(viii)	To be an outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features.	The calcareous massif of the Mount Perdu displays classic geological landforms, including deep canyons and spectacular cirque walls.	

Annex 6: Significant places in the PAO.



Annex 7: Significant places in the PNOMP.



Annex 8: Zoning of the Special Treatment Zone of the PAO. Source: Master Plan of the PAO.

