

Review Article





# Atacama culture accumulation cycle: the tradition of excavating and exhibiting in the 19<sup>th</sup> and 20<sup>th</sup> centuries

#### **Abstract**

This paper deals with the relationship between Bruno Latour's accumulation cycle theory and the sequence of the tradition of excavating and exhibiting in archaeology, focused on the Pre-Colombian Atacameña culture of Atacama Desert; how the contributions and research changes of varied pieces excavated since the 19th century started filling out the glass cabinets of European, North American and Chilean museums until the appearance of San Pedro de Atacama Museum, which led to the reformulation of hypotheses and evidence about the Pre-Colombian cultural horizons of Atacama people.

Keywords: museums, archaeology, atacameños, le paige, orellana

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### Introduction

Archeological studies in the Big North of Chile or in Atacama Desert deal with 4 aspects not generally well-known. The first one is studies beginning in the 19th century involving individual archaeologists or members of European English, Spanish, French and German scientific expeditions or commissions. The second one has to do with the fact that in these expeditions cemeteries or gentilares whose cultural horizon or ethnic group could not be accurately contextualized at that time were excavated. The third aspect refers to archeologists or European scientific commissions that collected lithic and ceramic pieces and also textiles and mummies that were sent to the main museums of the Old World, spreading these vestiges before Chile was interested in establishing a related museum. The fourth aspect deals with the presence of the Belgian archaeologist Gustave Le Paige in the mid-1950s, who returned to European tradition, but making an inflection: He created the first regional museum in the main seat of Atacameño culture: San Pedro de Atacama. Bruno Latour indicates that always be a well-known open side and an unknown ignorant side in every science.1 Museums collected the samples of cultures already extinct in the world. However, the mechanisms through which these pieces arrived at glass cabinets in Europe, the USA or Chile are still veiled. So, Latour's question concerning the fact those archaeologists make up the speakers of the science that rescues the vestiges of cultures in certain places remains, who is speaking "Things or people through the voice of the representative?" Closing this process that ends in a museum and reading this knowledge from the proposal of carrying these materials to glass cabinets is for Latour, the "whole accumulation cycle". This explains why every time we enter and observe these materials, we open up our knowledge of archaeology, museums and the samples and their representations. A sort of simulation of the outside. Archaeological research in the 20th century faced the anthropological tradition of live communities, where the "natural forms of life" of South American indigenous cultures such as "onas" were exhibited in road shows.2

It is interesting to review the "accumulation cycle" in archaeological studies, that became part of the tradition of excavating, selecting and sending objects to museums during the 19th and 20th centuries until

we became aware of this "accumulation" in Chilean museographic institutionality and archaeological professionalization. The sites excavated in Atacama Desert were connected to what would later be called Atacameña culture, except for prospection's on the desert coast. It is important to highlight how motivation for excavating continued until the arrival of the Belgian Jesuit Gustave le Paige. His work was an inflection in this tradition in Antofagasta Region and its impact on a national basis. This knowledge about remnants, what Latour would call "inscription", was the moment for debating about the identity and habitat of the pieces collected. According to this perspective, the attraction towards Le Paige's work, his activities at the museum and the organization of the International Congress of Archaeology were significantly relevant in the archeological panorama on a national basis. We will focus the end of the tradition of excavating and exhibiting on one of his followers interested in Atacameña culture, Mario Orellana Rodríguez.

# The tradition of excavating and exhibiting in European expeditions in the north of Chilethe start of the accumulation cycle

Englishmen inaugurated the interest for cultural remnants in the current Chilean desert. William Bollaert, in his Antiquarian, ethnological and other studies in New Granada, Ecuador, Peru and Chile: with observations on the pre-Inca, Inca and other monuments of Peruvian nations (London, 1860), reveals his interest in Arica tombs, where he extracted various materials textiles, ceramics, wooden ornaments, etc. and sent them to the British Museum. In this way, the tradition of excavating and exhibiting was inaugurated. German Aquinas Ried excavated in 1851 and his discoveries in Chiu-Chiu were sent to Ratisbona Mineralogical Society Museum.3 Later, the Spanish Scientific Commission to the Pacific excavated in Atacama Desert in 1863-1864, led by Manuel Almagro. After wandering from Cobija on the coast to the pre-Andes, he could find mummies in Chiu-Chiu and wrote, "He made many excavations there and had the pleasure of removing many mummies which, through hard work, were sent to Madrid". When materials from the trip to the Pacific were registered in Madrid in 1868, there were a total of 231 pieces



and 6 mummies from Chiu-Chiu, including mud, wooden and stone utensils, harnesses, clothes, etc.<sup>4</sup>

When José Toribio Medina, the main Latin American polygraph and bibliophile, began writing his book Los aborígenes de Chile in 1882, he started his tour on the north, pointing out two situations: the first one was the importance of Chiu-Chiu for Atacameño people and the second one, that many lithic pieces and mummies from Chilean indigenous people were in different European and North American museums. Among the former in Berlín, Sèvresand and latter Washington, he took advantage of his archeological trip to contribute with certain pieces to the Natural History Museum. Although there was a Natural History Museum in the country, founded by wise man Claudio Gay, on September 14th, 1830, he traveled with Rodulfo A. Philippi to Atacama Desert, sending archaeological pieces to the museum. He was later imitated by other Chilean researchers. But it was necessary to wait until the 20th century to create a museum for properly collecting pieces from indigenous origin.

To make archaeological excavations in the Chilean territory and also in Latin America at that time, it was only necessary to have an authorization from the site owner. The transportation of archeological utensils to England was common at that time because an authorization from the site owner was enough for excavating and collecting. For example, lithic and ceramic pieces found in Peña Blanca, near Huasco, at the end of 1889, allowed the formation of new archeological collections such as "Christy Collection", distributed between Liverpool Museum and British Museum.<sup>6</sup> Parallel to the stay of Medina in the north, Francisco San Román, a Chilean engineer and geologist, was asked by the government to lead the "Atacama Desert Exploration Commission", 1883-1890. In his journey around the paramo, he could get 4 complete mummies in a good conservation state from Chiu-Chiu gentilares and several ornaments and utensils. He sent them to German wise man Rodulfo A Philippi, director of the Natural Museum in Santiago.<sup>7</sup>

Until 1890, individual expressions except for the Hispanic scientific mission were the dominating feature of the excavation and exhibition tradition, favoring the only national museum and mainly consolidated foreign museums. In the first decade of the 20th century, a change was made in these excavations. On the one hand, there were ex profeso expeditions to Atacama Desert and on the other hand, Chile inaugurated a museum more in accordance with archaeological concerns and the rescue of its ancestral culture patrimony. Relevant in the first lustrum was the Discovery of "Chuquicamata Mummy".5 The so-called "Copper Man", 8,9 was discovered in La Descubridora Mine, whose owner was a Welsh citizen, William M Matthews. It was in this place where, two years later, the world's largest copper mineral exploitation began. After several adventures with the mining man mummy, it was purchased by the North American millionaire John Morgan and donated to the New York Natural History Museum, where it is currently exhibited.

A huge mission was organized by France, called "Mission Francaise dans le Désert d'Atacama", that also explored Chuquicamata mineral remnants. Baron Albert de Dietrich excavated in Chiu-Chiu in 1894 and donated several pieces to the Musée d' Etnographie du Trocadéro de Paris, which were examined by Eric Bomanin. Domain was a member of the "Mission Francaise", in charge of G.de Créquis Montfort and E Sénéchal de la Grange, where Arthur Chevrin participated in the first 1900 lustrus. The Welsh expedition inspected the coast, La Chimba caves and other places in Antofagasta, along

with several Calama cemeteries in the hinterland. In 1904, the objects collected in Calama, a mummy of a miner and his tools among them, were exhibited in Palais du Trocadéro. 10,11

French work on the so-called Dupont site near Calama was continued by the German archaeologist Max Uhle, considered the "Father of Andean Archaeology", in the next decade. Uhle not only excavated in Antofagasta region, but also created the Pre-History Section at the Natural History Museum in 1911, which later became "Ethnology and Anthropology Museum.<sup>12</sup> At the same time, the Chilean Society of History and Geography was created in 1907, allowing its members to preserve the old monuments of the Pre-Colombian cultures. José Bengoa named them "rescuers" because their objective was "to rescue the fragments of cultures whose fate was to disappear. Uhle had started his journey in South America, sponsored by the Royal Ethnographic Museum of Berlin and the German Government. He contributed with numerous pieces excavated in Peru to California University in 1901. In this context and before the First World War, scientific expeditions and the individual efforts of European archaeologists were part of the global policy of European imperialistic powers. William Bollaert, an English man, was the first to report his results to the Royal Society, which usually shared them with the Royal Navy and also in mixed expeditions for geographic recognition and natural resources as anthropological explorations.<sup>13</sup> The German imperialistic view had considered both commercial influence and cultural penetration since 1870, when archaeological contributions were considered as part of the "informal imperialism" policy, or what was estimated as a "Greek colonization method", the influence of the national spirit on the empire being a reference.<sup>14</sup> Some German scientists, although funded by the government, did not share the idea that science was an imperial dissemination or propaganda instrument. Adolf Bastian's model, as emphasized by Glenn Penny, organized a group of German ethnologists. Uhle's case is quite noteworthy. He studied in Leipzig, a city with an Ethnography Museum established in 1868, far from the political intention of creating the German Empire in 1870 or its deployment as a colonial power in 1884. The generation of German social scientists ethnologists, anthropologists whose activities were conducted from 1868 to 1914, according to Penny, was under "the inspirations, motivations and legitimacy for the creation of German ethnographic museums drew heavily on visions of a unitary humanity and the desire to sketch out a total, harmonic history of "mankind" along Humboldtian lines".15

Max Uhle's archaeological research in the north of Chile and also in Arica contributed with numerous pre-historical pieces belonging to Changos and Atacameños, helping him write landmark books to study Chilean pre-history. Uhle's discoveries were exhibited in the new showcases of the new Museum. If In June and July 1912, he excavated in Chunchuri and published a series of related papers. After two years, a public official, Augusto Capdeville opened another front in the ocean town of Taltal to reveal the pre-history of the north of Chile. His excavations called the attention of the main researchers of Uhle's archaeology, Dr. Aureliano Oyarzún and Englishman Ricardo Latcham, who published several studies based on Capdeville's excavations. The latter moved a great part of his archaeological collection to the museum directed by Uhle and Latcham. If

German Dr. Otto Aischel gathered interesting material during his explorations on Antofagasta coast and Santa María Island. He exhibited them at the Ist Pan American Scientific Congress in Santiago in 1908. Later, he enlarged his records with a collection of rape tablets from Atacameño culture. In returning to Germany, he donated the pieces to Kiel Museum, where he was the Director, later. Aischel's excavations in coastal sandbanks were the first in Antofagasta coastline, corresponding, among others, to deposits of Changos' seashell remnants. 19 Swedish Claus Royem also became interested in the zone and collected a meaningful amount of materials he donated to Oslo Museum. These were later examined by Gösta Montell in 1926. 20

Archaeological excavations made by Chileans not related to any university or government institution and also foreigners were not subjected to fiscal scrutiny by any organism and we could even say that discoveries belonged to those who explored on the ground surface and those who unburied tombs in indigenous cemeteries. The creation of the National Monument Council in 1925 or the National History Museum in 1929, where the Ethnology and Anthropology Museum became the Pre-History Section of the Museum, did not involve any control and authorization for excavations. The National Monument Council established in 1970, Decreto Supremo N° 484, issued a Regulation on Archaeological, Anthropological and Paleontological Excavations and Prospection's.

However, research done at the Natural History Museum by Ricardo Latcham<sup>18</sup> on Atacameño culture resulted in a bigger area explored in 1935, together with Humberto Fuenzalida, he travelled to, excavated and took pictures of several locations at the Andean piedmont: San Pedro de Atacama, Chiu Chiu, Toconao, Turi, Ayquina, Calama and Chuquicamata.<sup>13</sup> All the samples were taken to the Museum. Latcham insisted that the ruins at the Andean piedmont could hide clues to better understand Atacameño culture. In 1938, Swedish archaeologist Stig Rydén inspected Lasana ruins.21 Latcham made it possible to include Atacameño culture in the frieze of Chilean pre-history because the English archaeologist published La alfarería indígena chilena in 1928, where Atacameño culture had a remarkable place. In the same year, he published Prehistoria de Chile, giving value to its architectonic monumentality and the archaeological excavations in the area influenced by Atacameños. Despite this, Latcham realized that archaeology in Atacameño region was just starting. Ten years later, he published his Arqueología de la Región Atacameña, where he located the epicenter of the culture in San Pedro de Atacama. It is interesting to read what Latcham wrote on that occasion: "With the exception of La Araucana, which has survived to these days, the most well-known of these ancient cultures and one of the most interesting is that of people known as Atacama or Atacameño. In Pre-Hispanic times, one of its seats was found around Atacama Salar, whose main population was called Atacama (today, San Pedro de Atacama) and it is due to these facts that it was renamed Atacameño. Without having such an advanced culture as some of old Peru, they had made good progress in many arts and industries. They spoke their own language which, so far, cannot be equaled with any other. This language is called Kunza.18

The Austrian specialist Grete Mostny continued Latcham's work, contributing with her archaeological excavations in 1946 and mainly the study of the Atacameño cities of Turi, Cupo, Peine and San Pedro de Atacama in 1948 to remarkable progress in the contextualization of Atacameño culture and people. <sup>22,23</sup> Grete Mostny also highlighted Atacameño culture in the Chilean pre-history panorama with her book Culturas Prehistóricas de Chile, written in 1954. Latcham's and Mostny's achievements about Atacameño culture found in Belgian Jesuit Gustave Le Paige a qualitative jump in the 1950s.

Le Paige brought his experience from his journey to Africa, particularly Belgian Congo.<sup>24</sup> Quickly and already settled in San Pedro de Atacama as a priest in March 1955, Le Paige became interested in gentilares and other Atacameño culture sites. He viewed this from a patrimonial perspective. He made his church house a museum, which he created on June 29th, 1957. When he inaugurated it, the Jesuit archaeologist pointed out its importance for the region: "Rare are the regions of the world that do not have a regional museum. Araucanos and Diaguitas had their own. No long ago, Atacameños and Lican-Antai could not say the same; even worse, because the pieces collected in the zone were sent to unknown private collections or abroad. It was necessary to correct this mistake and also agree that Atacameño Museum should be installed in the middle of the environment itself. A museum must be able to give every visitor the chance to arrive at all the places from where remnants, pictures, drawings and documents came from the real obstacles are the destruction of the remnants of the past, lack of scientific spirit, amateur researchers' collaboration and destruction of collected objects which may serve science much more than as a house ornament".25

Proportionately speaking, the creation of San Pedro de Atacama Museum made up a decentralization of archaeological piece exhibitions which were commonly sent to Santiago Archaeological Museum. It was necessary to ponder how the fragments from Pre-Colombian cultures that had populated the Eastern strip of Atacama Desert could be tracked and observed in the region. According to our Judgement, Le Paige's proposal was to locate the accumulation cycle closing in the Atacameña culture habitat itself, analyzing and registering, debating and making hypotheses about it. Physical anthropology could find the live community of its ancestors in San Pedro de Atacama Museum itself. Individual archaeological work consolidated an institutionalized action, changing the knowledge of Atacameño culture: now, it was clearly seen in the Chilean archaeological panorama.

The excavation on new sites in the Atacameño culture habitat and the publication of its results in the national university environment, echoed by the mass media, found a critical commentator and last follower of the archeological tradition of excavating and exhibiting in a young archaeologist, Mario Orellana Rodríguez.

# Atacameño culture and the discussion about le paige's view: 1960-1966. toward the end of the accumulation cycle

Le Paige's<sup>26</sup> excavations since 1955, were favored by his closeness to the inhabitants of the district, custodians not only of cultural traditions, but also the sites where their ancestors were buried. This enabled him to discover unknown and important archaeological sites he made known in 1958.<sup>26,27</sup> Le Paige's provisional results about sites such as Ghatchi, Puripica, Tulán, Ascotán and Tambillo and the many lithic pieces rescued were widely recognized by the scientific community. However, Le Paige dated them between 30,000 and 50,000 years, creating a controversy because human presence in the continent dated back to many years. Discoveries were not unknown for graduates from the Major of History and Geography at University of Chile, where the first archeologists came from, before the beginning of a Major in Archaeology. Mario Orellana was one of them. He began his studies in 1950 and his thesis dealt with Egyptology, directed by the Austrian archaeologist Grete Mostny, Ricardo Latcham's successor<sup>13</sup> at the National Museum of Natural History. His interest in

archaeology was fostered by his connection with the Austrian master Osvaldo Menghin, an eminence in Latin American paleohistory, who accompanied him to excavations in Ghatchi in 1959.28 In the late 1950s, Orellana, who began to teach archaeology at University of Chile in Santiago and Catholic University of Valparaíso, joined Le Paige's excavations in 1959. He wrote: "Several study trips to Antofagasta province (1959-1960) enabled us to familiarize with archaeological materials discovered at Loa Department in the last few years, which can be found at the Museum in San Pedro de Atacama. Le Paige a tireless collector, has found at the western side of the Andes, between 2400 and 4000 masl., in the mountain spurs of the Andes and salt lake cordilleras, a series of places with archaeological industries. We think that there are no elements allowing us dating Le Paige's discoveries so far. Anyway, we agree on doing preliminary studies, supported by typological comparison. It is also doubtless that we must look for other elements to scientifically locate lithic industries. Ghatchi's material consists of black basalt stones roughly worked as a whole, which typologically remind us of the oldest utensils found in Europe, Africa and Asia.29

Le Paige's merit was the opening up of another field of action for national archaeology and detection of remnants or evidence of man's older age not only in Chile, but also in the whole American Continent.<sup>30</sup> But also a remarkable fact: providing the heart of Atacameño culture with a collection of his discoveries in a museum for the whole community, established in 1957. Unexpectedly, he publicly viewed, beyond scientific publications, a culture and its patrimony, waking up institutional interest, as observed in Orellana.<sup>31</sup> And it was Orellana himself, in 1959, who supported him with his contact from the History Section at Catholic University of Valparaíso, "but he has also secured money contribution from University of Chile at Antofagasta since both try to conduct a project to restore San Pedro archaeological ruins".<sup>32</sup>

Ghatchi was the most interesting site due to its complexity. Orellana accompanied Le Paige to some of his excavations and also made some by him. Trying comparative methodology with Argentine sites, he posed that Ghatchi morphological pieces related them to Lauricocha (Peru), Ayampitín (Argentina) and Viscachani (Bolivia). Gatchi's complex was "a horizon of higher Andean hunters that we are dating between 7500 and 3000AC". 33 Gatchi was a problem when observing pre-ceramic industries that is, its people did not know ceramics and agriculture. In that year, he participated in the archaeological expedition of the Catholic University of Valparaíso, together with Julio Montané, Julio Spinner, Rómulo Santana and Dick Ibarra Grasso. With Julio Montané from La Sererna Museum, he excavated in Solor Field 3. Montané had been one of the first archaeologists to check Le Paige's discoveries and accompanied him in 1958 to conduct archaeological studies at San Pedro Station.

The National Archaeological Congress in Arica in 1961 had confined the area of Atacameño culture to the north of the country and had limited the ethnic denomination-Atacameño- to the previous cultures of new inhabitants.<sup>34</sup> Le Paige's ideas and the big amount of pieces collected on different sites were surprising and caused a flow of opinions about his affirmations. The Belgian archaeologist had also stated that the so-called Paleolithic station in Taltal, discovered by Augusto Capdeville and made known by Ricardo Latcham and Aureliano Oyarzún, was related, due to the lithic material of its lower stratum, to his discoveries at the foothills. For the priest, it was highly probable that the "first population on our coasts did not come from

the sea, but from the Andes", as he pointed out in his paper Antiguas Culturas Atacameñas en la Cordillera Chilena. Época paleolítica. 35

In a paper about "the state of the art" of Ghatchi lithic pieces, our author revises the statements of the Belgian Jesuit about dates and techniques for excavating and selecting materials. All this leads to the need of being prudent about dating materials and also about the methodology used concerning the natural environment and the layers and sediments of the excavations. Orellana perceived that the issue to be clarified in Ghatchi deals with a major matter such as man's age in the continent and his presence in the national territory. So, other specialists were necessary to address this matter, for example, geographer Rómulo Santana from the Catholic University of Valparaíso and the associate members of the Anthropology Center at University of Chile, the academic unit that emerged in 1954 and to which he belonged.

Orellana's excavations in Ghatchi were 3 perm<sup>2</sup>, as suggested by Menghin, to quantify objects and determine percussion ones. There he verified that lithic pieces were different, of direct percussion and pressure, unifacial and bifacial, remnants of these pieces being important. For Orellana, there was not evolutionism in excavation sequences. On the contrary, it was necessary to propose a nomenclature to keep a dialog with other Latin American sites. For him, Ghatchi materials could belong to a Pre-Ceramic period as a kind of Pre-Neolithic which might consist mainly of "particularly lithic artifacts made with a Paleolithic technique (percussion, pressure, etc.) and whose morphology was also Paleolithic". Nevertheless, the concept Paleolithic is not used because, in Europe and Africa, it implies a chronology from Günz-Mendel to the beginnings of the Holocene, far from Würm. In our continent, lithic artifacts of Paleolithic morphology are dated in 6000 AC, that is, when the Neolithic Revolution was just starting in the Near East.

In comparative terms, discoveries and dates established by Junius Bird in Quiani, Punta Pichalo and Taltal correspond to an Advanced Pre-Ceramic period, while Ghatchi might belong to an Old Pre-Ceramic period. It was neither possible to relate Ghatchi to the seashells in Arica and Pisagua. Material found in Ghatchi by Orellana which does not relate to those found by Le Paige would correspond to higher hunters and show similarity with other sites in Lauricocha and Ayampitin.

Orellana concluded, "we do not believe that Ghatchi, characterized by its corners, must have formed a lithic complex seated on the Chilean pre-Andes and, at the same time, been part of a big horizon of Andean hunters but this belief that, we repeat, is supported by some facts (systematic collections, comparative typological studies, geomorphological studies and knowledge of minimal dates for lithic industries of the South (Menghin) and territories near Antofagasta province (Cardich, Rex González), does not mean assigning an absolute old age to our ancestors. Higher hunters did not only live between 7500 and 6000 AC. They may be older in South America and we must not forget, that they remained, sometimes being contemporary to the first Agro-Pottery cultures". 36

There were other authors who preferred to refer to pre-agricultural cultures. However, new excavations and comparisons with cultures on the other side of the Andes or located farther north in the national territory revived the hot debate about man's age in South America. Orellana was not apart from these communications and started new excavations and publications, preparing for the International

Archaeological Congress at San Pedro de Atacama, which took place in 1963. In a paper including field data, published in 1962, Orellana points out a dilemma about Le Paige's research, now as part of a Project supported by the Catholic University of Valparaíso, which also included Le Paige. The latter exceeded the expectations of the project because, within a few months, since mid-1961, collected numerous pieces of different types and materials. But there are two issues not solved about Le Paige. The first one is the chronology assigning Ghatchi an age of 50,000 years since man's age in North America is dated 40,000 years. In 1962, Le Paige began to change his initial date and went down to 30,000 years, though stating that America's settlement must be dated in 50,000 years. The second issue is the revision of the expression "Atacameño culture" that Alcides D'Orbigny gave to the indigenous of that place in the first half of the 19th century. Arica Congress in 1961 suggested that it be used exclusively for the Spanish conquest period, with about 250 years before the Spaniards' arrival. Orellana prefers using "Site-type criterion, that is, designating the culture with the name where archeological remnants were first found", namely, for the Agro-Pottery Period, naming it as "San Pedro Culture" with a sequence of phases for this culture, where San Pedro Cultural Phase I should be dated in the first centuries of the Christian Era. In addition, he points out the need of dividing Ghatchi complex into two phases for the Paleolithic or Pre-Ceramic Period: Ghatchi I, for the set of artifacts and instruments that can be related to collector groups and Ghatchi II for instruments typical of higher hunter groups.<sup>36</sup>

In other studies, Orellana went deep into the observations we have mentioned, focusing on what he called "San Pedro Culture", which demanded different excavations of tombs in the ayllos of San Pedro de Atacama: Quitor, Conde Duque, Yaye, Solcor, Larrache, Chécar, Séquitor, Sollor, Tchaputchayna, Beter and Poconche. In "Field Work" he mentioned the difficulties of excavating in sandy ground due to collapses, pointing out in his methodology, "Before making the excavation, we took pictures of the site, we collected on the surface and then the excavation began, taking careful notes on the excavation booklet, drawing and taking pictures of each progress". Orellana based his conclusions on the descriptions of the sites explored with Le Paige and compared his collection with the pieces exhibited in the museum to determine cultural contexts. He pointed out that his pottery typology had been accepted at the Archaeological Congress of San Pedro de Atacama in 1963, along with replacing the expression "Atacameño culture" with "San Pedro de Atacama Cultural Complex" and its division into 3 phases: San Pedro I, II and III.<sup>37</sup>

Orellana also examined another of Le Paige's discoveries, cave paintings of camelids at Ayquina Quebrada. Orellana and ReinadoYaski visited them in November 1961 to measure and take pictures of them. He doubted that the authors of these paintings were members of Atacameño culture. He thought that their creators were animal domesticators. This difference is basic to date these paintings because came lids domestication must have occurred before the Christian era and maybe at the beginning of the Andean Neolithic".<sup>38</sup>

The International Archaeological Congress of San Pedro de Atacama in 1963 was attended by the main national and remarkable Latin American specialists such as Argentine Alberto Rex González and Bolivian Dick Ibarra Graso. Osvaldo Menghinsent sent a paper and the Center of Anthropological Studies at University of Chile took charge of the organization since Orellana was appointed Secretary General of the Congress. The conclusions of the Congress indicated

that the ethnic denomination Atacameño culture would not be used any longer. It was replaced by San Pedro de Atacama Cultural Complex. The expression "site-types" would be used. The Chilean Archaeology Society was established, as suggested by LautaroNúñez, Orellana being a member of its Board. In addition, there was a call to "authorities to defend the cultural, archaeological and historical patrimony of northern Chile, particularly San Pedro de Atacama, from the innumerable amateurs and tomb looters".<sup>39</sup>

In this congress, Orellana Rodríguez presented his paper "Arqueological problems of San Pedro de Atacama and its surroundings", where he synthesized the results of his previous publications, discussing the origins of the nomenclatures "Atacamas" and "Atacameños" from chronicle testimonies to current travellers/ scientists. He highlighted the fact that in reviewing "Deaths" and "Baptisms" books from the 18th century at San Pedro de Atacama Church, indigenous were ascribed to an ayllo, putting in doubt the use of an ethnic group for contemporary culture. So, the use of San Pedro culture did not involve ethnically naming its members because it was based on a relatively modern geographic denomination for a Pre-Colombian Agro-Pottery culture. After associating the 3 cultural phases of San with certain excavated tombs, he presented the pottery types of San Pedro de Atacama cemeteries.<sup>40</sup>

In a later paper, he put together results and conclusions, producing his monograph La Cultura San Pedro. Estudio arqueológico de la cultura agro-alfarera precolombina de la zona de San Pedro de Atacama in 1963, published in Center of Anthropological Studies, N° 17, whose introduction says, "In this paper, we study some of the agro-pottery materials excavated by Le Paige, that is, we did studies at the Museum; on some occasions, we have systematically excavated (Solor, Quitor) and collected on different sites (Quitor, Coyo, Tchapuchayana, Sequitor, etc.). We insist mainly on cultural associations, in the context of tombs, to then postulate the existence of a culture with its corresponding subdivisions dated in pre-Colombian times. We are also interested in clarifying some contacts and possible influences of San Pedro de Atacama Pre-Colombian cultures and other cultures from bordering regions.<sup>37</sup>

New excavations enabled Orellana publishing his important study on El Precerámico en el desierto de Atacama (Chile) in Madrid in 1963, highlighting the inflection of discarding the denomination "Atacameño culture" from Chilean archaeology because "It avoided, particularly before 1955, observing previous pre-historical moments which, certainly, were difficult to individualize. For more than 50 years, nobody thought about the existence of an Old Pre-Ceramic stage characterized by a hunters' economy. The merciless desert of northern Chile (including practically 3 provinces: Atacama, Antofagasta and Tarapacá) made archaeologists doubt the existence of people in places far from current water areas. Only Calama, Quillagua, Chiu-Chiu, San Pedro de Atacama, Toconao, Peine and Socaire were partially excavated. However, far from sites traditionally studied, farther than the banks of Loa and Salado rivers, important archaeological sites characterized by big amounts of flakes, nuclei, sheets, tips, scrapers, etc. were found in 1955. These discoveries and also the first scientific publications are due to Father Gustavo Le Paige, a Belgian Jesuit. Since 1959, we became part of the small group of researchers who believed in the existence of Pre-Agro-Pottery cultures, closely working and publishing with Le Paige, though this was not a reason for having the same criteria".37

In this text, he examined Ghatchi industrial complex and Tulan industry in full detail, offering a typological comparison and a chronological location of the latter. He concluded that the lithic remnants found in the U.S.A. date back to long time ago, while those of South America, although old, are more recent. Extremely valuable was the monograph written with Jorge Kaltwasser, entitled Las industrias líticas del departamento de El Loa, where the most substantive was proving a common view of the main Pre-Colombian lithic industries of the zone, known so far and solve problems about the lexicon used in the typological description and the application of a "statistical criterion to Chile pre-history".<sup>41</sup>

The chronology to be assigned to Pre-Ceramic sites was always present in Orellana's work. This resulted in his paper "About the chronology of San Pedro de Atacama Cultural Complex", where he presented the crucial issue of radiocarbon-14 dates applied to the objects of the period, highlighting that, "If data obtained from the radiocarbon-14 method for the oldest stages of South America as a whole do not oppose other studies and, on the contrary, coincide with relative chronologies, this is not the case of some dates obtained for more recent periods (Agro-Pottery). First, any chronological conclusion desired for Agro-Pottery stages must be supported by a good number of dates. 42

So, let's summarize the contribution of archaeologist Mario Orellana Rodríguez to the problem of the old Atacameño culture, mentioning his presentation "Pre-history of the puna and Atacama Salar, North of Chile (Pre-Agro-Pottery)" in 1966, where he refers to the Agro-Pottery and Pre-Agro-Pottery periods, confirming the use of the notion "Paleolithic": "For those cultural times belong to an absolutely Pleistocene time and, therefore, are previous to 8000 A.C. Those industries and lithic complexes can be chronologically located in a recent time (or Post-Glacial). Although they have a Paleolithic appearance, that is, its instruments were made with percussion and pressure techniques, they are not truly Paleolithic".43

Between 1966 and 1967, as a corollary of this long controversy about Atacameño culture and as a recognition for a location that provided its first remnants, Chui-Chiu, he founded an archaeological Museum. Archaeological materials were authorized by the Center of Anthropological Studies at University of Chile, established in 1954. Where did pieces come from? Were they part of the results of Salado River Project and, therefore, included "lithic material from confluence sites 1 and 2, Western Loa 3 (Pre-Ceramic and Agro-Pottery from different periods) and ceramic collection from Turi and Ayquina, above all early agro-pottery ceramics from periods 2 and 3?" (Personal communication 6/11/2015) The Museum lasted only a few years. At the brink of the 1970s, archaeologist George Serracino, appointed by Calama City Hall person in charge of patrimony, moved all Chiu-Chiu materials to El Loa Park Museum in Calama.

### **Conclusion**

In the archaeological studies done until the so-called Atacameño culture, there was no focus on the different contributions made by European scholars' expeditions interested in examining indigenous cemeteries and collecting numerous utensils of these indigenous people from the Atacama Desert. In the observations about these contributions, four aspects are worth to point out: one of them is the amount of objects sent to European Museums, without fiscal scrutiny; the second one is the excavations that focused on Chiu- Chiu at the

beginning of the 20th century, next to archaeological sites in Calama; the third one is the Chilean institutional archaeological intervention, the Natural History Museum and University of Chile, which began to examine the archaeological importance and architectonic monumentality of other Andean towns, Toconce, Lasana and San Pedro de Atacama, among them; the fourth one is the arrival of Gustavo Le Paige that put scientific attention on San Pedro de Atacama and nearby places, along with the foundation of a museum to conserve the archaeological data of Atacameño community ancestors in this place.

With Le Paige, there was commotion owing to the interpretations of his invaluable archaeological discoveries, due to the new non-examined sites and the huge amount of different objects dug out since 1955. This demanded not only questioning the so-called Atacameño culture, but also discuss its chronology on the basis of new sites and reformulate the pre-historical panorama of the north of Chile and the country. In this perspective, contributions from Mario Orellana Rodríguez are remarkable. He postulated new denomination criteria, discussed classification and chronology methods, posing the problems of the novel discipline that was about to be institutionalized in Chilean universities, precisely when the controversy about San Pedro de Atacama Cultural Complex led new Chilean archaeologists to introduce themselves in recent methods and design a new archaeological and patrimonial frieze of northern Chile and, particularly, Antofagasta Region.

Orellana did not only get involved in the hottest archaeological debate of the 1960s, with his own excavations and interpretations of Atacameño culture, but also closed the tradition of excavating and exhibiting when he created an archaeological museum dedicated to Atacameño Culture in Chiu-Chiu in 1966.<sup>44-46</sup>

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### **Conflict of interest**

Author declares there is no conflict of interest.

## References

- Bruno L. Science in Action. How to follow scientists and engineers through society. Harvard University Press, Cambridge, USA; 1987.
- Ballesteros DA. Los "fueguinos", Robert Lehmann-Nitsche y el estudio de los onas en la Exposición Nacional de Buenos Aires (1898). História, Ciencias, Saúde-Manguinhos. 2011;18(3):789–810.
- 3. Bittmann B. El Programa Cobija: Investigaciones Antropológico-Multidisciplinarias en la costa Centro Sur Andina: Notas etnohistóricas. In: Shozo M, editor. *Contribuciones a los estudios de los Andes Centrales*. Japan; 1984. p. 48.
- 4. González P, José A. La Comisión Científica del Pacífico en Chile, 1863-1864. In: Rafael S, et al. editor. Imágenes de la Comisión Científica del Pacífico en Chile, Centro de Investigaciones Diego Barros Arana-Consejo Superior de Investigaciones Científicas de España-Editorial Universitaria, USA; 2007.
- 5. Medina JT. Los aborígenes de Chile, Imprenta Gutenberg, Chile; 1882.
- Read CH. On antiquities from Huasco (Guasco) Chili. The Journal of Anthopological Institute of Great Britain and Ireland. 1890;19:56–62.
- Román S, Francisco J. Desierto y Cordilleras de Atacama. Pontificia Universidad Católica de Chile, Cámara Chilena de la Construcción, Biblioteca Fundamentos de la Construcción de Chile, USA; 2012. p. 461.

- Núñez AL, Carolina AP, Bárbara CC, et al. El campamento minero Chuquicamata-2 y la explotación cuprífera prehispánica en el Desierto de Atacama. Estudios Atacameños. 2003:25:7–34.
- Figueroa V, Diego S, Hernán S, et al. Prehispanic Minig Ergology of Northern Chile: An Archaeological Perspective. Chúngara Revista de Antropología Chilena. 2013;45(1):61–81.
- Boman E. Antiquités de la región andine de la Republique Argentina et du Desert d'Atacama. Mission Scientifique G.de Créquis-Montfort et E. Sénechal de la Grange, Imprimerie Nationale, France; 1908.
- Lejeal LM. L'Exposition de la Mission Francaise de l'Amerique du Sud au Palais du Trocadéro. *Journal de la Societé des Americanistes*. 1904;1(3)321–328.
- Alegría LL. Museos y Campo Cultural: Patrimonio indígena en el Museo de Etnología y Antropología de Chile. DIBAM 2004;8:57–70.
- González P, José A. Ricardo E Latcham, un científico social. Desde las observaciones etnográficas de la sociedad hasta la arqueología de las culturas originarias chilenas. *Alpha*. 2014;38:67–88.
- Forbes ILD. German informal Imperialism in South America before 1914. The Economic History Review. 1978;31(3):384–398.
- Glenn P. Objects of Culture. Ethnology and Ethnography in Museums in Imperial Germany. Chapell Hill, University of Carolina Press, USA; 2003. p. 281.
- 16. Núñez AL. Las investigaciones de Friedrich Max Uhle en el desierto de Atacama (norte de Chile). In: Peter K, et al. editor. Evaluaciones de sus investigaciones y obras, Fritz Thyssen Stiftung, Fondo Editorial Pontificia Universidad Católica del Perú, Peru; 2009.
- Núñez H Patricio. Augusto Henri Capdeville Rojas. Tópicos de Chile y su época Taltalia. Revista del Museo Augusto Capdeville Rojas de Taltal. 2008;1.
- Latcham RE. Arqueología de la región Atacameña. Prensas de la Universidad de Chile, USA; 1938.
- Martínez L. Prehistoria de Antofagasta. En la ruta de los primeros antofagastinos, CORE Agrupación Cultural Naturaleza y Patrimonio Antofagasta, USA; 2010.
- Montell G. An Archaeological Collection from the Rio Loa Valley, Atacama. Oslo Etnografiske Museums Skriften, Norway; 1926.
- Rydén S. Contributions to the Archaeology of the Rio Loa (Appendices by Carl-Herman Hjortsjö and Bengt Kjerrman), Sweden; 1944.
- Mostny G. Arqueología del Norte Chileno. Ciencia e Investigación. Argentina; 1946.
- Mostny G. Viajes arqueológicos a la provincia de Antofagasta. Antártica. 1946;29.
- Ojeda JP. Fetiches kongo, momias atacameñas y soberanía colonial. Trayectoria de Gustavo Le Paige sj (1903-1980). Estudios Atacameños. 2012;44:35–72.
- Núñez L. Gustavo Le Paige. Cronología de una Misión. Ediciones Universitarias. Universidad Católica del Norte. Chile: 1993. p. 149.
- Paige GL. Antiguas Culturas Atacameñas en la Cordillera Atacameña (Época Neolítica). Anales de la Universidad Católica de Valparaíso. 1958;43(20):139–165.
- Paige GL. Antiguas Culturas Atacameñas en la Cordillera Atacameña (Época Paleolítica). Revista Universitaria años. 1959;44–45:191–206.
- Orellana M. Descripción de artefactos líticos de Ghatchi. El problema del precerámico en el norte de Chile. Notas del Museo. 1962;20(70):75–123.

- Orellana M. Descubrimientos arqueológicos en el Norte de Chile. Revista de los FF.CC del Estado. 1961;327:24–25.
- Uribe RM, Leonor AA, Carolina AP. Arqueología de los periodos intermedio tardío y tardío de San Pedro de Atacama y su relación con la Cuenca del río Loa. *Chúngara*. 2004;36:943–956.
- González P, José A. Patrimonio, museos y arqueología: de la visibilidad de los pueblos indígenas a la institucionalización de los estudios arqueológicos en el Norte Grande de Chile. *Diálogo Andino*. 2010;36:15–32.
- Núñez AL. Pinturas de Gustavo Le Paige-Imaginario y vida de un misionero jesuita. *Texto de Lautaro N*úñez. QILLQA Ediciones IIAM, Chile; 2005. p. 128.
- Orellana M. Acerca de la Arqueología del desierto de Atacama. Boletín de la Universidad de Chile. 1961;27:41–43.
- 34. González P, José A. La arqueología y la antropología y el rescate patrimonial e identitario del Norte Grande. La estandarización de los estudios sobre los pueblos originarios en los años 50 y 60. In: André HJ, et al. editor. Temporalidad, Interacción y Dinamismo Cultural. La búsqueda del hombre. Ediciones Universitarias, Universidad Católica del Norte, Chile; 2011. p. 391–438.
- Rodríguez MO. Algunos estudios arqueológicos realizados en Chile y el problema del paleolítico americano. Anales de la Universidad de Chile. 1960;120:218–229.
- Orellana M. Recientes investigaciones arqueológicas en San Pedro de Atacama. Apartado Revista Mensaje. 1962ª,11(188):154–159.
- Orellana M. La Cultura de San Pedro" en Arqueología Chilena 3. Contribuciones al estudio de la Cultura de San Pedro de Atacama. Centro de Estudios Antropológicos Publicación. 1963;17:1–42.
- Orellana M. Las Pinturas Rupestres del Alero de Ayquina. Biblioteca Nacional Santiago de Chile. 1963<sup>a</sup>;3:153–158.
- Orellana M. Trascendencia del Congreso Internacional de Arqueología.
  Boletín de la Universidad de Chile. 1963b;41:74–75.
- Orellana M. Problemas de la arqueología de San Pedro de Atacama y sus alrededores. Anales de la Universidad del Norte. 1963c;2:29–39.
- Orellana R, Jorge KPM. Las industrias líticas del Departamento de El Loa. Antropología Publicación del Centro de Estudios Antropológicos. 1964;2(2):37–76.
- Orellana M. Acerca de la cronología del complejo cultural San Pedro de Atacama. Antropología Centro de Estudios Antropológicos Apartados del. 1964a;2:96–104.
- Orellana M. Prehistoria de la Puna y Salar de Atacama, Norte de Chile (Pre Agro-Alfarero). XXXVI Congreso Internacional de Americanistas Sevilla. 1966;1:165–171.
- 44. Manuel A. Breve descripción de los viajes hechos en América por la Comisión Científica enviada por el Gobierno de SMC durante los años de 1862 a 1866. Acompañada de dos mapas y de la enumeración de las colecciones que forman la exposición pública, *Imprenta Rivadeneira*. Spain; 1866.
- Claudio L, González JA. Riquezas y rutas. El Sur de Chile en la mirada científica imperial británica (1830-1870). Historia Unisinos. 2014;18(1):44–55.
- 46. Orellana M. El Precerámico en el desierto de Atacama (Chile). Trabajos de Prehistoria del Seminario de Historia Primitiva del Hombre de la, Universidad de Madrid y del Instituto Español de Prehistoria del Consejo Superior de Investigaciones Científicas, Spain; 1963d. p. 7–35.