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Photographs as Artifacts

Visual Archaeology and Archaeological Visibility of Indigenous Material Culture in Tierra del Fuego (Southern South America)

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Abstract. – This article presents key concepts and methods used to develop a *visual archaeology* of two Indigenous societies of Tierra del Fuego (Shelk'nam, Yámana/Yagan). Photographs are conceived as *artifacts*, which condense the traces of at least two *agents*: photographers and photographed subjects. These visual records are not only biased by the different photographers who took them, but also shed light on the different *material culture patterns* produced by each Indigenous society, which are visible on the images when studied in large samples. The article discusses some results of systematic investigations carried out on a corpus of 847 photographs taken by 39 photographers of Shelk'nam and Yámana/Yagan persons (19th and early 20th centuries). These are compared to materials found in the archaeological record in order to generate new data about the material culture used by Fueguian hunter-gatherers. *[Tierra del Fuego, Indigenous material culture, visual archaeology, archaeological visibility]*

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Introduction: Looking at Fueguian Photographs with an Archaeological Gaze

This article presents and discusses some of the key concepts and methods used to develop a *visual archaeology* of two Indigenous societies of Tierra del Fuego: the Shelk'nam[1] and Yámana/Yagan[2]. The theoretical framework used in this article proposes that *photographs* can be conceived as *artifacts*, which condense the traces of at least two *agents*: photographers and photographed subjects. Signals of their respective agencies can be traced when analyzing the *formation processes of the photographic record* (see below). The photographic record holds information about numerous Indigenous activities, both of high and low archaeological visibility, which makes its analysis of great potential relevance for archaeological enquiry. However, to realize part of such a potential, it is necessary to develop a methodological approach that can help researchers to systematically gather and analyze data in order to identify trends in past

1 In some historical-ethnographic written sources, the Shelk'nam (also spelled Selk'nam) were known as "Ona," although this term is currently in disuse.

2 The term Yámana is commonly found in written historical-ethnographic sources and used in academic publications. The term Yagan (also spelled Yaghan) is found in fewer texts, although it has been chosen by descendants of the indigenous communities as their self-identification name: therefore, both terms will be used in this article.

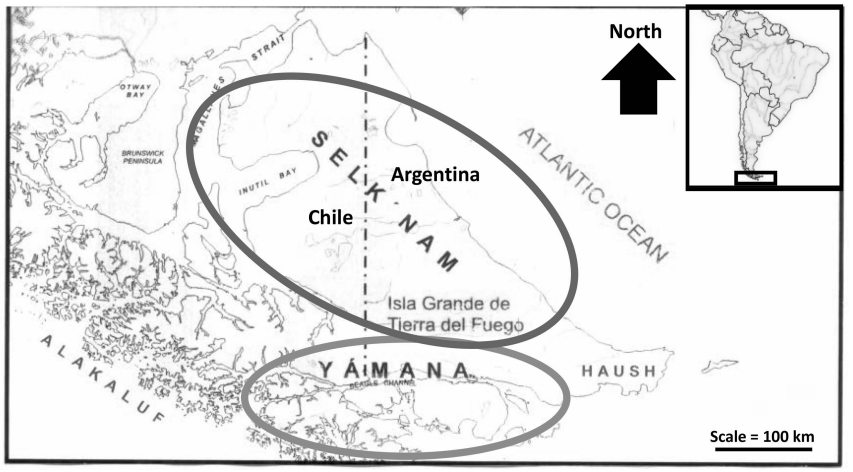

Fig. 1: Map of Tierra del Fuego with schematic indication of Shelk'nam and Yamana/Yagan.

material culture practices of Indigenous societies, which, as will be argued here, only emerge when studying large samples (Scherer 1992). To this end, the article presents these theoretical and methodological approaches and summarizes some of the results of systematic investigations carried out on a corpus of 847 photographs taken of Shelk'nam and Yámana/Yagan persons between the late 19th and mid-20th century, by 39 photographers.

Tierra del Fuego is an archipelago located at the southernmost end of South America and is currently divided between Chile and Argentina (Fig. 1). The earliest remains of human occupation in the archipelago date back to around 11,000 B.P. in its northern area and around 7,000 B.P. in the Beagle Channel shore,[3] while the latest Indigenous sites are dated from the 19th century (Orquera et al., 2012). From the 16th century onwards, written data inform about the existence of three Indigenous societies in this archipelago, two of which are the focus of this article.

The Shelk'nam indigenous society traditionally had a hunter-gatherer mode of life. Their ancestral territory included the northern and central areas of Isla Grande de Tierra del Fuego. Their subsistence was based on hunting guanacos (*Lama guanicoe*), some rodents, birds and gathering some edible plants as well as bird eggs.[4] Their nomadic mobility was exclusively pedestrian and when moving from one place to another, they either transported small foldable huts or re-occupied previously built huts of greater size and conical shape. These were constructed using wood, branches, and animal hides. A key element in the Shelk'nam technological toolkit were bow and arrow, which they used for hunting; other hunting tools included slings and traps (see footnote 4). Baskets were used for gathering and transportation of subsistence items. Regarding subsistence and manufacturing, the daily work was characterized by a strong gender-specific division, which also pervaded their ceremonies. Their cosmology included a rich series of myths and symbolic elements, of which the male initiation ceremony called "Hain" was the highest expression (Chapman 1982). In this ceremony, as well as throughout many other key moments of their social life, they wore various body painting designs (Fiore 2002; 2007 b).

Shelk'nam people were subject to numerous processes that affected their physical and sociocultural integrity during the contact period with Western groups (from the 16th century onwards). This included death by murder and by contagious diseases, reduction of their territories by the establishment of ranches and other economic ventures, intentional transculturation by Catholic Salesian Missions (including relocation of Indigenous groups in their missions), etc.[5] Those processes led to the demise of their way of life as hunter-gatherers. Shelk'nam descendants are currently organized in the Comunidad Selk'nam–Ona "Rafaela Ishton," located in Río Grande, Isla Grande de Tierra del Fuego (Argentine).

The Yámana/Yagan indigenous society traditionally had a hunter-gatherer-fisher mode of life. Their ancestral territory extended from southern

3 Orquera y Piana (1999); Massone (2004); Borrero (2001); Miotti y Salemme (2004); Orquera et al. (2012).

4 Borrero (1991); Bridges (1951); Chapman (1982); Darwin (1839); De Agostini (1924); Gusinde (1982); etc.

5 J. M. Borrero (1957); L. A. Borrero (1991); Manzi (2010); Nicoletti (2008).

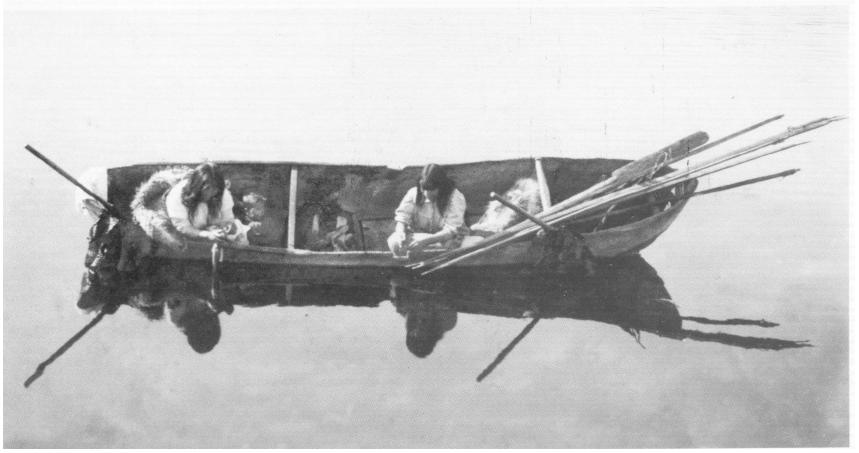

Fig. 3: Yamana/Yagan women in a canoe, with a child. Harpoon hafts, canoe paddles and other unidentified long wooden tools are placed along the front and back of the canoe. Photo by taken by Angeles Sánchez de Caballero (the first known female photographer of Indigenous Fueguian persons), circa 1910.

Fig. 2: Shelk'nam man, woman and child, wearing typical fur cloaks. The man is holding a bow and quiver. Photograph by M. Gusinde; taken between 1918 and 1924.

Isla Grande de Tierra del Fuego to Cape Horn. Their occupation of such a large portion of the Fueguian archipelago entailed the development of aquatic mobility using canoes (Fig. 3). Yámana/Yagan subsistence was based on the consumption of fur seals (*Arctocephalus australis*), sea lions (*Otaria flavescens*), guanacos, many species of fish and birds as well as beached whales; shellfish were gathered along the islands' shores. The use of harpoons, bows and arrows, and fishing nets was crucial for these subsistence strategies; baskets and leather bags were used for gathering, transportation, and storage.[6] The Yámana/Yagan usually built dome-shaped huts, where remains of shellfish accumulated to such an extent that they generated mounds or ring-shaped conglomerates, which now form part of the strata of archaeological sites. Gender divisions did exist in several subsistence and technological tasks, although capturing pinnipeds in the seawaters required the close collaboration between men – who used the harpoons – and women – who rowed the canoe while chasing and hitting the prey (see footnote 6). The Yámana/Yagan celebrated two initiation ceremonies: the "Chiéjaus," which initiated male and female youngsters into adulthood, and the "Kina," which only initiated men after passing the "Chiéjaus," although women also participated in it (Gusinde 1986 [1937]). Both ceremonies required using specific body painting designs as well as decorating hut poles, dancing wands, and ornamental wooden tablets (Fiore 2002; 2007 b).

The traditional hunter-gatherer-fisher Yámana/Yagan mode of life was deeply affected during the contact period due to several factors. These include death by contagious diseases, reduction of pinnipeds due to mass captures of sea lions and fur seals by Western ships of European and American origin, sociocultural changes due to actions of Anglican missionaries, occupation of their lands by

6 Gusinde (1986 [1937]); Hyades et Deniker (1891); Koppers (1997 [1924]); Orquera y Piana (2015).

Western settlers, etc. (Orquera 2002; Orquera y Piana 2015). Yámana/Yagan descendants are currently organized in two communities: Comunidad Indígena Yagan de Bahía Mejillones, located in Puerto Williams, Navarino Island, XII Region of Magallanes and Antártica Chilena (Chile), and Comunidad Indígena Yagan Paiakoala de Tierra del Fuego, located in Ushuaia, Isla Grande de Tierra del Fuego (Argentine).

As part of the contact process between Fueguians and Western voyagers, missionaries, ethnographers, and settlers produced a large corpus of photographs from the late 19th century onwards. In recent decades, Fueguian photography has been the focus of various research projects of history, anthropology, and aesthetics.[7] Yet this photographic corpus has not been studied systematically with the aim of searching for material culture patterns of archaeological relevance. Such is the aim of our visual archaeology project (Fiore 2005, 2007 a; Fiore y Varela 2007, 2009). In the next pages, the theoretical framework and methods used to carry out this project are presented and discussed, followed by some of the results of the Fueguian case studies. Finally, two comparisons are drawn. The first one presents trends in the use of the material culture by Shelk'nam and Yámana/Yagan societies, particularly focusing on specific types of artifacts produced, used, and displayed by each group. These are compared on an inter-society scale in order to show how the visual archaeology approach can shed light on the identification of social agencies using artifacts, which thus is documented in the photographic record. A second comparison focuses on the respective representations of specific tool types – e. g., harpoon points, projectile points – in the photographic and in the archaeological record of each Fueguian territory, in order to show how the systematic analysis of visual and archaeological information can improve our understanding of production and use of material culture in prehistoric and historical contexts.

Theoretical Framework: A Visual Archaeology of Photographic Artifacts

Photography has mostly been used in archaeology as a methodological aid to visually record fieldwork, lab work, and archaeological remains (e.g., Dorrell 1994). In recent years, photographs have also been used as documents – combined with written information – to study the history of archaeological research in specific areas (e.g., Saletta 2010). Yet the relevance of ethnographic photographs as sources of data about the past of material culture practices has often been neglected within archaeology as a discipline. However, systematic studies of photographs in which people appear obtaining, producing, using, holding, wearing, processing, transporting, inhabiting, etc. artifacts,[8] structures,[9] and/or ecofacts[10] can shed light on numerous aspects of these practices, which are of direct relevance to archaeology (Fiore 2002; 2007 a; Fiore y Varela 2009). These aspects include the identification of artifacts and structure types (in order to characterize the material culture repertoire used by a social group in a specific moment of its history), the location of sites in the landscape, situations in which certain material culture items are used, patterns of material culture manipulated per age and gender, etc. (Fiore et al. 2014).

The *archaeological record* includes artifacts, ecofacts, and structures found in sites and in off-site loci. The preservation of material culture items in the archaeological record is different according to a) their raw materials (organic versus inorganic), size, shape, etc.; b) the behavior of the persons producing, using, maintaining/recycling, and discarding them; and c) the deposition/burial and post-depositional conditions, all of which constitute the *formation processes of the archaeological record* (Schiffer 1987). This entails that not all material culture items and not all socioeconomic practices have the same archaeological visibility.

The *photographic record* is operationally defined here as a set of photographs that contain visual information about a certain society, found in one or several archives and/or publications. Due to its visual nature, the photographic record can have a higher visibility of several aspects of past material culture practices which have a very low archaeological visibility due to their ephemeral material traces. Hence its relevance for archaeology.

7 E.g., Alvarado y Mason (2005); Báez y Mason (2006); Brüggemann (1989); Carreño (2002); Chapman et al. (1995); Edwards (2002); Masotta (2003); Olivares y Quiroz (1987); Prieto y Cárdenas (1997).

8 In archaeology, "artifacts" are defined as portable material culture items, such as tools, ornaments, clothing items, and other objects (Renfrew and Bahn 1991).

9 "Structures" are archaeologically defined as non-portable material culture items, such as huts, fences, storage pits, etc. (Renfrew and Bahn 1991).

10 The remains of natural resources found in the archaeological record, including fauna, flora, and inorganic materials such as minerals, are known in archaeology as "ecofacts" (Renfrew and Bahn 1991).

In turn, the photographic record has its own biases and visibility limitations (see below). Thus, the photographic record can offer data that can corroborate, complete, and/or contradict the archaeological record, and *vice versa* (Fiore 2002; 2007 a). In order to carry out such analytical comparison, both records need firstly to be researched separately, studying their own formation processes and biases and assessing their information contents in order to explore their specific scopes and limitations. I will focus here on how the analysis of the photographic record can shed light on information of potential archaeological relevance.

The photographic record can be systematically analyzed with the aim of searching and identifying qualitative and quantitative trends in past material culture practices of a certain society. Such a study constitutes a *visual archaeology* that can provide data on these practices, which are useful both as new information about the society under study and as a source of comparable data referring to the regional archaeological record, particularly if they are contemporaneous (or quasi-contemporaneous) to the photographic record (Fiore y Varela 2009; Fiore et al. 2014).

It is also widely known that photographs are not objective records of past events.[11] Thus, creating an analogy with the archaeological formation processes, there are a number of *formation processes of the photographic record*, which underlie the production and use of each photo. These formation processes involve several "stages" (which clearly vary according to the techniques used), including the photo shoot, developing, printing/copying, editing, publishing/exhibiting, archiving/discarding.[12] A number of *agents* are involved in these stages: e.g., photographers, photographed subjects, managers (editors, archivists, curators, etc.), users (general public, academics, Indigenous communities, etc.), each one with their own aims, interests, needs, knowledge, and values. These agents shape, orient, and bias the production and use of the photos along the stages of the formation process mentioned above. Although great emphasis has been placed on the subjectivity of the photographers and their effects on the final photographic images,[13] fewer attention has been paid to the influence photographed subjects may have had in shaping part of the photographic record.[14] Due to the fact that the only stage of the formation process of the photographic record, at which the photographed subjects and photographers need to coincide, is the moment when the photograph is taken, it is clear that more stages of the process can be controlled by the photographer. However, this does not entail that the photographed subjects were always passive towards being photographed: research of the Fueguian cases shows the existence of several active attitudes of the Indigenous persons, including consent, reluctance, indifference, and negotiation prior to, during and/or after being photographed.[15] These attitudes are relevant in those photographs that were shown to the Fueguians while these were aware of the situation, as they may contain key information about how they wanted their socioeconomic practices and material culture to be reflected in these images, thus making them particularly relevant for archaeological enquiry. Moreover, all photographs, including those taken without the awareness of the photographed subjects, are potentially informative, insofar as these persons were not – and should not be conceived as – entirely passive beings that were fully and always manipulated by the photographers during the photo shoot. Although photographed persons sometimes were treated by some photographers as "specimens" which were to be objectified in the photographic image (Edwards 1988; Giraudo y Arenas 2004), this does not entail that the photographed persons never left traces of their own agencies[16] in the images. It is clear that photographers had more freedom and greater control of more stages of the formation process of the photographic record, while the photographed persons had lesser degrees of freedom. However, the photographs initially were produced jointly, unless every material culture item manufactured by the Indigenous people was planted by the photographers in order to completely control the scene. It is likely that within the details not controlled by the photographer (e.g.,

11 See, e. g., Collier (1975); Edwards (1992); Fontcuberta (2003); Mead (1975); Newton (1998); Pink (2001); Scherer (1992).

12 Fiore y Varela (2007; 2009); see also Alvarado (2007); Olivares y Quiroz (1987).

13 E. g., Edwards (1992); Batchen (1997); Newton (1998); Flusser (2000); Fontcuberta (2003).

14 Edwards (2002); Kossoy (2001); Morton (2012).

15 Fiore (2005; 2007 a; 2007 b; Fiore y Varela (2007; 2009).

16 "Agency" can be defined here as individual and collective actions of persons – including their interactions with other persons, material culture, and the environment –, which are shaped by their socioeconomic and cultural structures, and, in turn, reproduce and/or challenge such structures, thus, becoming active social agents (Bourdieu 1977; Giddens 1995). Evidence of human agency in the archaeological record includes the identification of repeated regional patterns of material culture production and use and of subtle variations within such patterns (Dobres 2000).

clothing items, tools, ornaments, poses, situations, etc.), the agency of the photographed subjects may have had some space to emerge and to leave visible traces in the images (Edwards 2002; Fiore y Varela 2009; Morton 2012).

Following the theoretical perspective outlined above, there are a number of expectations to check whether a certain corpus of photographs does reflect material culture patterns of an Indigenous society:

1) The photographic record of a certain society should show some common patterns (e.g., recurring types of artifacts, types of structures, structure locations in the landscape, gender/age uses of specific artifacts/clothing items/ornaments, etc.) regardless of the different photographers who took the photographs. This would entail that although these patterns may have been influenced to some extent by the photographers, they have mainly emerged from the agencies of the photographed subjects.
2) The material culture patterns found in the photographic record of a certain society should be different from those found in the photographic record of a contemporaneous neighboring society. Such comparison would be particularly valid if both photographic records have been produced by the same photographers, since it is likely that their biases would be similar in both cases, so the emerging patterns should not be entirely attributable to the photographers' agencies.
3) The material culture patterns found in the photographic record of a certain society to some extent should be consistent with those found in the historical-ethnographic written records and with the archaeological record of the same region inhabited by this society (most likely in the contemporaneous assemblages, but maybe also in the prehistoric ones). This does not entail that all three records should provide identical data, but they should show an overall consistency between these three sources of information, which would entail that in spite of the specific biases and limitations of each type of record, the photographic record would be reflecting some actual indigenous patterns in their production/use/display of material culture.

In sum, to carry out a visual archaeology of a set of photographs requires both the study of the biases generated by the different photographers who took them and also the different material culture patterns produced by each Indigenous society, which are traceable on these images when studied in large samples (Scherer 1992). The following section deals with the methods used to carry out such research.

Methods: Digging the Photographic Record

A series of methodological steps need to be followed in order to form a photographic sample and to analyze it systematically to answer questions of archaeological relevance. These steps will be briefly outlined here, emphasizing on those which are most relevant for the topic of this article:

a) "Sample formation": 847 published and unpublished photographs of Fueguian Indigenous persons were gathered from 16 archives and 64 publications (books and journals; see details in Fiore y Varela 2009). When possible, both the negative, film, or plate of the photograph and its positive/copies were observed to check for differences in their printing and edition. All available copies were digitized in high resolution from prints or were directly obtained as digitized copies from some of the archives. The criterion to include each photo in the sample was that they should portrait at least one indigenous Fueguian person. The Fueguian identification of the portraited person or persons was controlled and cross-checked with archive data and published data with the result that if such an identification was still uncertain, the photograph was not included in the sample under study. Data about the Fueguian society or – "ethnic adscription"– of the Indigenous persons, names of photographers, dates, places, photographed situation or context were also obtained from archive and published sources. Photographs were inventoried and identified with an I.D. number. If two or more copies of a single photograph were found, they were labelled with the same number, plus a letter to single out each different copy, thus allowing the study of the circulation of copies of a single photograph in different archives and/or publications, as well as the identification and analysis of editing processes – e. g., addition or subtraction of elements from the image (Fiore 2007 a).
b) "Database design and formation": a multiple-scale relational database was designed (using Access 2000), including data-entry tables at the photograph scale, the individual scale, the artifact scale, and the structure scale, as well as tables to record the data of each institution (archive or library holding the photo) and each publication. Each data-entry table has a number of fields in or-

der to enter data on specific relevant variables, for example:

- photograph table fields: photo number, Fueguian society, photographer, date, place, total number of photographed individuals, landscape;
- individual table fields: photo number, individual number, name, gender[17], age[18];
- artifact table: photo number, individual number, artifact number, type of artifact (type of tool, of object), type of clothing/ornament item.

These tables hold a one-to-many relationship: one photograph may record one or many individuals, who, in turn may use one or many artifacts and/or wear or display one or many clothing items. For this reason, all these tables are linked by the photo number and the individual number, which allows combining the data of these different scales in a relational manner.

As a result, after processing the 847 photographs, 446 photos attributable to Shelk'nam groups and 401 attributable to Yámana/Yagan groups were identified.[19] These 847 photographs have been taken by a total of 39 identified photographers: 26 in the Shelk'nam case and 23 in the Yámana/Yagan case (in several cases the same photographers took photos in both of these societies; see details below and in Table 1).

c) Data analysis:

- analysis of the formation processes of the photographic record;
- photographic demography (quantification of photographed individuals per age and gender, see below);
- qualitative and quantitative analysis of the material culture patterns in each Fueguian society;
- comparison of these patterns at an inter-society scale;
- comparison of material culture patterns in the photographic record of each society with the historical-ethnographic written record and the contemporary regional archaeological record.

It should be noted that the examples of comparisons between the photographic and the archaeological record provided in this article do not entail that the counts of artifacts in the archaeological sites are equivalent to the counts of artifacts in the photographs, since the former are frequencies of actual tools, while the latter are frequencies of tool images (i.e., an actual tool can appear more than once in the photographic record). Therefore, quantitative data from the photographic record cannot be considered at face value as a direct indication of tool use frequency in a society. Yet, in spite of their indirect and biased nature, such data may still be of relevance for archaeological enquiry insofar as they inform about types of artifacts, their shapes and raw materials (when visible), ways of holding/handling them, gender and age of persons using them. When such data are consistently repeated in several photo collections taken by different photographers, it is likely that they do not only respond to the photographers' interests but also to the sociocultural agencies of the photographed persons, thus making this information useful for critical comparison with the archaeological data.

These data analyses can provide significant trends regarding the material culture, which are of key relevance for archaeology, and which only emerge when systematically studying large samples. Although it is clear that the photographic record is made of single photographs, as with the archaeological record, a single artifact usually is not as informative as a set of numerous artifacts studied in context. When the use of a particular material culture artifact is recorded in one photograph, how do we know whether this photograph records an artifact that was frequently used in this society? How do we know whether this photograph represents an unusual artifact, a foreign

17 Gender is defined here as "a sociocultural and historical construction of a set of physical and behavioral characteristics related to sex but not necessarily equated with it" (Fiore 2007 b: 374); such behavioral characteristics include the use or display of material culture, including clothing, ornaments, and artifacts (tools and objects) – the latter being the focus of this article. The gender of each photographed person has been identified in the photographs only when the visibility of the image was clear enough to observe the physical appearance of the individual. Therefore, in the database, there are cases of photographed individuals in which the gender is "undeterminable," and these are not studied when taking this variable into account. The operational definition of gender used in the database and in this article is based on a dychotomic classification – female/male –, although it should be clear that other gender categories and/or subdivisions may have operated in the Fueguian societies (Fiore 2007a/b).

18 Ages have been identified in ranges – baby, child, youngster, adult, elderly – according to the physical appearance of the person (see details in Fiore y Varela 2007; 2009).

19 Other photos of this sample did not allow a relatively accurate ethnic identification and, therefore, are not included in the results presented below (38 possibly Shelk'nam, 22 possibly Yámana/Yagan, plus 26 portrayed persons of possible indigenous Fueguian origin, but with no ethnic identification possible).

Table 1: Data about the Fueguian fotographic record studied in this paper.

photographer	year/s in which photos were taken	N photos Shelk'nam case	N photos Yamana/ Yagan case
Le Bon	1881		2
Pettit	1881		5
Popper	1886	3	
Doze & Payen	1881–1883		137
Beauvoir (*)	1887–1899	11	
Veiga	1887–1905	6	
Veiga (*)	1900–1905	2	
Cañas Pinochet	1894–1895	1	1
Lahille	1896	19	
Lehmann–Nitsche (*)	1898–1915	4	
Bocco de Petris	1898–1899	2	
Cameron	*circa* 1900	4	
Morton Middleton (*)	1900 *ante quem*		1
Ojeda and/or Barclay (*)	1900	2	
Ojeda and/or Barclay	1902	1	
Bridges	1900–1907	8	
Bridges (*)	1900–1939	6	
Barclay	1901–1903	1	2
Williams	*circa* 1901–1903		1
Gallardo (*)	1902–1910	22	
Furlong	1907–1908	58	22
Skottsberg (*)	1907–1909		1
De Agostini	1909–1929	68	9
De Agostini (*)	1910–1920	3	1
Gusinde	1918–1924	168	158
Gusinde (*)	1918–1924		1
Reynolds	1920–1932	1	
Koppers	1922		2
Koppers (*)	1922		14
Borgatello (*)	1924	1	
Lothrop	1924–1930	2	2
Auer	1929	2	
Peña and/or Bourquin–Kolhman	*circa* 1940		1
Weinstein	*circa* 1940	1	7
Goodall	1945	1	1
Lipschutz (*)	*circa* 1946	1	6
Mostny (*)	*circa* 1946		4
Gerstmann	1948		1
Bórmida	1956 *ante quem*	4	

photographer	year/s in which photos were taken	N photos Shelk'nam case	N photos Yamana/ Yagan case
Chapman	1964–1987	5	5
Stanfield	1970	1	
Foresti	1973 *ante quem*	1	
Ortíz Troncoso	1973 *ante quem*		4
Stambuk	1986 *ante quem*		1
Klevansky	1995		1
Unknown	no data	37	11
total photos per Fueguian society	xxxx	**446**	**401**
total photographers per Fueguian society	xxxx	**30**	**26**
photographers in common: S + Y	xxxx	**6**	
total number of photographers in the Fueguian S and/or Y photographic record	**39**	xxxx	xxxx

Key: Data about photographers, dates and Fueguian societies have been identified using archival information; (*) indicates that these specific photograph/s have appeared in a publication by this author and thus have been attributed to him (authorship not yet confirmed by archival data).

artifact newly introduced to this society, or a traditional artifact used in special circumstances? One approach to partially answer these questions is to place the photograph in context, which entails not only retrieving written information about the photographer, the photographed persons, and their material culture but also assessing other variables, such as how many photographs depict the same items out of the total number of photographs under study, in which situations they were used (domestic, ceremonial, posed), age and gender of the persons handling the artefacts. Of these variables, this article will focus on the gender of the Shelk'nam and Yámana/Yagan photographed persons and the types of artifacts (tools and objects) they are manipulating. Due to space limitations, comparisons with the archaeological record of the regions of each Fueguian society will only focus on hunting tools, just to provide an example of how the combination of both types of information may shed new light on material culture practices of these hunter-gatherer societies in their recent past.

Visual Archaeology Results: Trends in the Use of Material Culture by Fueguian Societies Represented in the Photographic Records (End of 19th and Early 20th Century)

A number of *formation processes of the photographic record* have been identified when analyzing the 847 Shelk'nam and Yámana/Yagan photographs samples. The discussion of each of these processes is not the focus of this article, but it is worth mentioning that they include the following:

1) poses controlled by the photographer;
2) nudity seeked or avoided by the photographer and by the photographed subjects;
3) edition of photos by adding or subtracting portions to or from them in order to include or exclude certain persons and material culture items (Fig. 4);
4) publications of sections of photographs without acknowledging that they belong to a single image;
5) negotiation of different ways of payment – food, goods, money, and even copies of photographs – to get the Indigenous persons' approval before taking the photograph, and/or after taking it as a reward;
6) mislabelled copies in archives and in publications.[20]

The focus of this article is the discussion of data about the handling of artifacts (tools and objects) by the Shelk'nam and the Yámana/Yagan. One of the key questions relevant to the archaeology of these societies is which types of artifacts were produced and used by each society, in order to shed light on their respective traditional hunter-gatherer modes of life and also on the changes

20 Fiore (2002; 2005; 2007 a); Fiore y Varela (2007; 2009).

Fig. 4: Three Shelk'nam men: two naked (Koiyot and Doihei) and one dressed (Pahchik), wearing what looks like a fur cloak and a Western cap (photo taken by M. Gusinde in 1922–1923)

they underwent during the contact with Western populations, which firstly visited and then colonized their territories (Borrero 1991; Orquera y Piana 2015). This question can be approached both by considering the content of the photographs and on the individual scale ("photographic demography").

As for the first criterion, the images can be grouped in three categories according to the different general scenarios of material culture used. These are, 1) photographs that show situations in which only indigenous artifacts are handled by the Fuegians; 2) photographs that show their exclusive use of Western artifacts, and 3) photographs that show the combined use of some indigenous and some Western artifacts. The analysis of the frequencies of each of these kinds of photographs provides a preliminary panorama regarding the kinds of material culture scenarios more frequently photographed in each society, showing whether such scenarios were mostly "Indigenous," "Western," or "mixed" in terms of the artifact types handled by the Fueguians. Taking into account that this photographic record was formed during the same period, if such scenarios had been exclusively controlled by the photographers, it would be expectable that they would show the same trends in both case studies. Such trends would mainly reflect the interests of the persons taking the photographs as well as the existence of similar contact processes undergone by the Indigenous societies throughout the contact period with Western groups (from the 16th to the 20th century).[21] Conversely, another possibility is that the results of the analyses at the photograph scale clearly show distinct trends in each Fueguian society. In this case, besides the input of the photographers, other factors may have influenced the formation processes of the photographic record of each society, such as the attitudes which each Indigenous group had towards foreign material culture (e. g., adoption, rejection, etc.) and towards their own material culture (e. g., conservative, prone to negotiation, etc.).

The analysis of the presence of "Indigenous," "Western," or "mixed" types of artifacts at the photograph scale shows different trends in the three cases under study. In the Yámana/Yagan case, there is a predominance of photographs of persons handling only Western artifacts (N=148), followed by photographs of both types of artifacts (N=118; Fig. 5), while photographs of only indigenous artifacts are comparatively less frequent (N=109). Conversely, in the Shelk'nam case there is a strong predominance of photographs of persons handling only indigenous artifacts (N=347; Fig. 6), while photographs of only Western artifacts (N=49) and of artifacts of both types (N=46) have very low – and similar – frequencies.

A comparison of these results suggests that the visual record of each Fueguian society sheds light on different contact processes and cultural transformations that they had been undergoing during the late 19th and early 20th centuries. Thus, the Yámana/Yagan photographic record is characterized by a higher proportion of images, which show persons handling only Western artifacts, suggesting that the cultural transformation of this Fueguian society was already quite deep by the time these photographs had been taken.[22] This general scenario is quite consistent with a number of texts written by voyagers, missionaries, explorers, and settlers, in which it is often mentioned that the Yámana/Yagan were very prone to contact with foreigners and that they usually intended to barter some of their local products for Western material culture items (Orquera y Piana 2015; Saletta 2015).

21 In this case, an overlap between the agencies of the photographers and the agencies of the photographed subjects would generate a process of equifinality, which would require detailed analyses to unveil the influence of each in the resulting photographic record.

22 Diachronic analyses of the photographic record of each society can shed light on potential changes within the contact period, but these are not developed here due to space limitations.

Fig. 5: Group of Yamana/Yagan women and children. The combination of indigenous and Western material culture items is apparent: they are wearing Western clothes, traditional facial paintings and necklaces. Two women are holding baskets and five are holding ceremonial sticks (probably used during the yamalashemoina ceremony documented by Gusinde and Koppers). Photo attributed to M. Gusinde, probably taken in 1922. This previously unpublished photo has been found in an album given by M. Gusinde to Anglican Rev. Lawrence (E. Piana, personal communication 1998).

Fig. 6: Group of Shelk'nam men, women and children wearing traditional clothing and facial painting. They belong to the Kaushel family. The men and one of the boys are holding bows. Photo taken by G. Ojeda and/or W. Barclay in 1902.

Conversely, the Shelk'nam photographic record is characterized by a very high proportion of images, which show persons handling only Native artifacts. Such great quantity of photographs of individuals with their traditional material culture should not be taken at face value as a straightforward indicator of less contact of this society with Western groups, rather it suggests that, even during the contact period, at least under certain circumstances, the Shelk'nam still had access to using such traditional artifacts. In turn, this is very consistent with written texts which, explicitly and implicitly, indicate that the Shelk'nam people resisted changing several aspects of their culture and that even when they were pushed by Western agents – e.g., religious missionaries – towards such changes they went back to their Indigenous practices whenever possible (Borrero 1991).

As a consequence of the comparison of these two cases at the photograph scale, it is noticeable that the formation processes of the photographic record of material culture artifacts were not similar in each society. It seems that such differences were not exclusively attributable to the photogra-

Table 2: Data about photographed individuals, total photographs and individuals/photos ratio.

society	female	male	sub-total	indeterminable gender	total individuals	total photographs	ratio ind/phot
Shelk'nam	667 (42%)	895 (58%)	1562 (100%)	250	1812	446	4
Yamana/Yaghan	590 (48%)	650 (52%)	1240 (100%)	203	1443	401	3.5

phers, particularly since six photographers took photos of both societies. A total of 296 photos (59.7%) of Shelk'nam and 92 photos (22.9%) of Yámana/Yagan were taken by Cañas Pinochet, Barclay, Furlong, De Agostini, and Gusinde, which add up to a total of 388 (45.8% of the total 847 photo sample under study; see Table 1). This makes it expectable that their biases would have oriented equally their photographic work in both Indigenous societies. However, in their interaction with the photographed persons such biases seem to have been reoriented. Thus, it is quite likely that the agencies of the photographed persons were partly a relevant factor in shaping these different trends. Such differences are also traceable within the photographic record, on the individual scale.

A number of much more detailed material culture trends of archaeological relevance can be searched at the individual scale. The analysis will focus here on the artifact types (tools and objects) that are represented in the photographs. In order to search for potential trends in the use of artifacts per individual, it is firstly necessary to analyze the formation processes of the photographic record that may have influenced such trends. One starting point is to study the number of persons photographed in each society. Thereby it should be clear from the onset that in any photographic collection of an Indigenous society a) not every person of the society was photographed and b) some persons were photographed more than once. The initial count of the number of photographed individuals (regardless of whether a single person appears once or more in the photographic record) and the analysis of the age and gender groups represented in these photographs cannot generate an actual demographic sample but a "photographic demography" (Fiore y Varela 2009). These data are obviously not a representative sample of the actual number of persons in each society, but they are relevant to other, more complex issues regarding the formation processes of the photographic record, such as whether the number of photographed individuals depends (or not) on the number of photographs, whether there were preferences for photographing a specific gender group, and whether specific gender or age groups managed specific material culture items (see below). The resulting photographic demography[23] for the Fueguian cases is presented in Table 2.

The question as to whether the number of photographed individuals of each society is related to the number of photographs recording such society is directly relevant to study the formation processes of the photographic record, insofar as it can clarify whether the former is merely a result of sample size or not. If the number of photographed individuals does not depend on sample size, this may reflect other factors, which may have influenced the number of individuals appearing in the photographic record. This could be the number of individual photos versus group photos (and how many individuals are visible in these); the frequency of contacts each Indigenous group had with the photographers; and/or the concentration or dispersal of each Indigenous group in its territory. The data analysis of total individuals versus total photographs per society (Table 2) indicates that the individual/photo ratio is very similar in the Shelk'nam case (ratio=4) and the Yámana/Yagan case (ratio=3.5). This entails that, in average, a similar number of persons was recorded per photo in both societies. This seems not to be a byproduct of the types of photos taken at each society, since in all of them there are group photos and individual portraits in relatively similar proportions (Fiore y Varela 2009).

The issues on the representation of gender groups clearly are more related to the attitudes and

23 Due to space limitations, the data presented here are only focused on numbers of individuals per gender. Further demographic analyses can include "filtering" repeated individuals who have been identified in two or more photographs of the very same situation (e.g., a ceremony, a hunting party, etc.). Such a filter reduces the duplication of several photos that document a single event and, thus, becomes relevant in the count of "actual" events that have been documented in the photographic record. Their discussion goes out of the scope of this article.

interests of photographers, although they may also shed light on certain attitudes that a specific society had towards letting certain age or gender groups be photographed. The fact that all the photograph collections produced by different photographers are lumped together in a single sample may to some extent "averages" different individual trends. For this reason, the production of each photographer has also been studied separately in order to shed light on these potential variations (e.g., Fiore y Varela 2009). Yet, the integrated study of the whole photographic record, treated as a single sample, mitigates the individual influence of each photographer, thus helping to shed light on some general tendencies, which reflect not only the averaged photographers' intentions but also, to some extent, the interactions that the photographed persons of a certain Indigenous society had with the photographers (e.g., favoring or hindering the photographic record of some age or gender group). This is particularly relevant when comparing two or more societies mostly photographed by the same photographers, such as in the Fueguian cases.

The results shown in Table 2 indicate that in both societies under study, there is a slightly higher proportion of male individuals recorded in the photographs, which may have resulted from the interests of photographers on recording men doing different activities and/or on an easier access to witness their activities. It is interesting to note that the Shelk'nam society has the highest proportion of male individuals represented in the photographic record. This is consistent with the fact that their social structure was much more male-dominated (Borrero 1991; Chapman 1982), and such domination may have expanded, to a certain degree, towards the control of the interaction with foreign photographers (Fiore 2002; Fiore y Varela 2009). Conversely, the male-female proportion found in the Yámana/Yagan photographs is comparatively more balanced, which is consistent with their quite egalitarian social structure in terms of the roles carried out by each gender group (Emperaire 1972; Orquera y Piana 2015).

Having presented a panorama about the formation processes of the photographic record regarding the "photographic demography" of the Fueguian collection (individuals/photographs ratios and female/male proportions), it is possible now to focus on the material culture artifacts that these individuals are handling in the photographs.

The results of the study of the Shelk'nam case are indeed quite revealing. There are indigenous artifacts which are handled exclusively by men, particularly those related to hunting activities (e.g., bow, arrow and quiver; see Fig. 7a/b); the high number of these cases (e.g., N=278 photographed bows, see other details in Table 3) makes this a quite reliable trend about the handling of material culture and the role of gender. Interestingly, the archaeological record of the Shelk'nam region (17 sites with layers dated to the contact period)[24] has yielded 181 lithic arrowheads, 10 glass arrowheads, and one arrowhead made of bone, thus indicating the frequent use of this type of artifact in this society.[25] While the archaeological record provides data about the different raw materials used to produce these tools, which are often not distinguishable in the photographic record, the photographic record has now provided data about the gender of the persons using these artifacts. This is one example of the different biases that each type of record has, and of the ways in which both records can provide complementary information about a certain cultural practice, in this case, regarding the technological sphere.

Other artifacts are handled exclusively by women, such as packed huts[26], which they carry on their backs. Although the number of these cases is much lower (N=12), the trend found in these photographs is still remarkable insofar as it confirms that the transportation of packed huts was a task carried out only by women. Both trends are entirely consistent with the historical-ethnographic texts about the Shelk'nam, which indicate that hunting was a male task (which was key for their subsistence), while transporting packed windshields was a female task (which was key for their mobility) (Borrero 1991; Gusinde 1982 [1931]).

Another result shows a predominance of Shelk'nam women in the use of baskets (Table 3), which in turn is consistent with the fact that these were produced by women and also frequently used by them (Table 3). Only two male individuals are associated with three baskets in total, in two dif-

24 These data come from contact-period-layers of archaeological sites, which have been dated from the 16th century onwards, thus being contemporaneous to the written records and to the photographic record of each indigenous society.

25 Saletta (2015); Fiore et al. (2014); Saletta y Fiore (2017).

26 These are huts of a specific type, often called "windshield," since it was an open tent, which consisted of a series of tree branches with tied animal skins that, when set up on the ground, had a semicircular floor plan with its open side facing away from the wind and its closed side protecting the hut's inhabitants from the wind. This tent was dismantled, packed into a package, and carried as a burden from one place to another (Gusinde 1982 [1931]; Borrero 1991).

Fig. 7 b: Shelk'nam men, dressed with indigenous fur cloaks and holding their bows and arrows in a "hunting position", while clenching their quivers with their teeth. No arrow points are visible in these tools, thus suggesting they are either practice items or artefacts only only used to pose for the photograph. The man on the left wears a metal ring on his left hand (second finger), similar to those worn by married persons according to Western cultural tradition. Photograph taken by M. Gusinde (1918-1924). Note the similarities in the positions and toolkits in both photos, in spite of the fact that the dates, persons photographed and the photographers are different.

Fig. 7 a: Shelk'nam man, dressed with indigenous fur cloak and holding his bow and arrow in a "hunting position", while clenching the quiver with his teeth. Photograph taken by C.W. Furlong in 1907-1908.

ferent photographs. In both cases they are not using the baskets but rather sitting or standing next to them, in “ethnic scenes” (Alvarado 2007) clearly arranged by the photographer in order to show the individuals next to some of their “typical” and “picturesque” material culture items. Such artifacts usually have no archaeological visibility, hence the crucial relevance of the photographic record is an alternative source of data about material culture items made of perishable raw materials.

Interestingly, there are fewer photographs of individuals with Western artifacts and these mostly show Shelk’nam women using spindles, thread balls, and looms; such tools correspond to weaving tasks that were taught by Catholic Salesian missionaries to promote the transculturation of this society (Nicoletti 2008). Such tasks were specifically oriented towards the female gender, while other tasks such as farming were targeted towards Indigenous people of male gender. Although there are photographs of Shelk’nam men living in these missions, no images of them and any Western working tools related to such task have been found so far. Conversely, chairs, a Western material culture item introduced by these missionaries as well as by other Western new settlers (e.g. farmers) appear in the photographs where they are used by Shelk’nam persons of both genders (Table 3).

In the Yámana/Yagan case, the most frequently photographed artifact types are the ceremonial sticks and wands, which were mainly used during the “Chiéjaus” (Gusinde 1986 [1937]) and the “Yamalashemoina” (a collective mourning ceremony, also attended and performed by both genders; Gusinde 1986 [1937]). Consistently with the mixed-gender nature of these ceremonies, these

	Shelk'nam		Yamana/Yagan	
artefact type	female	male	female	male
bow	0	278	0	1
arrow	0	91	0	1
quiver	0	92	0	0
basket	7	3	9	0
harpoon (various subtypes)	0	0	0	12
canoe paddle	0	0	23	3
packed hut-windshield type	12	0	0	0
ceremonial sticks and wands	0	0	38	34
ceremonial rope	0	0	0	7
feather (ceremonial use)	0	0	0	0
spindle	8	0	1	0
thread ball	11	0	0	0
loom	1	0	1	0
chair	4	3	6	4
firearm	0	0	0	1
mug	2	0	0	0

Table 3: Material culture artefact types per society and per gender who manipulates them
Key: Note that one individual may manipulate more than one artefact (e.g. bow and arrow), hence the data in each row of the table quantify the N of individuals using such artefact type, regardless of whether he/she is using other artefact types (recorded in other rows of the table).

artifacts were used by both genders, as appears in the photographic record (N=38 female cases and N=34 male cases; see Table 3). However, a ceremonial rope, which was used during the "Chiéjaus" to symbolically "capture" rebellious young participants to this ceremony, only appears together with Yámana/Yagan men, a point that is also consistent with the written records about this ceremony (Gusinde 1986 [1937]).

A clearly different trend appears when Yámana/Yagan hunting tools were analyzed. Harpoons and bows and arrows appear only in association with men: the former are comparatively more frequent in the photographs (N=12 photographed harpoons; Fig. 8a/b) while the latter are represented only in one case (Table 3). Interestingly, both harpoons and bows and arrows are not only mentioned in the written historical-ethnographic records about the Yámana (Orquera y Piana 2015; Saletta 2015) but also appear in important frequencies in the archaeological record of the Yámana territory during the contact period, since 75 lithic arrowheads and 27 bone harpoon points were found in 5 sites (Fiore et al. 2014; Saletta 2015). Therefore, the quasi-absence of bows and arrows in the photographs generates a contradiction with the written and archaeological records. The reasons for this discrepancy are difficult to ascertain. On the one hand, it is possible that photographers did not find these material culture items ethnographically and/or aesthetically interesting. Yet if that were the case, such lack of interest also should have affected the photographs taken of the Shelk'nam, which, as seen above, show exactly the opposite trend in terms of this specific material culture item. On the other hand, it is possible that the Yámana/Yagan were using these tools outside the sight of the photographers and/or that by the time the photographs were taken (1880 s onwards), the use of bows and arrows was in fact in decline. This issue is by no means closed with this discussion, and further research will be needed to shed more light on it.

Beyond these issues, it is also interesting to note that bone harpoon points of different types have been recorded both in the photographic and the historic and prehistoric archaeological record of the Yámana/Yagan territory, including single-barbed or two-barbed harpoons with simple-tenon detachable points (N= 15 artifacts, found in 4 sites[27] ranging from ca. 2,200 years B.P. to the contact period), and multibarbed harpoons with fixed points (N= 62 artifacts, found in 5 sites[28] ranging from ca. 6,400 years B.P. to the contact

27 Sites where two-barbed harpoons with simple-tenon detachable points have been found are: Túnel VII, Lanashuaia I, Mischihuen I, Shamakush X (data from Proyecto Arqueológico Canal Beagle databases).

28 Sites where multibarbed fixed-base harpoon points have been found: Túnel I, Túnel VII, Lancha Packewaia, Mis-

Fig.8a/b: LEFT. Yamana/Yagan man named Athlinata, hafting a multi-barbed point. Harpoons of this type are frequently found in the archaeological record of the Beagle Channel region. Photograph taken by Doze and Payen, in 1882-1883. RIGHT. Two Yamana/Yagan women and one man on board of a canoe, wearing Western clothing; the two women are manipulating the canoe paddles while the man is standing and holding a harpoon. Other harpoons, such as single-barbed with simple-tenon base are visible at the side of the canoe with their points partly detached from the haft. Harpoon points of this type are commonly found in the archaeological record of the Beagle Channel region. Photograph by A. Sánchez de Caballero, circa 1910.

period; see Fig. 9). Such compelling coincidence between the visual and archaeological records attests to the long-term continuity of a hunter-fisher technological tradition, which was, according to the visual and written records, manipulated by men (Orquera y Piana 2015). Thus, while the archaeological record provides detailed data about the types of artifacts, their morphology, size, and raw materials[29], the photographic record provides some confirming data (e.g., morphology) and some complementary data. This includes information about the way the harpoon was tied to the haft, the haft length, the ways in which the harpoons were handled, and the gender of the persons who produced and handled these multi-component artifacts. Interestingly, it should be noted that also the photographic record has its own low visibility areas. This is particularly noticeable, for example, in the case of another type of bone tool, the hollow awl, which is found very frequently in the archaeological record (N= 295 artifacts found in 10 sites[30] ranging from ca. 6,400 years B.P. to the contact period; see Fig. 10), yet these are entirely absent in the photographic record. The reasons for this absence may be many, ranging from a lack of interest of the photographers on these tools and/or on the tasks they were involved, the fact that such tasks were mainly carried out by women (Orquera y Piana 2015; Saletta 2015), and/or their comparatively small size. Regardless of these hypothetical situations, this case is a good example of the importance of not overemphasizing the relevance of one record over the other; due to their own biases and their own visibilities, it is the combination of both which helps to shed new light on the Fueguian hunter-gatherer practices.

As opposed to these male-dominated hunting artifacts, baskets appear in the photographs exclusively manipulated by Yámana/Yagan women (N=9, Table 3), showing again consistency with their ethnographically recorded production and use (Orquera y Piana 2015), and marking a similarity with the Shelk'nam case. Other notoriously female-dominated material culture items are the canoe paddles, which appear together with women in 23 cases, against only three male cases (Table 3). This is strikingly consistent with the description of several written sources, which indicate that Yámana/Yagan women were very often in charge of rowing the canoes, especially when men were harpooning pinnipeds (fur seals – *Arctocephalus australis* – and sea lions –*Otaria flavescens*) in the open sea.

Regarding the Western artifacts found in these photographs, spindles and looms are scanty (N=1, table 3) and were used by women; the potential re-

chihuen I; Imiwaia I (data from Proyecto Arqueológico Canal Beagle databases).

29 E.g., (Orquera y Piana 1999); Scheinsohn (2010); Fiore (2011).

30 Sites where hollow awls have been found: Túnel I; Túnel II; Túnel VII; Lancha Packewaia; Mischihuen I; Shamakush I; Shamakush X; Ajej I; Lanashuaia I; Imiwaia I; data from Proyecto Arqueológico Canal Beagle databases.

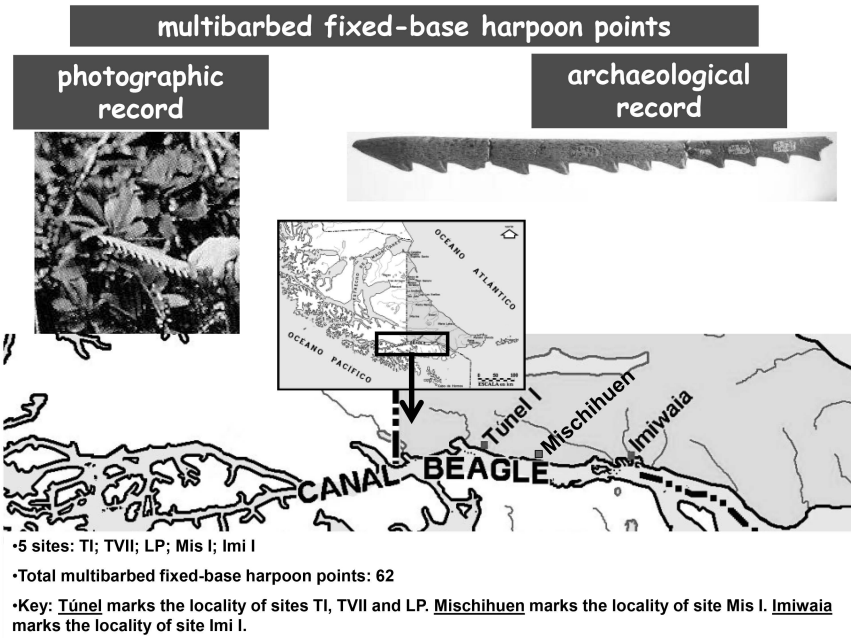

Fig. 9: Multibarbed harpoon point from prehistoric layers of Mischihuen I site, compared to multibarbed harpoon point held by Athlinata (19th. century) and map of archaeological sites where these harpoon types have been found in the Beagle Channel region (map kindly prepared by L. Orquera, modified for this paper).

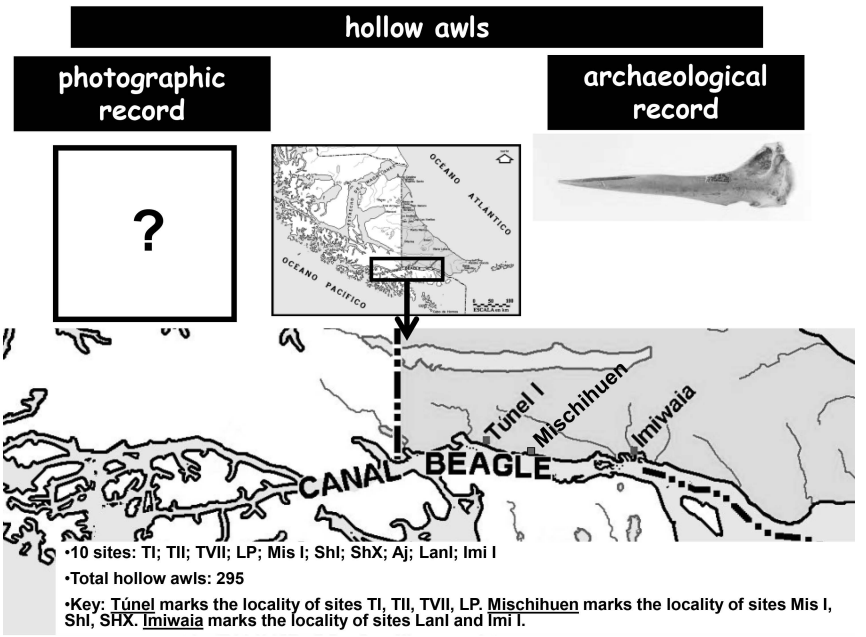

Fig. 10: Hollow bone awl from prehistoric layers of Tunel I site, and map of archaeological sites where these tool types have been found in the Beagle Channel region (map kindly prepared by L. Orquera, modified for this paper).

lation of this activity with the religious missions needs further enquiry, insofar as there are no clear data about the use of such types of artifacts by the Anglican missionaries who interacted with the Yámana/Yagan. Chairs are again used by both genders, as in the Shelk'nam case. Finally, within the 401 photographs and 1,443 individuals under study only one case exists in which a Yámana/Yagan man is holding a firearm. There is no clear information about the context in which this photograph was taken and also little information is available regarding the use of firearms by this Indigenous group, and it is possible that the man was only posing for the camera and not actually using this Western weapon. Hence, this photograph is a good example of the importance of studying large samples of images in order not to overemphasize the importance of the data found in

a single photograph. Contextual information and qualitative analyses are essential to understanding the stories behind each photograph, but quantitative analyses are complementary to the former, as they bring out trends which would otherwise remain unknown and which are useful to assess the relevance, reliability, and implications of the data found in each image.

Concluding Remarks: Challenging Archaeological Visibility from a Visual Archaeological Perspective

The case studies presented in this article have shown that, when guided with archaeological questions, the systematic analysis of large samples of photographs can shed light on a number of issues about material culture practices, both of high and low archaeological visibility. Results show that there are a number of coincidences in the Shelk'nam and Yámana/Yagan societies with regard to their use of indigenous and Western material culture items, as in both societies

- indigenous hunting tools, such as bows, arrows, quivers (in the Shelk'nam case), and harpoons (in the Yámana/Yagan case) are only handled by male individuals;
- indigenous baskets are almost exclusively used by female individuals;
- Western spindles or looms are only used by female individuals;
- Western chairs are used by both male and female individuals.

These data have deep social implications for both case studies. Firstly, they show the existence of intra-society differences in the handling of specific indigenous material culture items based on gender. Such gender-based divisions, however, are similar in both societies insofar as they both relate the male gender with hunting roles (explicitly represented via men posing with bows and arrows or harpoons as if hunting), while the female gender is visually related to gathering roles (implicitly represented via the representation of women holding baskets, even if such poses do not represent a proper gathering activity). Secondly, these trends also show the interaction of Shelk'nam and Yámana/Yagan persons with Western material culture items as part of a process of interaction or "transculturation" which was actively fostered by the presence of Salesian and Anglican missions in their Indigenous territories. Such processes, again, show some gender-based differences, exemplified by the exclusive use of weaving items by women.

In spite of these coincidences, clear differences in the use of Indigenous material culture artifacts have also been found when comparing both Fuegian societies

1) There is a very high number of bows, arrows, and queavers photographed in the Shelk'nam case in comparison with a very low number of these items in the Yámana/Yagan case; however, the archaeological record shows the existence of arrows in both regions (not just in the Shelk'nam territory).
2) There is a documented use of harpoons in the Yámana/Yagan photographic record in comparison with a not documented use of such tools in the Shelk'nam photographic record. This trend is interestingly confirmed in the archaeological record of the Yámana/Yagan territory, where the same types of harpoon points have been found from prehistoric times as early as 6,400 years B.P.
3) There is a clear trend in the use of canoes and canoe paddles as mobility technology in the Yámana/Yagan case compared with no use of these by Shelk'nam individuals. This result is not particularly striking insofar as it is in total concordance with the previously known data about their different modes of life and types of mobility. However, what is interesting, is that there is an almost exclusive female use of canoe paddles by the Yámana/Yagan, which provides new and independent evidence of the key role women played in the use of this technology and which had key implications both for the transportation of persons and goods and for the hunting tasks carried out at sea.
4) Although both societies celebrated initiation ceremonies involving the masked presentation of spirits, there are deep differences in the creation and use of specific ceremonial artifacts. The Yámana/Yagan produced and used wooden sticks, wands, and ceremonial ropes, which were not used by the Shelk'nam. At an intra-society scale, it is interesting to note that the former were handled by both genders, while the ceremonial rope was only worn by male individuals, showing again a gender-based social division. Given their organic raw materials, all these items have low to null archaeological visibility, which makes their photographic visibility even more relevant from an archaeological point of view. These photographs are some of the very few artifacts which document the existence of such material culture products.

In sum, these trends have various implications for the archaeology of the Fueguian archipelago.

Firstly, there are clear differences in the material culture repertoires used by each society. This suggests that in spite of the numerous biases introduced by the photographers as part of the formation processes of the photographic record, the photographed subjects also contributed, to an extent, to the construction of their own visual records and left visible traces of their agencies in these photographic artifacts. Photographers have a greater control of the whole production sequence process, which comparatively reduces the degree of freedom of photographed subjects to exert control over their own visual representation. However, the photographic record condenses the agencies of both, so the signals left by both agents –which by no means are symmetrical or equally strong – can still be traced back in these visual artifacts.

Secondly, the Fueguian photographic record has provided data with a twofold relevance for archaeology. a) It contains information not only about artifacts made with durable – mostly inorganic – raw materials which usually have high archaeological visibility, but also on perishable – organic – materials which often have a low archaeological visibility. b) It contains information about the social contexts and dynamics in which material culture was produced, used, and displayed, out of which gender has been chosen as an example in this article.

The systematic study of the Fueguian photographic record has shown trends that confirm, complete, and in fewer cases contradict the archaeological knowledge about the production and use of material culture items by Indigenous societies. The combination of both records, each one with its own formation processes, increases the degree of detail with which the recent past of these hunter-gatherer societies can be approached and even provides new links to their prehistoric past. Thus, visual archaeology can shed light on material culture practices both of high and low archaeological visibility. This opens a new analytical relevance of photographs as artifacts, which is unfolded in numerous fascinating dimensions when these are looked with an archaeological gaze.

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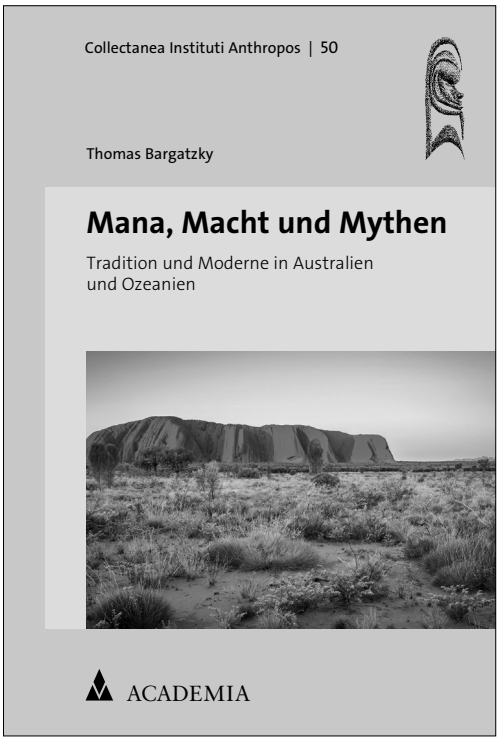

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