Exploring hunter-gatherer cosmologies: An ontological approach to the study of rock art from the Late Pleistocene to Mid-Holocene periods (c. 9000-3500 BP) of southern Patagonia, Argentina

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EXPLORING HUNTER-GATHERER COSMOLOGIES

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Chapter 1: Introduction

In the discussion of the archaeology of Argentina, and even of South America, one runs across many incidences of rock art, ever present as they are in the archaeological record. In South America, there is both a visual and technical heterogeneity in rock art production (Troncoso et al. 2018, 3–4). There are many different technological types listed under the term but, overall, these can be separated into three distinct categories: geoglyphs, rock paintings (sometimes called pictographs or pigment art) and petroglyphs (Podestá and Strecker 2020 in Smith 2020, 9965). For the purposes of this thesis, the focus will be placed on rock paintings from the southern Patagonia region of Argentina as their common occurrence have made them the topic of many research projects, providing ample material for this investigation (Fig. 1). These parietal paintings and the accompanying contextual evidence will be examined using an ontological approach with the help of ethnographic data in hopes that this will stimulate new interpretations for hunter-gatherer cosmologies in southern Patagonia, specifically the central plateau of Santa Cruz.

Figure 1: Rock art from Cueva de las Manos in Alto Río Pinturas, Santa Cruz (Onetto and Podestá 2011, 70)

As Troncoso et al. (2018, 4) explained, rock art presents a "pervasive kind of archaeological evidence", it shows up in the South American record almost incessantly following the Ice Age (the Upper and Middle Holocene periods) and transpires extensively in different regions at very different times, peaking in popularity around the Late Holocene period (c. 5000 BP) (Schobinger 2016, 37; Troncoso et al. 2018, 3). Given the heterogeneity of the political, social, and economic contexts in which rock art can be found, it has been dubbed as a cross-cultural phenomenon with a long-standing tradition that was in force until quite recent times, though to a much smaller scale, surviving and adapting until the early 20th century (Troncoso et al. 2018, 3-4).

In the case of Argentina, archaeological evidence of the earliest hunter-gatherer populations can be found primarily in three different regions: the Patagonia region, the humid Pampa region, and the Puna region (Flegenheimer et al. 2006, 29). Rock art is present in all of these areas except in places of the humid Pampa where plains dominate the landscape and rocky surfaces are difficult if not impossible to find (Schobinger 2016, 263). The Patagonia region is famous for its repertoire of rock art sites and specifically for those in the canyon of a river called Río Pinturas, where the renowned Cueva de las Manos cave site is located (Flegenheimer et al. 2016, 153-159). This complex of rock art sites boasts of murals with human handprints, animal footprints, and hunting scenes with depictions of animals like felines and guanacos (camelids) (Fig. 2) alongside smaller images of anthropomorphic figures, sometimes wielding weapons and sometimes wearing some type of headdress (Schobinger 2016, 39-43).

Figure 2: Guanacos from Cueva de las Manos, stylistic group B (Onetto and Podestá 2011, 71)

Given the richness of parietal art depictions found in the Río Pinturas region, it is unsurprising that so much time and research effort have been dedicated to their study. However, the issue remains that not much is known about the people who produced these works of rupestrian art. Indeed, while it has been established that there was a strong 'hunting culture' at the time (Schobinger 2016, 41), these thoughts have not been developed much further in terms of possible hunter-gatherer cosmologies. Therefore, in this thesis I will carry out an ontological approach to the study of hunter-gatherer rock art assemblages in an effort to explore how they viewed the world around them and what they thought about their reality.

Aim and Research questions

This thesis confronts the question of what early Patagonian hunter-gatherer cosmologies could have looked like by carrying out a re-evaluation of previous research and comparing rock art assemblages from different archaeological sites in the same area. The aim of this study is to revise the existing archaeological and ethnographic literature on these topics without adding any new raw data so as to leave room for fresh interpretations that take inspiration from similar lines of inquiry. Such is the point of the ontological approach, to question the very foundations of previous knowledge and the accompanying frameworks by using ontological concepts as analytical tools to arrive to new interpretations (Jones 2017).

To this end, the purpose of this thesis is to provide the room for the framing of new questions, new avenues of research which could serve the study of rock art not just in the Patagonia region or in Argentina, but also in other areas of the world. Rather than promise to find concrete answers to the question of hunter-gatherer cosmologies, I will attempt to put together a well-informed foundation upon which other works can be built. To do this, the thesis lays emphasis on the kinds of motifs these sites possess and compares their incidence, as well as examines the complete rock art assemblages (i.e., contextual finds and ethnographic data). This allows for new ways of expanding on the information in the hopes that it will bring us closer to understanding a bit of how and what hunter-gatherers thought of the world they lived in. To achieve this goal, this thesis is centred on answering the following research question:

i) 'Could an ontological approach to hunter-gatherer rock art from the Late Pleistocene to Mid-Holocene periods (c. 9000–3500 BP) in southern

Patagonia (Argentina) help us come up with the beginnings of their cosmology?'

As further guidance, the following sub-questions will also be taken into consideration:

a) Could these rock art images be taken as evidence of hunter-gatherers attempting to understand their surrounding environment?
b) Could it be that these images were imbued with some kind of energy or agency that mirrors a type of animal/human symbiosis?

Methodology

This study consists of an interdisciplinary approach that I devised which combines archaeology with anthropology to offer new interpretations through an ontological theoretic stance based on ethnographic examples. By an ontological approach, what is meant is the estrangement from and recognition of an ontological bias in Western knowledge, i.e., the belief that there are multiple ways of seeing the world, but there is in fact one reality and only a scientific, 'objective' approach can yield accurate and reliable results, and only the 'West' is equipped to access this reality (Abadía and Porr 2021, 12). Yet, only by recognising that at the core of alterity there are multiple ontologies can we start to understand and take seriously different ways of living and being (Abadía and Porr 2021, 12).

The interpretations of early hunter-gatherer cosmologies will be based on a re-evaluation of previous ethnographic and archaeological data, theoretical concepts, and comparison of sites. Of the two directions that an ontological discussion can take according to Alberti (2016) – i.e., a metaphysical approach or an anthropologically inspired approach – this thesis will take on the latter in which the influence of Viveiros de Castro (2004) is felt by placing emphasis on Indigenous theories of being and interacting with the world when analysing the rock art assemblages. Additionally, in order to better understand the possible nature of these pictographs, some of Gell's (1998) theories will be briefly explored alongside the very concepts of 'art' and 'image' as we currently define them.

The antiquity of these rock paintings means that other than the material evidence found at the sites and the art itself, there is little trace left of these past societies, and

there is also no continuity between these early groups and the present-day Indigenous peoples. It is for this reason that ethnographic accounts from communities in the same area will be used as a means of reference to get some idea, however remote, of the cosmologies of other groups who lived there at different times. While these oral accounts might not be considered the most reliable of archaeological sources given the lack of continuity between rock art production and the current Indigenous communities of Patagonia, it will nevertheless serve as a conceptualization of what might have happened, a means of visualizing possible narratives. Both the archaeological and ethnographic data, however, were pulled together from literature studies, no independent research was carried out by myself.

Thesis outline

This thesis is divided into six chapters. Chapter 1 consisted of an introduction into the topic of the thesis, its research aims, and research questions, providing a very brief summary of the approaches and methods used. Chapter 2 follows with a geographical overview of the area of research, presenting important background information on the state of archaeological research into rock art in South America and Argentina respectively before focusing on Patagonia. Following this, Chapter 3 addresses the research methodologies used in this study, with a special focus being lent to the nature of an ontological approach. Chapter 4 provides an archaeological overview of a number of relevant sites with parietal art will be described and compared in an effort to provide some insight into what hunter-gatherer rock art assemblages actually look like. Consequently, Chapter 5 will bring together all the data from previous chapters in an ontological discussion that attempts to uncover parts of the cosmology of these early populations. Lastly, Chapter 6 will summarize the results from the discussion and offer some suggestions for future avenues of research.

Chapter 2: Archaeological background

Rock art research in South America

When speaking of the rock art traditions of South American pre-Hispanic societies, there is a clear discrepancy between the amount of archaeological research carried out and the global interest invested in these areas as opposed to other regions of the world. Indeed, while rock art studies have generated a lot of research — especially in South American countries where parietal art is so prolific that archaeologists separate different traditions into styles — there has been very little public interest in these studies up until some decades ago. According to Troncoso at al. (2018, 1–2), this situation arises from a combination of different factors, such as the fact that academic geopolitics continuously prioritise a Euro- and Anglo-centric narrative that leaves little room for South American scholars studying South American archaeology. This is further exacerbated by the difficulty of integrating rock art into archaeological contexts, especially without proper dating of these sites, leading to some archaeologists not taking rock art seriously and thereby leaving the investigation and recording of sites in the hands of researchers outside of the discipline (Podestá and Strecker 2020 in Smith 2020, 9970). The result was the creation of a sub-discipline of archaeology — South American rock art archaeology — that is both locally specific and resistant to following global trends of research (Troncoso et al. 2018, 2).

And yet, in recent years the narrative has changed, more places are being carved out for both South American and Indigenous scholars in rock art academia, a process which was spurred on by what Abadía and Porr (2021, 12) refer to as the "slow and difficult recognition of alterity". By this, what is meant is the way Western scholars have been forced over time to recognize that at the root of alterity lie ontological commitments different to one's own that are no less valid or true. This is known as the 'ontological turn', a disputed change in direction in archaeological thinking where ontological questions of reality itself ('what there is') and peoples' claims about reality ('the essential set of understandings about the world') began to be raised to understand what lay at the root of the 'Otherness' of past societies (Alberti 2016).

Currently, we reside in what has been termed by David Whitley as the 'Golden Age' of rock art research, following a notable increased interest in recent years (Troncoso et al. 2018, 1). The first references in Western literature to any type of rock art in South

America were remarked upon by European missionaries and travellers during early European colonialism in the 16th century (Podestá and Strecker 2020 in Smith 2020, 9966). Although these individuals contributed a considerable amount of information, these were documented with little care for detail and outright faulty recording (Podestá and Strecker 2020 in Smith 2020, 9966).

In the next few centuries, any mention of South American rock art is scarce; however, the late 20th century experienced a renewed interest in rock art after an increase in scientific works as archaeologists became more exhaustive in their studies and attempted to place rock art within ethnographic and interpretive contexts (Podestá and Strecker 2020 in Smith 2020, 9966). This culminated in the development of four main lines of research in South American scholarship that are by no means consecutive: a) descriptive approach, b) stylistic approach, c) technological approach, and d) socio-historical approach, all of which can be encountered in today's research agendas (Troncoso et al. 2018, 5).

Argentinian rupestrian archaeology: State of affairs

In Argentina, the history of rock art research may be divided into three main trends according to Fiore and Hernández Llosas (2007), following theoretic-methodological developments that span between the 19th century and contemporary times. The first phase in question has been dubbed the 'pioneer phase' (Fiore and Hernández Llosas 2007, 218). This period began in the 19th century and ended in 1936, a historic milestone in Argentina as it was this year when the *Sociedad Argentina de Antropología* (Anthropological Society of Argentina) was founded (www.saantropologia.com.ar). This phase is better known as the exploratory era in which large parts of the Argentine territory were investigated to find archaeological remains whose data would then form the basis of the descriptive and interpretive research of that period (Fiore and Hernández Llosas 2007, 218-219).

The second trend has been labelled as the 'foundational phase', from 1936 to 2000, and is characterized by a continuation of archaeological explorations with an emphasis on formulating descriptions of different sites and localities (Fiore and Hernández Llosas 2007, 220). Most important of all was the establishment of the first regional stylistic sequences in Patagonia and northwest Argentina, compiled by Carlos Gradin and colleagues during their work in Río Pinturas (1970s to 1990s), and Carlos

Alberto Aschero and Alberto Rex González, respectively (Gili 2010, 21–33). Until roughly 1980, the main concern within the archaeology of rock art was the construction of these stylistic sequences and formulating links between these and archaeological contexts (Fiore and Hernández Llosas 2007, 225).

The last stage in this development is the 'contemporary phase', from 2000 onwards (Fiore and Hernández Llosas 2007, 226). In these last couple of decades, rock art research has been steadily developing, starting with a continuation of previous investigations at the regional and inter-regional levels while also embarking on new surveys of unexplored zones (Fiore and Hernández Llosas 2007, 226). More importantly, this period is distinguished by the evolution of theoretical concepts related to the function of rock art within the social lives of its producers (Fiore and Hernández Llosas 2007, 230).

The research area: Southern Patagonia

Patagonia comprises four separate provinces: Neuquén, Río Negro, Chubut, and Santa Cruz. The research area is located in southern Patagonia, specifically in the Central Plateau of Santa Cruz province where many known rock art sites are located, such as Cueva de las Manos, Los Toldos, La María, Cerro Tres Tetas, and so forth. Patagonia is bordered to the east by the Atlantic Ocean, and to the west by the Pacific Ocean (Fig. 3–4). It is characterized by lake environments surrounded by forests and rain forests, as well as semi-desertic plateaus with steppe vegetation (ICOMOS 2006, 152).

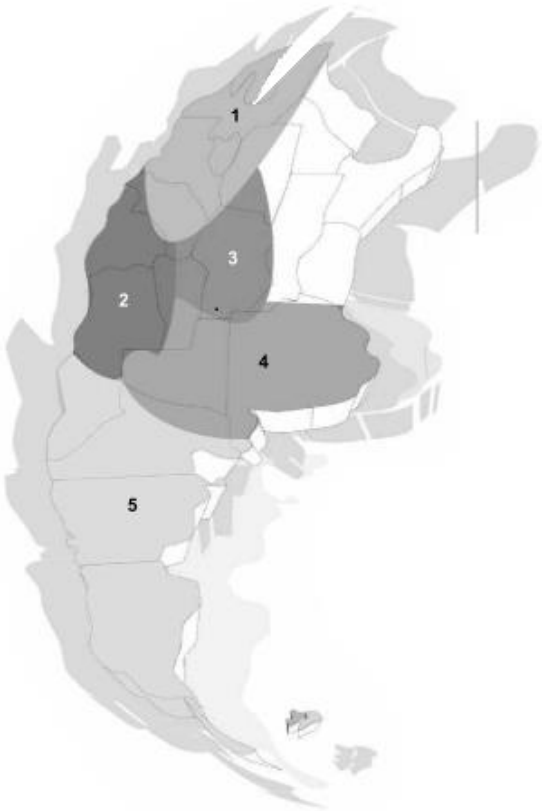


Figure 3: Map of Argentina with traditional archaeological regions. 1: Northwest Argentina, 2: Cuyo, 3: Central highlands, 4: Puna, 5: Patagonia (Flegenheimer and Pupio 2006, 58)

Past investigations in the southern Patagonia region indicate that there is a long history of rock art production spanning at least 10,000 years into the past in the Santa Cruz Central Plateau, with the arrival of the first human populations estimated to have happened c. 12,000 BP (ICOMOS 2006, 152). The first Patagonian rock art to be discovered was product of the work of Francisco P. Moreno in 1877 a famous explorer and geographer who investigated the rock art of Río Pinturas (Menghin 1952, 5). He was then followed by professors Aparicio and Frenguelli who made the important discovery of the Los Toldos site complex, now credited as containing the oldest rock art in the Patagonia region (Gili 2010, 21; Menghin 1952, 6). It is this site that also marks the beginning of the negative handprint style, typically the left hand, witnessed in a multitude of other rock art sites and associated with geometric designs like broken lines, dots, etc. (Gili 2010, 21).

Figure 4: Map of Patagonia (https://a-p-lcdb.webnode.es/lcdb/)

There are many different types of rock art representations scattered along the Patagonian landscape. These include abstract motifs, figurative motifs (anthropomorphic and animal figures, and hunting scenes), geometric motifs (circles, dots, lines, etc.), and handprints (mostly negative, but positive handprints are also to be found) (Schobinger

2016, 37-45). According to Menghin (1975, 57-82), these rock art renditions can be divided into seven different styles that encompass the entire region: negative handprint style, scenic style, *pisadas* style, parallels style, fret style *(estilo de grecas)*, miniature style, and complicated symbols style (in Gili 2010, 22). The colours most commonly used to create these rock art motifs are red, black, yellow and white, although other colours are also used (Schobinger 2016, 38).

Research gap

To date, investigations of Patagonian rock art have been mainly centred on the recording of sites, types of production techniques, composition studies, dating studies, the relationship between rock art and space, stylistic determinations, and symbolic or ritualistic interpretations (Troncoso et al. 2017). However, as mentioned in Chapter 1 of this thesis, there is a shortage of studies relating the production of rock art to the construction of specific ontologies, particularly when early hunter-gatherers are concerned as the lack of ethnographic data makes it all the more difficult to extrapolate their lived realities. Hence, this will be the purpose of this thesis, to see if by studying and comparing hunter-gatherer rock art assemblages from different sites we can get closer to exploring the possible cosmologies of these early populations.

Chapter 3: Methodology

Theoretical framework: Ontological approach

What is an ontological approach? First, let's begin by establishing what ontology is and how it came to be used in archaeological research as an analytical tool. As a theory, ontology already exists implicitly in archaeology and can be conceptualised in one of two ways according to Alberti (2016, 164); one can think of ontology as a "people's *beliefs about* reality", or as a "people's reality, their actual ontological commitments". In essence, ontology is a theory that deals with reality and being, how people experience the world and what beliefs they hold about those experiences (Jones 2017, 168). In line with Alberti's (2016) two conceptualizations of ontology, one can appreciate that these positions are quite distinct as the former implies that people create and live in different realities, whereas the latter proposes that there is one reality and it is people who experience this reality in different ways (Abadía and Porr 2021, 11). In either case, both of these options deal with alterity (i.e., ontological difference) and it is this very concept that ontology is equipped to address (Abadía and Porr 2021, 11).

By alterity, what is meant is different people hold different ontological commitments, and alterity in rock art research is the recognition that pictographs were created in worlds other than our own and by people who were different from us (Abadía and Porr 2021, 13). It is in the process of dealing with this knowledge that ontology comes in, it promises new ways of thinking about alterity in the archaeological record that essentially require us, as researchers and archaeologists, to put aside our own ontological commitments, the products of our lived realities in this modern world (Abadía and Porr 2021, 11). This is done to get closer to identifying and understanding the ontologies of past societies by analysing "the systems of relationality that are materialized in the archaeological record" (Troncoso 2014, 69; my translation).

Much like alterity, relationality is also at the heart of ontology, particularly when applied to the realm of archaeology. Perhaps the concept of relationality can be best explained by Gonzalez Dubox (2021, 47; my translation) when he said, "Nothing indicates nothing. Things make sense in relation". In other words, one cannot isolate the rock art from the rock surface, or the landscape, or the contextual archaeological materials – these are all interrelated and it is only by studying their significance as an assemblage that one can approximate some of the original understanding or 'meaning' of the site (Jones 2017,

177). For instance, rock art 'images-as-assemblages' is a concept entertained by Alberti and Fowles (2018) that runs along the same lines as relationality in that it proposes a different way of conceiving art in general. In this approach, rupestrian art is considered as a multispecies *happening* because the art itself is seen as caught up in "creative and transformative relations with […] many other creatures and agencies"; in essence a stance that incorporates ecology in the make-up of rock art (Alberti and Fowles 2018, 133). Although this concept will not be explored to its fullest potential regarding the many different types of non-human agencies involved in a rock art assemblage, it has nevertheless served as inspiration for studying rock art not just for its artistic component, but also for its place in the landscape and any contextual archaeological remains that could help shed some light on the ontological situation thousands of years ago.

Art, Representationalism and Agency

In this section, I would like to first briefly emphasize the difference between what has come to be understood as art in the modern sense of the word, and 'art' in the archaeological sense of the word, specifically the process of image-making in past societies. Here, the term 'image-making' is used as opposed to 'art' because of the conceptual implications that one inevitably engages in when the word 'art' comes to mind, implications about aesthetic, purpose, and audience, for example (Gell 1998, 1–13). As David and McNiven (2017, 3) aptly point out, "cross-culturally, the term 'art' is problematic because it does not capture well most non-Western notions of image-making," and in this case, it is not only non-Western 'art' that is being studied, but art before 'art' was a thing in itself. The question that then arises is, how does one approach rock art when even the term 'art' is under discussion? The answer can be found in Gell's words and it is reflective of the ontological position when he states that in order to appreciate the art of any sort of historical period one should "try to recapture the 'way of seeing' which artists of that period implicitly assumed their public would bring" (Gell 1998, 2).

Another implicit assumption regarding rock art is that of representationalism, "the philosophical notion that the world is composed of things with inherent attributes, and these things can be represented" (Jones 2021, in Abadía and Porr 2021, 50). This is the underlying expectation that rock art analysis must be concerned with revealing the hidden 'inner' meaning of the imagery because it must possess some symbolic value.

Jones (2017, 171) is one among many who question the priority of representational approaches to rock imagery, which is not to say that one should not consider the iconic when studying rock art, but that focusing solely on iconographic and semiotic approaches present images as static and flat, denying their ontological complexity. To quote another academic on the matter, Davis (1986, 197) explains that "the conceptualization of the semantic is a distinct event", just because a creature produces marks or scribbles it cannot be taken to signify that these markings *refer* to something. This is not the case in this instance since the hunter-gatherer rock art in Patagonia includes not just abstract markings of the kind Davis refers to, but also anthropomorphic and zoomorphic images. And although this thesis will focus on rock art motifs and their place in the rock art assemblage, it is not a statement to the superiority of representational meaning, but a testament of the type of research available and the limits of reinterpreting a bibliographic account.

In discussing the ontological complexity of rock art, an additional concept of relevance is agency. Gell (1998, 17), for one, defines agency as "a culturally prescribed framework for thinking about causation", and distinguishes two types of agencies: primary agency (intentional beings) and secondary agency (inanimate objects). In this framework, an object can have agency only as an extension of a primary agent's own agency, they are not agentive themselves, a rather Western-centric conception that limits the scope of interpretation. Addressing precisely this issue, Gonzalez Dubox (2021, 38) stresses a relational focus on agency as opposed to treating it as an individual property, in agreement with some of Gell's later work where he acknowledges agency as belonging to the realm of the social and not the individual. Agency, at least in reference to rock art, is enmeshed with relationality, since it is through its relation to its environment that it acquires an active role in the landscape and quite possibly in the lives of its creators.

Ethnography and the issues of continuity

In southern Patagonia, there are primarily three groups of peoples indigenous to the region: the Mapuche (Araucanian), the Tehuelche (Chonan), and the Puelche (Chonan) (Cooper 1946 in Steward 1946, 128-129). In Santa Cruz province, where the research area is located, it is predominantly the Tehuelche that inhabit the region. 'Tehuelche' was a term first used by Jesuit missionaries of the mid-18th century to refer generally to the Indigenous peoples of southern Argentina, bypassing the cultural

divisions of the southern and northern branches of the 'Tehuelche' (Cooper 1946 in Steward 1946, 129). The southern Tehuelche, however, prefer to call themselves *Aónik'enk,* reason for which this term instead of the former will be used when referring to this specific group (Matarrese and Siffredi 2004, 1). Unfortunately, only late ethnographic sources are available, describing a culture at a high degree of disintegration due to mainly two factors: (i) the turmoil caused by the installation of the Mapuches, destabilizing and pushing the Tehuelche even further southward, and (ii) European colonization of the south, the *Conquista del Desierto*, responsible for more instability and loss of Indigenous land (Bórmida and Siffredi 1970, 204).

The fact that the production of rock art in Patagonia was a long-standing tradition spanning hundreds of years is encapsulated in the numerous superpositions of paintings in many of the rock art sites studied, from the earliest registered rock art in Chilean Patagonia at c 11.560 to 10.260 BP, to the rapid dwindling of the tradition upon the arrival of the Europeans in the 16th century (Gili 2010, 22-27). Considering this long continuity of the practice, one would expect it to be connected to the Indigenous communities of the region. And yet, in his account of the rock art in Patagonia, Menghin (1952, 10–11) states that the surviving Tehuelche negate the possibility that their ancestors were responsible for the rock art. While not necessarily an indication that the Aónik'enk never produced rock art, it is testimony from the latest descendants of the time that at least suggests if there ever was a tradition, it has since been lost to time.

On this note, it is necessary to detail how the ethnographic data from the Aónik'enk will be used in this thesis. I place emphasis on the difference between using ethnography as an analogy as opposed to a conceptualization, the latter of which is how this study is approaching this testimony. The caveat of using ethnographic examples to explain archaeological phenomena is that they cannot be taken as one-to-one correlations, but merely as real-life examples of how these phenomena *could* be interpreted and not as a measure of what actually happened in the past. To this end, the ethnographic data will be taken as conceptual examples, alternatives to get an idea of what might have happened and not statements of what effectively occurred.

Chapter 4: Archaeological research

Presenting the sites

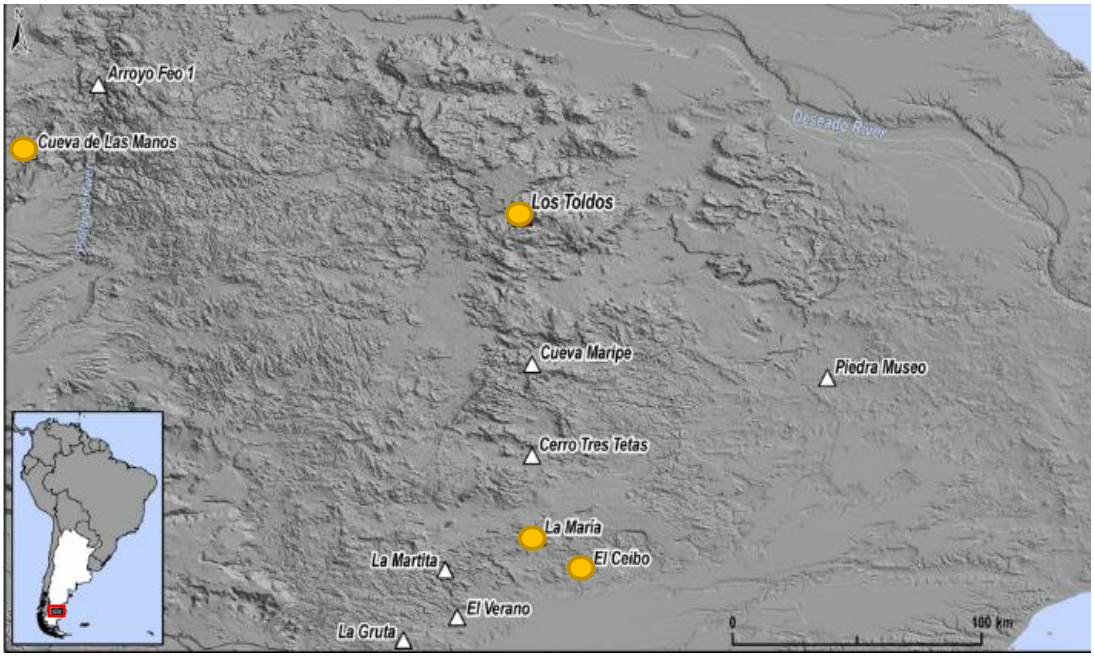


Figure 5: Map of research area with Cueva de las Manos, Los Toldos, El Ceibo, La María, and other rock art sites (Carden and Miotti 2020, 2)

Cueva de las Manos

As was mentioned before in Chapter 1, Cueva de las Manos is an emblematic site in the Patagonia region. It is located in the northwest of Santa Cruz province in the Estancia Alto Río Pinturas, still in the central plateau of this province but further off from the main research area than any other site handled in this paper (Fig. 5) (Schobinger 2016, 40). Cueva de las Manos is renowned for its large and impressive repertoire of rock art, it holds the most complete collection of hunter-gatherer imagery belonging to the regional sequence which spans the length of 10,000 years of artistic tradition (Aschero 2018 in Troncoso et al. 2018, 209). Cueva de las Manos can be best described as a "complex of rock art sites" (CRAS) (Aschero 2018 in Troncoso et al. 2018, 210-212), encompassing the cave itself, the walls at the side of the entrance, and two major outcroppings or eaves (Fig. 6) (Gutiérrez de Angelis et al. 2019, 1).

What is truly remarkable about Cueva de las Manos is the numerous superimpositions that cover the walls and parts of the ceiling, equalling to 60 metres (m) worth of art material spread out over 200 m of rock surface, and the collective and individual hunting scenes (Schobinger 2016, 40; Aschero 2018 in Troncoso et al. 2018,

209). There is also a chronological order to the colours used in the rock art, starting with ochre-yellow, black, and then red in the early scenes (Aschero 2006, 73). Although very little is actually known about the producers of this cave art, what can be deduced from the archaeological remains and the representational content of the pictographs is that the once inhabitants possessed a strong hunting culture, specializing in guanacos (Fig. 7) but naturally including other animals in their activities as well, just not to the same degree (Schobinger 2016, 42).

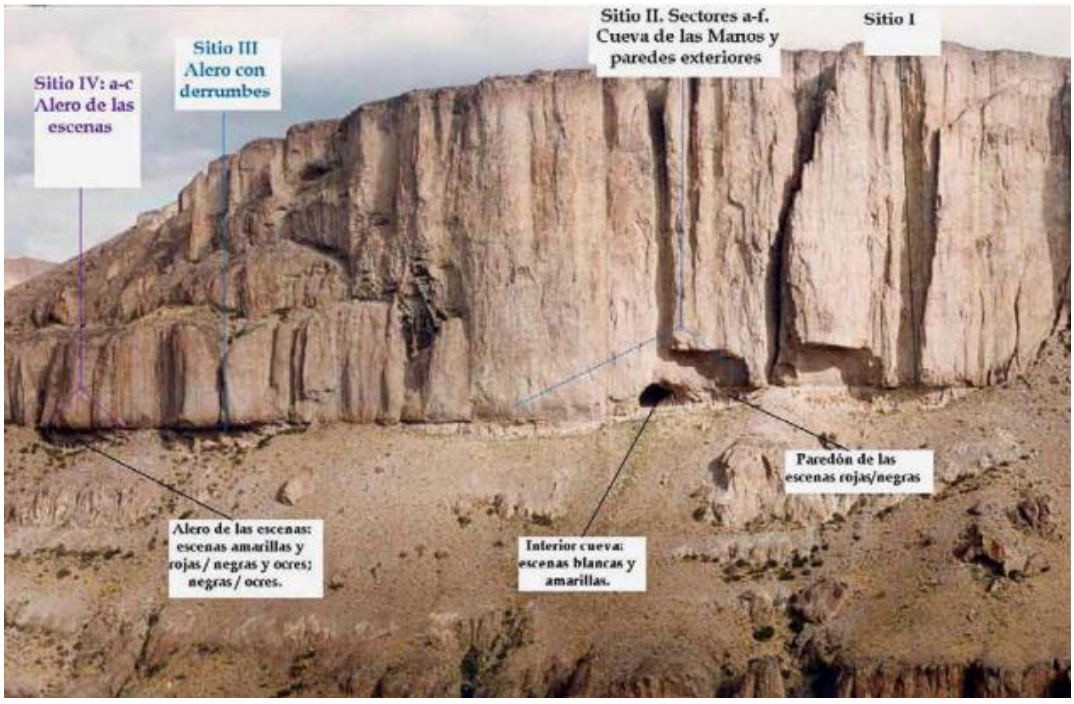


Figure 6: Outside view of Cueva de las Manos with each individual site labelled 'Sitio I–IV' (Onetto and Podestá 2011, 69)

To reiterate, the art at Cueva de las Manos has a very long tradition. Researchers distinguished different stylistic groups based on 'canons' (i.e., "the procedure followed for the design of either human or animal figures, to the order of construction" (Aschero 2018 in Troncoso et al. 2018, 218)) and patterns of design in the representation of particular motifs. Following this, they were able to observe that "the stylistic groups of each phase have predecessors in the ones before them" (Schobinger 2016, 40-41), in which motifs such as guanacos, negative handprints and human figures seem to form the connection between different styles, coexisting for a brief period of time before merging into the next stylistic tradition. These different styles were divided into four stylistic groups: A, B, B1, and C, which are also known as the regional sequence *Río Pinturas I, II,*

III, and *IV* respectively (Onetto and Podestá 2011, 71-74). Stylistic group A has the oldest samples of pictographs and is primarily composed of hunting scenes where the interaction between humans and animals—mainly guanacos *(Lama guanicoe)* and very rarely huemuls *(Hippocamelus bisulcus)*—is depicted in a naturalistic and dynamic way, elucidating upon hunting strategies and taking advantage of the natural topography of the rock surface as a means of virtually recreating the surrounding environment outside the cave (Fig. 8) (Onetto and Podestá 2011, 71; Aschero 2006, 73; Aschero 2012, 809). This style can be further subdivided into stylistic groups A1, A2, A3, A4 and A5, roughly corresponding to the period 9,300-6,000 BP (Aschero 2018 in Troncoso et al. 2018, 222-233; Aschero 2012, 819-820).

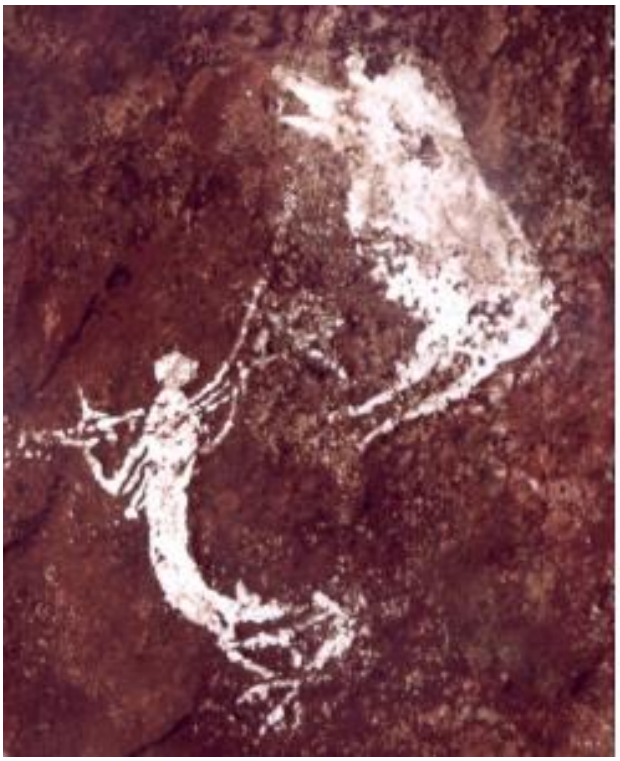


Figure 7: Guanaco hunting scene form Cueva de las Manos, stylistic group A (Onetto and Podestá 2011, 71)

Stylistic groups B and B1, on the other hand, are associated to the period of 7,000-3,000 BP (Onetto and Podestá 2011, 74). While stylistic group B replaces the famed hunting scenes for static images of single guanacos, sometimes with distended stomachs, stylistic group B1 marks a clear distinction with former styles, becoming more and more schematic and employing a more elegant design for human and animal figures (Onetto and Podestá 2011, 74). Also characteristic of this style are dotted lines (possibly

representing hunters or hunter's footsteps), hand stencils, a single *ñandú (Rhea americana)* foot stencil, and circular red dots that were likely produced by throwing against the wall stone spheres wrapped in paint-soaked leather (Onetto and Podestá 2011, 74). Last, but not least, stylistic group C represents the end of the sequence at around 1,300 years ago; it is very often superimposed onto other groups and is both monochrome bright red and schematic, consisting largely of geometric figures (e.g., zigzags, circles, dots, etc.) and animal or human silhouettes (Onetto and Podestá 2011, 74-75).

Of relevance to this thesis are stylistic groups A and B as these both fall within the chronological limits of the Late Pleistocene to Middle Holocene period (c. 9,000-3,500 BP) (Carden and Miotti 2020, 2).

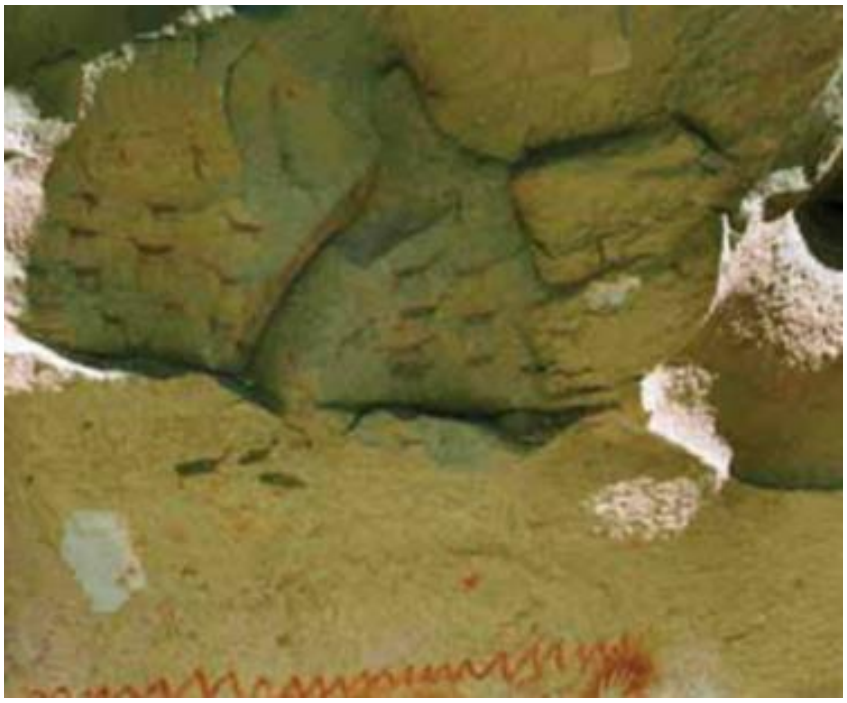


Figure 8: Hunting scene from Cueva de las Manos (Flegenheimer and Bayón 2006, 156)

Los Toldos

Los Toldos, like Cueva de las Manos, is a complex of rock art sites consisting of 16 caves and rock shelters situated in Estancia Los Toldos, of which 11 contain rock paintings (Carden and Miotti 2020, 3). Los Toldos is located in the northeast of the central plateau of Santa Cruz, specifically in Las Cuevas Canyon of the Deseado Massif which is characterized by a volcanic landscape made up of chimneys, volcanoes, terraced plateaus,

and basalt flows (Carden et al. 2018, 294-296). This complex of caves is distinguished by a plethora of negative handprints, largely of the left hand, but also includes a few positive handprints (Fig. 9), negative prints of feet (human and guanaco), three-toed prints (i.e., ostrich tracks), and simple geometric motifs composed of red and black circles and dots in groups or aligned in rows, sometimes found superimposed on handprints (Schobinger 2016, 38).

As it would be impractical to discuss all eleven sites with rock art, only two will be discussed in this thesis: Cave 2 and Cave 3. These sites formed part of a "scheduled mobility network among highly mobile and dispersed hunter gatherers" who repeatedly used these caves as their bases of residence (Carden and Miotti 2020, 11).

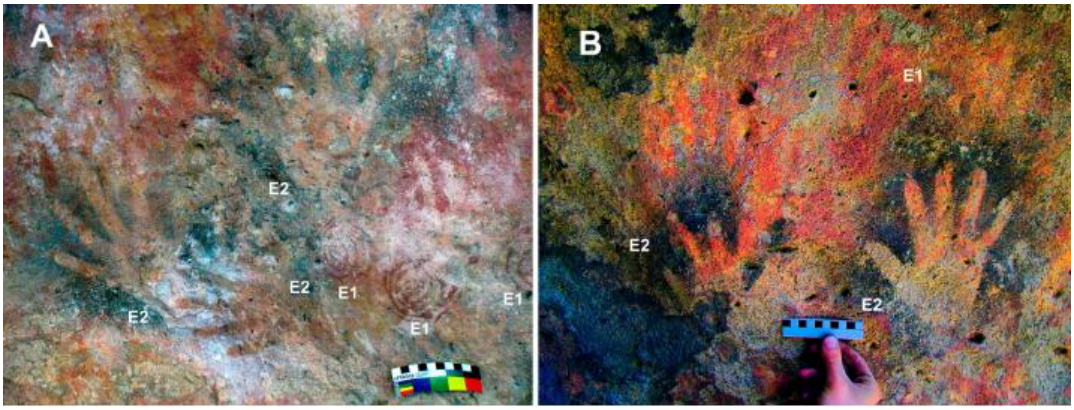


Figure 9: Painting scenes from Los Toldos. A: Panel 28, Cave 2. B: Panel 15, Cave 3 (Carden and Miotti 2020, 7)

Cave 2

The site of cave 2 is located in the southern slope of the Cuevas canyon, at the foot of a temporary river that, according to Cardich and Paunero (1991, 53), is the reason for the notable reduction of the cave's floor, produced by erosion from the temporary stream. Although no radiocarbon dates have been reported for this site, two different stages of human occupation have been noted and they have been identified by Menghin (1951) and dated by Cardich et al. (1973) as Toldense (c. 11,000-8,500 BP) and Casapedrense (c. 7,300-4,800 BP), from the Pleistocene/Holocene transition until the Late Holocene (in Miotti and Carden 2007, 208). This cave site consists of different chambers and has a width of 35 m, a maximum depth of 15 m, and a maximum height of 3 m at the front of the cave which gradually decreases to less than 1 m at the very back (Cardich and Paunero 1991, 53).

Addressing the rock art content, it has been estimated that there are at least 200 negative handprints, many of them taking advantage of the natural contrast provided by the colour of the rock surface, while others are displayed on a painted background (Schobinger 2016, 38). Based on field observations, it is likely that the number of negative handprints could reach double this amount, with the greatest concentrations in the Cuevas canyon found in Los Toldos caves 2 and 3 (Miotti et al. 2007, 620). The oldest examples of these hand stencils are painted in the negative using the colour red and these are superimposed by others in the colour black, followed by yellow, white and dark red (Fig. 10) (Miotti et al. 2010, 4). These handprints represent half the rock depictions from Cave 2, making it the most popular motif (Carden and Miotti 2020, 5). Moreover, this technique of the negative was applied to two other instances of rock art in this cave: a human footprint and a guanaco footprint, linked to the Mid- and Late Holocene periods (Miotti et al. 2010, 4).

Figure 10: Panel with superimposed motifs in Cave 2, Los Toldos (Miotti et al. 2010, 4)

In terms of archaeological remains, Cardich and Paunero (1991, 54) identified 12 natural sediment layers, numbered 0-11, covering the distance from the current surface to the bedrock. Of these 12 sediment layers, archaeological materials such as lithic remains (i.e., double scrapers, bifacials, retouched flakes and knives, etc.), bones from various animals (i.e., guanacos, *Hippidion* sp., *Canis familiaris,* etc.), or carbon fragments

were found in layers 2, 3, 4, 7, 8, 9 and 10 (Cardich and Paunero 1991, 54-57). Of particular interest is the evidence of former structures inside the cave, like the negatives of windbreak poles that were erected by the first Casapedrense occupants in a sector of the cave that was most affected by the wind (Cardich and Paunero 1991, 57). Cardich and Paunero (1991, 57) also acknowledged what could be the leftovers of an old hearth in an unexcavated section of the cave, having recovered pieces of carbon and burned bones and having noticed a large smoke stain on the ceiling of this area. Among the faunistic remains were complete skeletons of guanacos and a large percentage of neonate and juvenile guanacos (c. 60%), indicating year-round human presence in the cave (Cardich and Paunero 1991, 58).

Cave 3

A mere 120 m away from Cave 2 is the site of Cave 3, possibly the largest cave in the Cuevas canyon with a rock face of approximately 20 m wide (reaching a minimum of 4 m at the innermost sector), 22 m deep, and a height decrease from 6 m at the highest point to 1,5 m in the deepest part of the cave (Cardich and Paunero 1991, 53; Miotti and Carden 2007, 208). The cave consists of two chambers and faces north-northeast, providing protection against the strong predominant winds from the West (Cardich et al. 1973, 91-92). The same two different occupation stages (Toldense and Casapedrense) and the twelve stratigraphic layers that were identified in Cave 2 are also present in Cave 3, the difference being that radiocarbon dating from Cave 3 supported Menghin's (1957) assertion that the production of cave art in Los Toldos, specifically the colour sequence established from the 'style of hand stencils', was indeed an ancient tradition that went back to the Toldense period, c. 9000/8000 years BC (Carden and Miotti 2020, 3).

Speaking of the 'style of hand stencils', it must be said that although no systematic research has been carried out on the pictographs in Cave 3, it is at least known that all the motifs are handprints, corresponding to the oldest "style of negatives" (Fig. 11) (Miotti and Carden 2007, 208). Cardich et al. (1973, 95-96) even discovered portions of red and yellow paint in layers 10 and 11 respectively (Toldense layers), and attributed them to the production of the negative handprints covering the walls, the majority having been painted in red, although black, white and yellow were also used.

Meanwhile, the cultural content of the cave is starkly marked by lithic remains, such as scrapers and intensely worked bifacials, among which a series of technically elaborate implements like sheets and flakes stand out, most of them with sharp edges that indicate their use as some kind of instrument (Cardich et al. 1973, 95). However, unlike Cave 2, there are no traces of ancient fires and yet, faunistic remains are in abundance (Cardich 1987, 98). In the Pleistocene/Holocene transition and in the Holocene, the faunistic assemblage is dominated by the guanaco, although the remains of vicuña (*Lama gracilis*), horse (*Hippidon* sp.), and birds like the *ñandú* have also been identified, with the greatest variety of animals belonging to the Middle Holocene period (Miotti and Carden 2007, 208). Worked stones were also uncovered, used as *boleadoras* by Casapedrense hunter-gatherers during their hunting expeditions, as well as some bone artefacts (Cardich et al, 1973, 95).

Figure 11: Hand negatives on the ceiling of Cave 3 (Cardich 1987, 108)

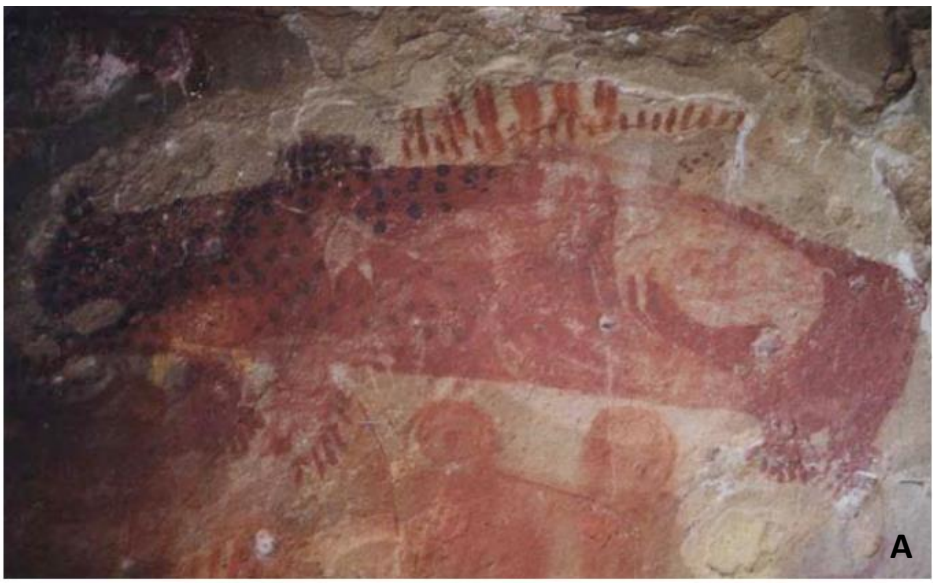
El Ceibo

El Ceibo is also a complex of rock art sites, located in Estancia El Ceibo on a "Chon Aike" tuff formation cliff that surrounds a basin whose centre is a lagoon, about 150 km to the northwest of Puerto San Julián (Miotti and Carden 2007, 209; Cardich 1979, 167). Excavations by Cardich (1979) unearthed the same cultural sequence in El Ceibo as in Los Toldos, which is situated 100 km to the northwest (Schobinger 2016, 38). Nine caves

containing rock images were identified at the base of the cliff, some painted on the walls and fewer on the ceiling, all of them featuring waste from the hunter-gatherer industry (Cardich et al. 1982, 173-174). The greatest concentration of paintings can be found in Cave 6, which is composed of three smaller caves numbered 6A, 6B and 6C, while the site with the most extensive archaeological research is Cave 7 (Miotti and Carden 2007, 209-210).

Cave 6

This cave is the most important site of the El Ceibo complex in terms of hunter-gatherer imagery, it has walls up to 14 m high and a rocky outcrop extending 35 m in length that provided ample cover once but collapsed at some point in history (Cardich 1979, 173). The three minor caves within this one (i.e., caves A-C) boast of many representations that cover the walls and parts of the ceiling, with guanaco silhouettes of various sizes (from 12 cm to 80 cm) making up the largest concentration (Cardich 1979, 173). An example of this would be Cave 6A, which contains a large guanaco painting in which only the front half of the animal remains visible, measuring 80 cm and possibly extending up to more than 1 m as a whole (Cardich 1979, 174). Another animal that formed part of the hunter-gatherer subsistence repertoire but is scarcely shown in their drawings is the ñandú, appearing in caves 6A and 6C as silhouettes of many different sizes (Cardich 1979, 174).



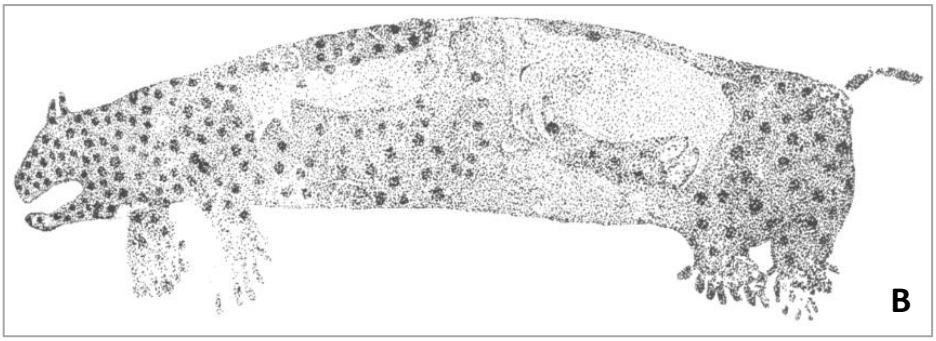


Figure 12: Feline representation from Cave 6B at El Ceibo. A: Photograph of motif (Miotti et al. 2010, 11). B: Drawing from a photograph by Cardich (Schobinger 2016, 39)

The most remarkable motif of the locality, however, is the feline. Depictions of these animals occupy central positions in the panels of the caves and are much bigger than other motifs (Miotti and Carden 2007, 209). There are a total of four feline representations, one of which is significantly larger than the rest, measuring up to 1,50 m from the tip of its nose to its feet (Fig. 12) (Schobinger 2016, 38). It is a polychrome figure painted on the ceiling of Cave 6B in the colour red with black dots decorating its body (Cardich 1987, 107). Its front legs are painted shorter than the back legs and it has more claws than are naturally found, resulting in an imposing figure that looms over the spectator in a position that appears like it might be stalking its prey (Schobinger 2016, 38). There is also a naturalistic character to this image, the short tail and the longer hair along its back show some of the animal's natural features with surprising detail (Cardich 1987, 107). On the authority of Miotti and Carden (2007, 209), this animal could be traced back to the Pleistocene or early Holocene, primarily identified as *Panthera onca mesembrina,* a species of extinct panther, although other taxonomic alternatives are also under discussion.

On the same wall as this impressive specimen is a myriad of other representations, involving guanacos and humans, one featuring a scene with a line of humans painted in red while three others are in white (Cardich 1979, 174-175). These figures are placed at a distance from one another and appear to be marching, the legs are barely marked to show movement and the arms do not show up at all (Cardich 1979, 174). The figures measure about 12 cm in height, composed of simple but very expressive lines, and they are surrounded by many other pictographs, mostly of well-defined guanacos in white or red (Cardich 1979, 173-175).

Cave 7

Of the nine caves composing El Ceibo, the only excavated rock shelter is Cave 7 (Miotti and Carden 2007, 209). It is a small cave located at the base of a cliff, largely covered up by sedimentation and, like Cave 6, it possesses a collapsed visor that when erect would have expanded the size of the cave considerably (Cardich et al.1982, 175). Beneath these remains, Cardich and his team discovered the footprints of old human populations and based on the corresponding thirteen-layer stratigraphy, they belong to Layer 12 which coincides with the oldest cultural layer at Los Toldos, 'Level 11' (Cardich et al 1982, 175). Layer 12 also contains lithic remains with technological characteristics that allow them to be related to the Toldense lithic industry of 'Level 11' (Cardich et al. 1982, 182).

Continuing on this same vein, based on use-wear analysis of the lithic artefacts, the hypothesis is that the main activities carried out in the shelter were fur/skin work, wood-work, and meat cutting (Cardich 1979, 208). Cardich (1979, 208) termed this practice *"consumo de última instancia"* ('last resort consumption'; my translation) having noticed the low number of lithic instruments with edges used for cutting meat with respect to those with edges made for scraping skin. Additionally, both extinct and current fauna were recovered from the lower strata, their remains corresponding either to the acropodial or metapodial bones, and these are very fragmented (Miotti and Carden 2007, 209). For instance, the remains of a prehistoric horse have been found in this site, coinciding with a find of the same animal in Los Toldos, alongside guanaco and puma (*Felis concolor*) remains (Cardich 1979, 171-177).

Unfortunately, this cave does not have that many incidences of cave art. What appears most often in archaeological research is one instance of a painting that was hidden beneath sediment attached to the wall (Miotti and Carden 2007, 209). This depiction is of two guanacos painted in red and Cardich (1979) has posited that they could be related to the oldest cultural layers, i.e., 'Level 11' (Miotti and Carden 2007, 209).

La María

Estancia La María is a very large locality in Santa Cruz, situated 150 km northwest from the city of Puerto San Julián, and considered the most important locality with regards to rock art in the Central Plateau (González Dubox 2020, 40-41). It is rich in quantity, variety and diversity of pictorial representations and comprises an impressive number of archaeological sites in good state of preservation at an average height of 130-400 m above sea level (Paunero et al. 2005, 148). The diverse topography of the area—high plateaus, canyons, and a large number of caves, shelters, and eaves—combined with proximity to water from a nearby lagoon and access to raw material from local flint quarries, created an ideal environment for hunter-gatherer settlement that dates to at least 11,000 years BP (Paunero et al. 2005, 148; Frank et al. 2020, 59).

Figure 13: Scene of guanacos drinking water at La María Quebrada (Paunero et al. 2020, 20)

Based on differences in landscape, archaeology, and environment, La María has been divided into 13 sectors with 11 of these possessing sites with rock representations (Paunero et al. 2020, 6-9). Unfortunately, the great majority of these sites have yet to be investigated as systematic excavations remain quite scarce, with information on lithics and archaeozoology dominating the discourse (Paunero et al. 2020, 6; Miotti and Carden 2007, 210). Because of this lack of unified data relating to La María's rock art, no specific

site will be detailed in this thesis; instead, a general overview of the locality's pictographic collection will be discussed.

The range of painted motifs recorded from multiple panels in La María is varied (Paunero et al. 2020, 17). For instance, based on La María Quebrada alone, one of the thirteen sectors, 29 sites have been identified with a total of 1590 motifs (González Dubox 2020, 41). Among these are hunting scenes (Fig. 14), negatives and positives of hands and feet, animal footprints, negatives of zoomorphic figures, and abstract and geometric symbols (Paunero et al. 2020, 17). Naturally, this comes with an abundance of superimpositions and it was the analysis of these that yielded a succession of three stylistic groups for the region, the first two falling within the chronological parameters of this work (Paunero et al. 2005, 161).

Figure 14: Communal hunting scene with guanaco at La María Baja (Paunero et al. 2020, 18)

Group 1 is characterized by representative motifs, featuring naturalistic hunting scenes and negative handprints of both adults and children (Fig. 15) which gave rise to the theory of a teaching and learning context (Paunero et al. 2020, 18). Sets of running guanacos and more geometric signs, like lines and dots, are also present, and these are

all assigned to the Pleistocene/Holocene transition, c. 11,500-7,500 ^{14}C BP (Paunero et al. 2005, 161; Frank et al. 2020, 59). The colours of this group are red, ochre, black, and light red (Paunero et al. 2005, 161). Group 2 is defined by a continuation of negative handprints of children and adults, and the development of polychrome alongside more varied techniques (Paunero et al. 2020, 19). At the same time, abstract motifs and representational abstract motifs are both found, as well as mostly individual guanacos, oval figures, and concentric circles (Paunero et al. 2005, 161). Lastly, this stylistic group is known for the development of practices for the maintenance of these pictographs and the incorporation of previous manifestations in the elaboration of new motifs (Frank et al. 2020, 59). Chronologically, this group belongs to the Middle Holocene, c. 7500-3500 ^{14}C BP (Frank et al. 2020, 59).

Figure 15: Handprint of a baby superimposed onto an adult's handprint at La María Quebrada (Paunero et al. 2020, 20)

Chapter 5 : Discussion

An ethnographic perspective

The historic territory of the Aónik'enk stretched the whole of Patagonia, from the Río Negro to the Strait of Magellan (Cooper 1946 in Steward 1946, 130). Their way of life was characterized by hunting and gathering, and they had a flexible and egalitarian socio-political organization composed of patrilineal bands led by local chieftains (Matarrese and Siffredi 2004, 2). The focus of spirituality for the Aónik'enk is centred on the Cycle of Elal, who is classical hero, tamer of beasts, legislator, creator of the Aónik'enk, and centre of the cycle (Bórmida and Siffredi 1970, 237).

As creator, Elal is presented as ancestor to the people, and as centre of the cycle all of the etiological myths revolve around him, regardless of whether he features as an active or passive participant (Bórmida and Siffredi 1970, 238). In his role of classical hero, he takes on mythical creatures and wild, dangerous animals that put the existence of man at risk, domesticating the latter and introducing more tame prey for the Aónik'enk to hunt (Matarrese and Siffredi 2004, 5). As legislator, he is "the guide to action and reflection for daily life" (Matarrese and Siffredi 2004, 5), providing guidelines of behaviour such as the prohibition of incest and the taboo of its name, the institution of marriage, and so forth (Bórmida and Siffredi 1970, 237). More than this, Elal also provides the tools and means by which the 'human condition' is made possible, granting the Aónik'enk with hunting weapons and fire, without which cooked meat would have been an impossibility (Schneier et al. 2021, 77).

By far the most recurrent characters in the etiological myths are the animals native to Patagonia, as befits a culture of hunters. Like humans, the animals can speak, they have cultural assets like fire, social organization, and they possess will and intention (Bórmida and Siffredi 1970, 238). There is no differentiation between the world of animals and the world of humans; the history of life for the Aónik'enk is divided into epochs and before Elal's departure from Earth, *"todos eran gente antes"*, i.e., they were all people before (Bórmida and Siffredi 1970, 208).

Answering the research questions

Archaeological evidence shows that the populations of Patagonia from the Pleistocene/Holocene transition to the Middle Holocene period were hunter-gatherers, and they were specialized in the hunting of guanaco. The Aónik'enk believed that a spirit watched over them during every hunt, keeping track of the number of misses and kills of each hunter, the former requiring the spilling of the hunter's blood so the spirit would not doubt his courage (Llaras Samitier 1950, 183). From the painted hunting scenes, particularly those in Cueva de las Manos and La María, it has also been inferred that not only was hunting extremely important, it was also an individual and a collective activity. As a source of subsistence, and therefore survival, I believe it would not be too far-fetched to suggest that these hunting scenes could be the means by which these hunter-gatherers took note of successful hunting strategies, such as methods of ambush, places of animal congregation, etc., and perhaps used these paintings to subsequently teach their children. Failing to have any other means of recording information than what could be retained in their own memories, it might have seemed like a handy solution to document this knowledge on an ostensibly permanent material like rock. In this way, the practice did not need to depend on an individual to survive but rested on the collectivity.

Additionally, it seems that the negative handprint, guanaco and human figure are framed as a kind of constant through time, establishing the connection between different rock art styles, particularly those in Cueva de las Manos (Schobinger 2016, 40-41). Following Casamiquela's (1981) theory on handprints constituting a type of puberty ritual (in Schobinger 2016, 264), I propose a slightly different approach, in which the handprints are, indeed, part of a ritualistic practice, only not one solely restricted to puberty. Given the dominion of the hunting culture and the constant presence of the handprint motif, I suggest that handprinting was part of a ritual of initiation marking the introduction into the hunting tradition. Observing the close link between age of maturity and age of active usefulness, i.e., when children are considered old or mature enough to participate in more dangerous and strenuous activities, I agree that puberty was certainly a factor in the ritual practice but it was not the sole reason for its inception or continuation.

On this note, evidence from pictographs in La María demonstrate that it was not just adults that left their handprints, but also children (Paunero et al. 2020, 18). Paunero et al. (2005; 2020) have described this as a "teaching and learning context", implying a hierarchy of sorts, at least in the production of rock art, that could have certainly extended beyond this custom to hunting, since this is also something that must be taught and

practiced. Implicit in a hierarchy is the presence of a moment of transition from one stage to another, and who's to say that both the initiation into the hunt and the carrying on of the rock art tradition were not commemorated in one and the same instance? Ethnographic evidence from the Aónik'enk, however, has only information on female puberty rituals and if males also went through a rite, it has been kept from ethnographers (Siffredi 1970, 265). It is perhaps worth noting that as part of the female puberty ceremony, the honouree received a tattoo on her wrist made up of very simple line or dot drawings, similar in description to some of the geometric and abstract designs in some cave paintings, like in Los Toldos (Siffredi 1970, 264; Schobinger 2016, 38).

It is almost difficult to imagine a time before hunting, and yet, there must have been a period of learning, of hunter-gatherers trying to come to terms with the environment and their place within it. In keeping with the argument brought up earlier viewing pictorial work as a way to document hunting strategies, I submit that on a broader scale, hunter-gatherers used their pictograph tradition in a process of understanding the ecological relationships around them before they could come up with ways of inserting themselves among them. This thought is inspired by Jones' (2021) work on the ecology of images in hunter-gatherer and agrarian rock art where he states that "rock art is a component of the interlinked ecologies that make places" (in Abadía and Porr 2021, 51). To highlight this point with an example, the images of guanacos alone or in herds present in Cueva de las Manos, Los Toldos, El Ceibo and La María could be interpreted as humans tracking their prey to hunt them and also to understand them, a means of mentally mapping their behaviour and movements. Archaeological remains from Cave 2 of Los Toldos indicate a year-round human presence evidenced by former structures and the complete skeletons of full-grown and neonate guanacos, meaning humans would have had full access to their prey for their whole life cycle. As it so happens, ethnographic accounts of the Aónik'enk describe them using *chulengos* (young guanacos) as decoys to hunt adult guanacos, which could give one further explanation for the depictions of

pregnant guanacos in caves like Cueva de las Manos (Fig. 16) (Cooper 1946 in Steward 1946, 143).

Figure 16: Image of pregnant guanaco (stylistic group B) from Cueva de las Manos (Onetto and Podestá 2011, 71)

The relationship between animals and humans is never as important as when viewed from a culture of hunters and gatherers. In Patagonia, it is the guanaco that is in centre stage, depicted more often than humans, in varying sizes, and either static or moving, as showcased in El Ceibo and La María. Aided by the non-differentiation between the worlds of animals and humans, the mythology of the Aónik'enk contains many references to metamorphosis, specifically on behalf of Elal, their creator and mythical hero (Bórmida and Siffredi 1970). There is even an important moment in which Elal, in his efforts to complete a series of trials to win the hand of the Sun and Moon's daughter, transforms into a chulengo and in doing so, manages to lure and kill a bad male guanaco to deliver its throat to the Moon (Schneier et al. 2021, 78). In another instance, that of the *guanaca bruja* (guanaco witch), a female guanaco with magical powers enchants the only child of a man, leading to the child dying two days later and the father killing every chulengo in the female guanaco's herd out of revenge (Bórmida and Siffredi 1970, 232). This not only sets a precedent for the killing of chulengo, as seen in the faunistic remains of Los Toldos, it also demonstrates an association between magic and the guanaco, which

is unsurprising considering the multiple values of the animal, and the 'human-ness' of animals in general.

In Aónik'enk cosmology, the puma is a traditional enemy of the people and there are accounts of Elal killing the animal to warm up its bones and consume its marrow, a practice which was continued by the Aónik'enk as a way of obtaining the strength of the feline and instilling courage (Llaras Samitier 1950, 185–186). On this matter, the feline representations in El Ceibo alongside the puma skeletal remains present an interesting puzzle that led Cardich (1979, 180) to believe that there could be a spiritual attitude of some sort attributed to the puma or jaguar. The central, imposing position of the biggest feline painting in Cave 6B and the exaggeration of one of its deadliest tools, its claws, present an all-around powerful image of the animal, framing it as a deadly hunter always on the prowl. In this way, a certain agency could be attributed to the depictions of these large felines that were perhaps used as a means of absorbing into one's body the favourable traits of this animal since, like the hunter-gatherers of the Holocene period, it was also a prime hunter. González Dubox (2021, 39), in speaking about Tehuelche-Mapuche mythology and their totemic songs, describes ritual situations where participants put themselves (literally and figuratively) in the skin of other animals, like the ñandú, guanaco, puma, and fox.

Lastly, given all the information discussed up until now, one has to wonder if we are any closer to defining a cosmology for these hunter-gatherer populations. I believe the answer is two-fold in that yes, we are one step closer, but we have not yet reached a 'cosmology'. From the onset, attempting to divine a cosmology based solely on archaeological remains, rock art and ethnography is very ambitious, especially considering that the ethnographic data in question does not belong directly to the same group under discussion. At most, what has been brought up in this research is an introduction into hunter-gatherer *values*. Case in point is the guanaco who, much like Elal for the Aónik'enk, is an enabler of the human condition, providing food, tools, clothing and other valuable resources that are indispensable for survival. One can see how early hunter-gatherers would have been moved to paint its image over and over again given the multi-fold worth of the animal. Likewise, the fascination with the feline, whether puma or jaguar, could be attributed to the guanaco as well but in a more indirect manner. After witnessing the skill of the feline at hunting its prey or coming across its bones in the depths of a cave, is it so unthinkable to believe that they would have wanted to take on some of these properties themselves, with an economy that is partially reliant on hunting skills? Finally, it is the

handprint motif that ties everything together, reconciling the prominence placed on certain animals in the pictographs with the central role of hunting, culminating in a ritual of initiation that welcomes younger members of the community into the hunting tradition.

Chapter 6: Conclusion

The purpose of this thesis was to attempt to decipher possible hunter-gatherer cosmologies based on their rock art productions and the archaeological material evidence from the same context. To achieve this, a multi-disciplinary approach was carried out combining archaeology with anthropology in an ontological framework that used ethnographic data from later populations, chiefly the Aónik'enk, as a means of conceptualisation. To this end, the main research question is: *Could an ontological approach to hunter-gatherer rock art from the Late Pleistocene to Mid-Holocene periods (c. 9000–3500 BP) in southern Patagonia (Argentina) help us come up with the beginnings of their cosmology?* And the research was further aided by the following sub-questions: (a) *could these rock art images be taken as evidence of hunter-gatherers attempting to understand their surrounding environment?* and (b) *could it be that these images were imbued with some kind of energy or agency that mirrors a form of animal/human symbiosis?*

Starting off by addressing the first sub-question, from the archaeological evidence we know that one of the main themes tackled in south Patagonian rock art is the hunt, with special emphasis paid to the hunting of guanaco. I therefore posited that the painting of hunting scenes was a way for hunter-gatherers to first take note of the successful strategies they employed as they learned from their mistakes and navigated their environment. For instance, the ethnographic accounts of the Aonik'enk using chulengos as decoys to lure adult guanacos could provide an explanation for the images of pregnant guanacos in Cueva de las Manos and the archaeofaunistic remains of neonate guanacos in Los Toldos. Painting this information would ensure that the survival of these tactics rested on the collective rather than on an individual and fits in with the teaching and learning context deduced from the handprints of both adults and children. These handprints, in turn, tie in with what I propose is a kind of initiation into the hunting culture, perhaps marking the transition from gatherer to hunter and likely also related to the puberty ritual that Casamiquela (1981) proposed.

For the second sub-question, the relationship between humans and animals is of relevance, and is featured almost exclusively in Aónik'enk mythology. Cases of metamorphosis from human to animal are common in the Cycle of Elal and it is supported by the non-differentiation between the animal and human worlds. The guanaco and the feline are prominent figures in these tales and they also appear very regularly in hunter-gatherer rock art. I found that the figures of felines, in particular, appear to be associated

with some kind of agentic power that finds its roots in the character and capabilities of the animal as something that was coveted by early hunter-gatherers. This is supported by ethnographic accounts of the Aónik'enk and Elal, both of whom consumed the marrow of the puma to instil courage and take on its strength as hunter.

In closing, the main research question could not be answered, at least not to the extent demanded by the phrasing of the inquiry. To define cosmologies based solely on the limited remnants of the past, i.e., the archaeological record, and the ethnographic testimony from a geographically similar but chronologically distinct population, i.e., the Aónik'enk, is challenging to say the least. So, to what extent was the research question answered? As far as was possible with the limited data compiled for this thesis, I was able to recognize some of the values held by these early hunter-gatherers based on what they treasured from their surroundings. Insofar as cosmologies are concerned, they are created from what we see around us, the factors that influence our daily lives that we feel a need to explain. However, the hunter-gatherer cosmologies that I set out to uncover were not defined. What I have done, instead, is reach an approximation of what might have been included in their conceptions based on what their own world consisted of and the aspects of it that they chose to immortalize on rock surfaces.

Final remarks

There is a scarcity of studies connecting rock art to the construction of specific ontologies; it is a recent field in archaeological theory and most of the existing frameworks relate to ethnographies of the Amazon or the Andes (Troncoso et al. 2017, 286). The purpose of the ontological approach in this thesis was to reconcile the existence of different ontologies within the unfortunately western-dominated framework of archaeology, present also in South American countries as a relic of colonialism. Naturally, there are limits to ethnographic conceptualisations and chief among them is colonization and the stark changes it caused for the Indigenous populations of Argentina, a threat that was not an issue 5,000 years prior for the hunter-gatherers. And yet, ethnography is useful because it can inspire new ideas and provide clues that might have been left behind in the cosmologies of other populations. An unfortunate reality of the bibliographical stance taken here is that it does not produce new data, only new interpretations. However, it is precisely more data that is needed, one that places rock art within its specific archaeological context, taking into account the landscape, any accompanying artefacts,

production techniques, ethnographic accounts, and so forth. It is my hope that this thesis can serve as an example of one of the many ways that archaeology and ontology can be utilized together to bring new life to archaeological interpretations and inspire more ideas for further research.

Abstract

Around the world, rock art has long been studied in efforts to decode its meaning and thereby understand the minds and realities of its hunter-gatherer artists. In Argentina, rupestrian art was first mentioned on the record by Jesuit missionaries from the 16th century, but the first true documentation of these 'sacred rocks' was completed by Moreno in 1877 in northern Patagonia. Rock art has been conceived as many things, as territorial markers, evidence of contact between groups, indication of group mobility, transmission of information, and as domestic/non-domestic symbolic creations. The question is, however, what happened to the study of hunter-gatherer rock art outside of these complexes? What can an ontological approach to these pictographs tell us about the cosmologies of the communities from the far-reaching past?

The aim of this study is to add to, or rather to spark up again, the discussion of early hunter-gatherer cosmologies as seen through the lens of hunter-gatherer rock art assemblages from several different sites in the central plateau of Santa Cruz, Patagonia. This is accomplished by adopting an interdisciplinary stance combining archaeology and anthropology with an ontological approach that uses ethnographic data as a means of conceptualizing new interpretations. This is all done through a bibliographical position in which previous research is re-evaluated. To this end, the thesis is guided by the following research question: *Could an ontological approach to hunter-gatherer rock art from the Late Pleistocene to Mid-Holocene periods (c. 9000–3500 BP) in southern Patagonia (Argentina) help us come up with the beginnings of their cosmology?*

Three possible interpretations are discussed in this thesis regarding rock art and hunter-gatherer cosmologies. The first relates to the importance of the hunt and identifies handprints motifs as part of an initiation ritual into the hunting tradition. Additionally, I posit that hunter-gatherers used the depictions of hunting scenes as a means of understanding the ecological relationships in their environment and to keep track of hunting strategies, thereby ensuring the continuation of the tradition by possibly using the pictographs to teach their children. Lastly, I suggest that the iconic images of large felines and their accompanying bodily remains *in situ* were part of a process of symbiosis in which the animal's favourable traits and capabilities as a prime hunter were taken on by hunter-gatherers themselves. These theories are then conceptualized by ethnographic accounts of the Aónik'enk, their mythology and traditions.

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Figures