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A DISTANT PAST, A PRESENT HERITAGE: THE PRE-COLONIAL SETTLEMENTS OF CHAPECÓ, BRAZIL*

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RESUMEN

The article presents a critical and synthetic evaluation of the pre-colonial archaeological researches in the geographical limits of the city of Chapecó and region, located in the west of the state of Santa Catarina, southern Brazil. The study area has a long history of archaeological research, including amateur and academic investigations since the first half of the 20th century and through the licensing of engineering works. There is a result, even if partial and general, of the different settlement systems that occupied the region in times before European colonization

KEY WORDS: Pre-colonial Settlements; Brazilian Archaeology; Indigenous Archaeology, Regional Archaeology.

UN PASADO DISTANTE, UN PATRIMÓNIO PRESENTE: LOS ASENTAMIENTOS PRE-COLONIALES DE CHAPECÓ, BRASIL

ABSTRACT

El artículo presenta una evaluación crítica y sintética de la investigación arqueológica precolonial en los límites geográficos de la ciudad y región de Chapecó, ubicada en el oeste del Estado de Santa Catarina, sur de Brasil. El área de estudio tiene una larga trayectoria de investigación arqueológica, que incluye investigaciones de amadores, académicos desde la primera mitad del siglo XX, hasta trabajos bajo la licencia de obras de ingeniería. Como resultado general, se tiene un panorama, aunque parcial, de los diferentes sistemas de asentamiento que ocuparon la región en tiempos anteriores a la colonización europea.

PALABRAS CLAVE: Asentamientos precoloniales, arqueología brasileña; arqueología indígena, arqueología regional.

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1. INTRODUCCIÓN

Long before 1917, when the city of Chapecó was officially created, different peoples occupied this territory reproducing their culture and ways of life in symbiosis with the natural environment (Figure 1). The exuberant landscape of forests, rivers, streams, water fountains and wildlife that the 20th century colonists found was known and manipulated by different human groups millenniums before. But how did these people live? Which places did they inhabit? What did they eat? Which utensils did they produce? What period did they live in? These are some of the questions that are sought to be answer through archaeological studies.¹

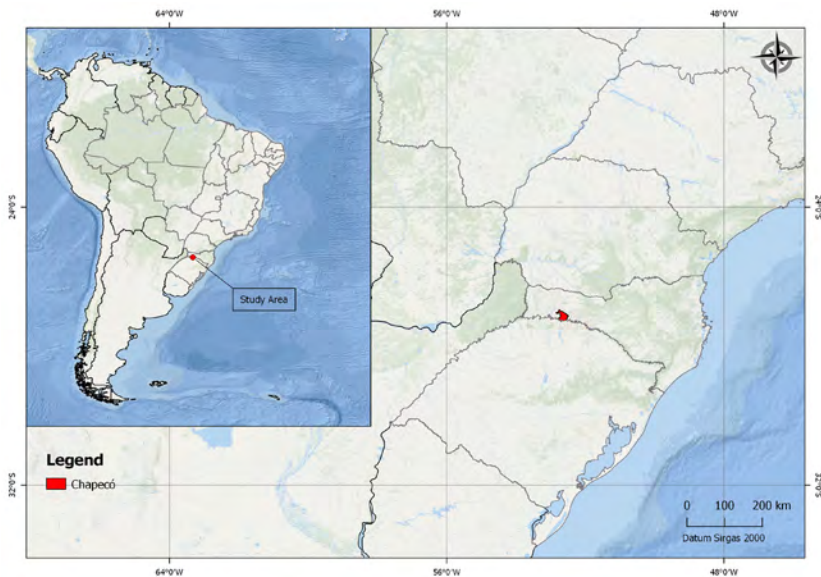


Figure 1. The area of study: Chapecó Region, West of Santa Catarina State, Brazilian. Source: CEOM/UNOCHAPECÓ.

The pre-colonial or prehistoric past refers to a broad time cutting that considers the trajectory of different human groups in the South American continent, corresponding to at least 15 thousand years until the arrival of European conquerors and colonizers in the 15th century. In this work, we will remember the main researchers and what is already known about the ancient societies drawing a parallel between the region of the upper Rio Uruguay and the territory of the city of Chapecó, as we know it today. It is worth noting that for the ancient peoples the borders and limits were not the same as those considered today and that they are constantly reformulated since the creation of the Brazilian Nation in the 19th century. Another important element when considering the pre-colonial occupation is that it must be analyzed in an integrated way with the south of Brazil and, more broadly, with the La Plata Basin.

2. ARCHAEOLOGICAL RESEARCH IN THE REGIONAL CONTEXT

In our region, we have a large number of registered sites, some with very old dates, that have been described since the 19th century, but more systematically studied from the 20th century (Carbonera, 2009; 2011). Still at the end of the 19th century, descriptions about archaeological finds in the upper Uruguay River were realized by Maximiliano Beschören. As a surveyor, he conducted survey expeditions in this area at the request of the Government of Rio Grande Sul, between 1875-1887. According to Beschören, in the Goio-Ên Valley (on the left bank, city of Nonoai), and in other parts of this region, old indigenous utensils were found, "Along the river bank, in different places, dishes of the most diverse shapes were found, buried, with wonderful designs. However, all of them are so aged that they did not resist when taken, breaking when taking them out of land." (Beschören,

[1889] 1989, p. 51).

Through the report, it is noted that for more than a century archaeological remains have been explored in the upper Uruguay. Although not known to the surveyor, his speech describes findings related to the Guaraní Tradition.² Another important element, mentioned in the excerpt above, refers to the widespread idea of the “treasures of the Jesuits”, which persists in the population’s imagination until today. Popular narratives claim that such treasures were buried during the flight of Jesuits and Indians from the Reductions of Rio Grande do Sul in Brazil, Misiones in Argentina and Paraguay, still in the 18th century. The idea of finding treasures buried in clay pots is still very much alive in the imagination of the population, being a great agent in the destruction of archaeological sites. However, this information is erroneous because, in the sites studied in the region of the upper Uruguay River, until now, precious metals (such as gold or any other type of metal) associated with pre-colonial objects have never been found. From the information available, the indigenous people of this area were unaware of metallurgy and the sites are the result of occupations that had no contact with the white man.

Also according to Carbonera (2009, 2011), in the first half of the 20th century, many archaeological remains were found by local residents during agricultural work. A portion of these objects gave rise to the first collections and can be found in museums of the region. We can cite as an example the collection gathered by Judge Antônio Selistre de Campos from the Chapecó district, who worked in this city during the 1930s to 1950s. He collected a series of ceramic vessels and artifacts in chipped and polished stone, composing a private collection (Figure 2).

According to Arruda (2004, p. 24) after his death, in 1957, the objects were transferred to the Bom Pastor School, because at this time there was still no museum or similar institution, and the school was considered one of the most important educational institutions of the city, so it kept the objects. The collection

remained at this school until it was transferred to the Municipal Museum Antônio Selistre de Campos, created in 1978. We do not have information on the exact origin of the objects, but most of them belong to the Guaraní Tradition. They are under the guard of the Museum of History and Art of Chapecó (MAHC), maintained by the Municipal Government of Chapecó.



Figure 2. Archaeological collection of Judge Antônio Selistre Campos, photographed in 1954. Source: Ceom / Unochapecó Collection

For the upper Uruguay River region, the first studies at archaeological sites were realized by Fr. Pedro Ignácio Schmitz, archaeologist and founder of the Anchieta Research Institute / Unisinos; he is also the author of one of the first scientific articles in this area, which refers to the Guaraní archaeological sites registered in the lands of the São Pedro Canísio Pre-seminary, near the town of Sede Capela, today the city of Itapiranga (Schmitz, 1957; Carbonera; Onghero, 2016). In his work, Schmitz (1957),

in addition to analyzing the archaeological material, warned about the number of sites in the area, the forms of destruction and the lack of research.

In 1966, Fr. João Alfredo Rohr was in the extreme west of Santa Catarina State and realized a systematic survey of archaeological sites, especially on the banks of the Uruguay River, since many of them had been impacted as a result of agricultural activities and potteries. He recorded 53 archaeological sites, related to Guaraní ceramists and Altoparanaense culture (Rohr, 1966; 1984).

Another researcher who studied the region was Walter Piazza and the results were published in 1969 and 1971. At first, he was between the Peperi-Guaçu and Irani river, and in a second stage it covered the area between the Irani and Peixe River, registering mainly Guaraní and Itararé-Taquara sites (Piazza, 1969, 1971).

In the late 1970s, research on environmental licensing projects³ began. Due to the importance of the archaeological heritage of the region, Schmitz (1978) pointed out the impacts that these enterprises would have on the prehistoric cultural heritage, defending the need to carry out rescue research. Thus, in the 1980s, archaeological research was resumed in the region as part of the activities of the Uruguay Archaeological Rescue Project and Uruguay Archaeological Rescue Project UHE Itá, advisory archaeology projects developed in the 1980s and 1990s, under the coordination of the archaeologist Marilandi Goulart.⁴ In the initial phase of the Uruguay Archaeological Rescue Project, surveys were carried out from the formation of the Uruguay River to the city of Itapiranga, this stage occurred between 1980 and 1985, then the Uruguay Archaeological Rescue Project UHE Itá began. In total, 310 archaeological sites were surveyed, of these, 227 in Santa Catarina State and 79 in Rio Grande do Sul State, distributed in 15 cities (including Chapecó) and reaching a collection that has approximately 200 thousand archaeological objects that are

part of the “Marilandi Collection Goulart”, safeguarded by the Integrated Regional University of Alto Uruguay and the Missions (URI-Campus of Erechim). To better understand the issue, see Carbonera (2008; 2014).

Marilandi Goulart’s work in Chapecó occurred through an agreement with the Municipal Government and it was linked to the Uruguay Archaeological Rescue Project. Through this agreement, ten sites were researched, seven located near the Uruguay River and three next to the Chapecó River (Table 1); the collected and excavated material is found next to the “Marilandi Goulart Collection” and is safeguarded by the URI / campus Erechim. Goulart (1981) notes that before her, João Alfredo Rohr had also visited the city of Chapecó at the request of the Municipal Government, where he registered some sites. According to the archaeologist, in the 1980s there were still many archaeological sites, much to be studied, however they were subject to constant depredation either by natural agents, but also by human action. Still according to the researcher, the importance of these places was ignored as a source of knowledge of prehistory:

The destruction process of the archaeological sites in Chapecó was violent. The local population, due to lack of awareness, did not try to preserve it, emphasizing in the interviews that until some years ago the traces were still abundant. The use of the tractor in the fields was the main cause of this destruction and there will always be this gap in the knowledge of Chapecó’s prehistory (Goulart, 1981, p. 65).

Since the 2000s⁵, there has been a significant increase in archaeological research in western Santa Catarina State, as pointed out by Caldarelli and Lavina (2011) . Among the studies carried out, we will use as a source for this article the data obtained by De Masi (2012), during the research work developed in the area affected by the Foz do Chapecó Hydroelectric Plant

reservoir whose collection is safeguarded by the Memory Center of West of Santa Catarina State – CEOM/Unochapecó University. For the city of Chapecó, De Masi (2012) registered more than 140 sites, totaling 18,848 material traces collected and conditioned, the ceramic material has a larger volume, with 15,452 fragments and 3,396 lithic objects, in addition, collections of fauna and coal were made, that add up to 261 traces. Of the 140⁶ sites, only four were excavated.

Site Number	Site Name	Locality	Municipality	Site Type	Ceramics	Lithics	Consevation Grade
*	Clube Refúgio Campestre	Linha Cerne	Chapecó	Litho-Ceramic	*	*	*
216	Nélcio Del Pizza	Porto Chalana	Chapecó	Litho-Ceramic	92	1	Partly Disturbed
218	José Fiori	Linha Espuma	Chapecó	Litho-Ceramic	228	3	High Disturbed
220	Francisco Vailones	Cahoeira Beira Rio	Chapecó	Ceramic	30	0	High Disturbed
221	Sebastião Bonnes	Cahoeira Beira Rio	Chapecó	Ceramic	114	0	High Disturbed
222	Arami Daneli	Cahoeira Beira Rio	Chapecó	Ceramic	6	0	High Disturbed
223	Alcides Mortelli	Linha Espuma	Chapecó	Ceramic	67	0	Partly Disturbed
224	José Costenaro	Linha Espuma	Chapecó	Ceramic	180	0	Partly Disturbed
225	Francisco Vailones	Linha Cachoeira Beira Rio	Chapecó	Litho-Ceramic	6168	199	*
*	Prefeitura Municipal de Chapecó	Sede Fuigueira	Chapecó	Galery	*	*	*

Source: Goulart (1995, Vol. II, Tomo V; 1995, Vol. III, Tomo IX).

Table 1. List of archaeological sites surveyed By Marilandi Goulart, in the city of Chapecó, in 1980.

Another preventive archaeology project developed in Chapecó was a transmission line connecting the Rodeio Bonito

Hydroelectric Plant, on the banks of the Irani River, and the city's Power Station, located in the Passo dos Fortes neighborhood. In this project, which was coordinated by Lino (2009), six archaeological sites of the pre-colonial Jê people were recorded and researched.

The work of these researchers in the city of Chapecó brought information about the pre-colonial archaeological sites, located mainly on the banks of the Uruguay River and its tributary, the Irani River. It should be highlighted that archaeological remains, whether individually or jointly, are considered assets of the union and national heritage, as they refer to the formation of national identity. The protection is based on Brazilian legislation, having as main legal instruments: Law 3.924 of 1961 and articles 215 and 216 of the 1988 Federal Constitution. The management of archaeological heritage throughout the Brazilian territory is done through the Institute of National Historical and Artistic Heritage (IPHAN), an autarchy linked to the National Secretary of Culture, which has regional / state superintendencies and a headquarters in Brasília. The IPHAN is responsible for protecting and promoting the country's cultural assets, ensuring their permanence and enjoyment for present and future generations (Iphan, 2016).

ACRONYMS	CLASSIFICATION	QUANTITY
SC-CH	Underground Structure	32
SC-CH	Surface Lithic	136
SC-CH	Jê Ceramics	5
SC-CH	Tupiguarani	20
SC-CH	Lithic Station	1
SC-CH	No Classified	1
TOTAL		195

Source: De Masi (2012).

Table 2 List of archaeological sites surveyed in the city of Chapecó during the Power Plant Foz of Chapecó project.

3. NATURAL LANDSCAPE

Chapecó has an area of 625,758 km² (IBGE, 2016) and is located in the west of the state of Santa Catarina, on the upper Uruguay⁷ River. In terms of geology, it includes the Paraná Basin, a basin with approximately 1.400.000 km², covering parts of Brazil, Argentina, Paraguay and Uruguay, a vast area of paleozoic-mesozoic sedimentation, with spills of basaltic lavas that represent one of the largest volcanic manifestations (Reis et al., 2014). According to Wildner et al. (2006), in the studied area, outcropping rocks are found, essentially constituted by vulcanites of the Serra Geral formation, of Juro-Cretaceous age, disposed on the sandstones of the Botucatu formation (whose sandstone rocks are today in the Guarani Aquifer).

In the Serra Geral formation, there are sequences of effusive rock spills, composed of a volcanic sequence that includes basic and acidic rocks that are individualized by their morphological and petrographic characteristics (Wildner et al., 2006). Given the uplift of the Serra Geral and the slope of the Volcanic Plateau, the waters of the Uruguay River Basin flow westwards to the Argentine border, and then follow southwards to the River Plate (Aumond, 2013).

The pre-colonial peoples explored the natural resources found along the Uruguay River and its tributaries, the clay used in the manufacture of ceramics, as well as blocks and pebbles of different sizes and types (basalt, sandstone, chalcedony, flint, quartz, among others), were used in the production of lithic artifacts.

The analyzed area is part of the Atlantic Forest biome. Until the 16th century, it covered more than 1.7 million km², an area that extended from Ceará and Rio Grande do Norte to Rio Grande do Sul (Brazil), including the province of Misiones (Argentina) and part of Paraguay. Currently, only 7.4% of the original coverage remains, which is at a high level of fragmentation, even so it

is one of the most diverse ecosystems on the planet (Di Bitetti; Placci; Dietz, 2003).

According to Sevegnani, Laps and Schroeder (2013), in the west of Santa Catarina State, the Atlantic Forest biome is represented by the mixed ombrophilous forest, deciduous seasonal forest and fields that are interconnected, sometimes one type becoming more evident, sometimes the other one. Also according to the authors, in this region the average altitudes are between 400 and 800m, the average annual temperatures are between 16 and 18 degrees, the average rainfall is 1.750mm per year. In the lower parts, such as the banks of the Uruguay and Irani rivers, there are higher average temperatures with a predominance of deciduous seasonal forest. In areas with more than 400 m of altitude occurs the mixed rain forest.

According to Di Bitetti, Placci and Dietz (2003), the Upper Paraná Atlantic Forest is home to countless species of plants and animals, including felines, such as the jaguar, puma and ocelot, as well as other mammals such as the tapir, the coati, the otter, four species of monkeys, three of deer and two of peccaries. Among the 500 species of birds, five are toucans. The rivers are home to a great diversity of fish, with more than 300 species. Reptiles, such as snakes and lizards, and amphibians, such as frogs and toads, are also found in this environment.

4. ANCIENT HUNTER-GATHERERS

For Bueno and Dias (2015), between 12 and 8 thousand years ago, eastern South America was already occupied by stable populations of hunter-gatherers, which can be characterized by different strategies for adapting and transforming Pleistocene landscapes. With the end of the last ice age, there was a progressive increase in heat and humidity, the climate became more similar to what we know today. These groups were nomadic hunter-gatherers, whose presence is identified mainly by chipped stone

artifacts.

It is not possible to identify which language they spoke, not even to know most of their cultural aspects from the few traces that resisted the action of time. However, the study of these materials demonstrates that these groups had a wide knowledge of the environment, which they successfully adapted and transformed. In addition, they had symbolic and technological baggage, maintained complex social relations with other human groups and developed exchange networks, through which they accessed goods produced by people who could live in very distant regions.

In the south of Brazil, the archaeological sites referring to this initial settlement are mainly of the open air type and are located on the banks of large rivers, such as Uruguay, but also occur in caves, better known in the State of Rio Grande do Sul. In the upper Uruguay, the data on the oldest settlement is quite fragmented; however, research conducted in the last decade has provided new information (see Caldarelli, 2010; Lourdeau et al., 2016).

Fell or Fishtail points are a type of artifact that characterizes the first waves of settlers to the South American continent, the pieces found in context are dated between 11 and 10 thousand years ago. In our region, three specimens are known, one from Chapecó found on the right bank of the Irani river, one from Itapiranga and another from Mondaí (Figure 3), all collected by residents, which makes it impossible to have more detailed information (Loponte; Carbonera; Silvestre, 2015; Loponte; Okumura; Carbonera, 2016).

The piece found on the coast of the Irani river is a small projectile top that weighs only 6,5 grams, its length is 38,38mm and its maximum width is 20,98mm next to the stem joint, the thickness is 6,91mm and the blade is 17.43mm long; it was made of excellent quality red chalcedony (Figure 3, part c). The shaft is larger than the blade, since it is 20,95 mm, which suggests

that the piece was subjected to a reassembly process (Loponte; Carbonera; Silvestre, 2015).

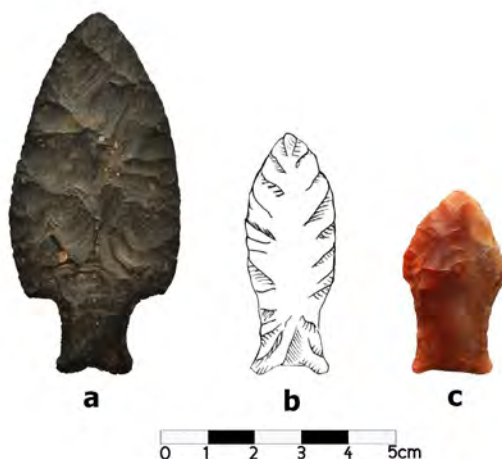


Figure 3. Fishtail points type. a) Mondaí, private collection; b) Itapiranga, described by Rohr (1966); c) Chapecó, Ceom / Unochapecó collection. Approximate scale in centimeters. Source: Adapted from Loponte; Carbonera; Silvestre (2015) and Loponte; Okumura; Carbonera (2016).

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Another moment of occupation with hunter-gatherer groups is framed by archaeologists as Umbu Tradition. As a good part of the materials produced and used by these groups probably decomposed, archaeologists find basically traces of coal and tools

made by chipping stones. This technique allowed the production of a varied arsenal of arrowheads, scrapers, punches, blades and other instruments intended for cutting, scraping leather and wood, in addition to serving for dig the earth, among other activities. The findings that identify this occupation were found at sites located on the Uruguay River. Until now, these sites have dated between approximately 7 and 10 thousand years ago, and were located in the cities of: Itapiranga (Rohr, 1966; 1973); Itá (Goulart, 1988a; 1998b; Carbonera, 2014); in Águas de Chapecó and Alpestre (Caldarelli et al., 2010; Brüggemann; Hoeltz, 2011; Lourdeau; Hoeltz; Viana, 2014; Lourdeau et al., 2016) and Faxinalzinho (De Masi, 2012).

Artifacts in the shape of “boomerangs”, a curved bifacial instrument, chipped on both sides, are found in western Santa Catarina, also in a large part of the province of Misiones (Argentina) and Rio Grande do Sul (Brazil). They were identified by Menghin (1955/1956) and considered as representative of pre-agricultural societies, receiving the nomenclature of Altoaranaense Tradition in Argentina and Tradition Humaitá in Brazil. However, due to the few data found in context, this idea has been questioned in Brazil and is still the object of study by archaeologists (Hoeltz, 2005; Dias, Hoeltz, 2010). A binational project between Brazil and Argentina has sought to bring more information about the problem (Loponte; Carbonera, 2015).

The soil levels that show Humaitá artifacts have been dated between 8640 ± 95 and 4260 ± 60 radiocarbonic years (Rohr, 1973; 1984; Piazza, 1969; 1971). Menghin also considered that these instruments were used during the middle and late Holocene, including by farming groups known in historical times as Kaingang and described in the San Pedro region in Misiones (Argentina) by Ambrosetti (1897).

Only the continuity of the research can bring better information about these old populations.

5. GUARANI

Studies carried out in the La Plata Basin and on the coast of southern Brazil identify a wide territory populated by the Guarani, which included especially the forests that bordered the great rivers. Such settlements would have started from the Amazon and reached the South of Brazil, including the West of Santa Catarina, from 2 thousand years ago. This expansion allowed Guarani groups to colonize much of the southern states of Brazil, parts of Uruguay, Paraguay and Argentina (Noelli, 1996; 1999-2000; 2004; Bonomo et al., 2015; Iriarte et al, 2016). The data indicate that to reach the estuary of the River Plate, the settlement would have occurred by the Uruguay river, as Guarani sites were found on islands close to the outflow of the Uruguay river, since at the bottom of the Paraná River no Guarani sites was identified until the moment (Loponte; Acosta, 2013).

The Guarani who occupied the forests of the upper Uruguay River chose as their preferred points to establish their settlements relatively flat areas at the mouths of the tributaries, close to the rapids. The evidence of this settlement consists of dark soil layers, bonfire structures and burial in urns, traces of fauna, shells, ornaments, lithic instruments and mainly by ceramics (Caldarelli, 2010; De Masi, 2012; Goulart, 1981; Lino , 2015; Noelli, 1999-2000; Rohr, 1966; Schmitz, 2011).

The Guarani remains are found in open air sites. When studying them, archaeologists observe the existence of areas intended for housing, growing food and burying the dead. According to Schmitz and Ferrasso (2011), patches of dark earth correspond to housings, where it is often possible to find traces of fauna used for food, such as birds, reptiles, mammals, fish and river molluscs, obtained through hunting and fishing.

Pottery production is undoubtedly the most characteristic element of this group. The abundance and variety of these artifacts are evidence of sedentarized societies, with the mastery of agricultural techniques. The ceramic material has different shapes,

sizes, uses and functions. The lithic material of the Guarani sites has been little detailed by the researchers so far. In general, they present utensils such as polished axes, pestle hands, shavings, beaters, scrapers, shaft straighteners,⁸ among others, produced mainly from diabase, sandstone, basalt, quartz, chalcedony and flint.

Another very striking characteristic of the pre-colonial Guarani is the form of burial. According to Schmitz (2000), it was common to bury the bodies with their arms and legs folded in a ceramic vessel large enough to accommodate the body and useless for other functions. There could also be burial in the soil, and then the bones could be deposited in a ceramic urn that was covered with another vessel, or also direct burial in the soil. This type of finding is relatively common, often reported by farmers and described in the first works published by Schmitz (1957) and Rohr (1966), and more recently by Müller and Souza (2011) and Carbonera et al. (2018).

Subsequently, we present the information available on the Guarani sites of Chapecó. The SC UU - 11 Francisco Vailones⁹ site, situated on the Cachoeira-Beira Rio community, in the city of Chapecó, located 80m from the Uruguay River, was excavated by Goulart (1981). It is a Guarani site that, despite having been partially destroyed by agricultural activities, still had two black soil spots of which only spot 1 was excavated with surface material found up to 21cm deep. The material consists of 6.168 ceramic fragments, 199 lithic objects and conchiferous material. The greatest number of ceramic fragments presented thicknesses between 7 and 15mm, the external finish is mostly smooth, corrugated, unglazed, some pieces have the incision, painted and rolled, also standing out a pendant (Figure 3, part b). The lithic material is formed mostly by splinters and some shaft straighteners, the latter made of friable sandstone (Figure 4). According to Goulart (1981, p. 64), the estimate would be that the site had been occupied around 1,000 years ago; although

the author comments that she has sent material for dating, the result does not appear in the analyzed report. Marilandi Goulart points out that the research work should continue, but this did not happen.



Figure 4. Polished axe and shaft straighteners. The two shaft straighteners come from the SC UU - 11 site (and / or site 225) Source: Image of the authors.

These are the only dated sites for the city of Chapecó, reaching an approximate antiquity between 240 and 530 before the present, these Guaraní settlements have an abundance of ceramic, lithic material, ornaments, traces of fauna. De Masi (2012) reports that on the SC-CH-148 site he found a very poorly preserved funerary structure. According to him, a quartz tembetá¹⁰ was found next to the deposition as part of the funerary furniture (Figure 4, piece c). In terms of ceramics, in the treatments applied to the external face of the containers, it can be observed from simpler finishes, where the surfaces were only smoothed, as well as those finely decorated with paintings or plastic finishes (Figure 5). The shapes represent vessels of different sizes and direct

edges, inclined internally and externally.



Figure 5. Adornments. a) Clay necklace tip, site SC-CH-158, inventory no. 15596. b) Clay necklace tip, SC UU - 11 and / or 225 site, inventory no. 22. c) Quartz tembetá, SC-CH-148. Source: Image of the authors.



Figure 6: Types of finishes applied to the outside of ceramic containers. a) Smooth. b) Painted. c) Smooth, brushed and corrugated. d) Corrugated. e) Printed. f) Smooth with cross clamp. g) Roulette. h) Ungulate. i) Nodulated. j) Incised. k) Pinched. Source: Image of the authors.

6. THE SOUTHERN JÊ

In areas further from the Uruguay River, there are traces of other farming societies, known by archaeologists as Itararé-Taquara. This culture was initially identified by Menghin (1957) in the province of Misiones in Argentina. This author related this culture to the ancestors of the linguistic group Jê, who in historical times corresponded to the Kaingang and Xokleng.

The pre-colonial remains of these groups are mainly associated with a complex architecture, such as underground and ring structures. The ring structures represent the funerary architecture and consist of central mounds where the dead were deposited cremated / incinerated, around them larger circles were built which could be a depression or an elevation of earth, the sizes could vary from a few meters to more than 100m. These groups also built underground structures, depressions on the ground with varying sizes that were used as much for housing as for food storage (Copé et al., 2002; De Masi; Artusi, 1985; Menghin, 1956/1957; Müller; Mendonza De Souza, 2011; Reis 2007; Schmitz, 2011; Schmitz; Beber, 2011).

The project developed by Lino (2009) brought data from six new archaeological sites of the pre-colonial Jê people, with the general result of new information that contributes to a better understanding of the pre-colonial past of the territory that today comprises the city. Subsequently, we describe the main characteristics of each archaeological site, in addition to the materials and structures found.

In the excavation of the LT-RB-I archaeological site, chipped lithic artifacts were found, such as single-faceted and bifacial objects, strikers and splinters, with silicified sandstone being the predominant raw material (Figure 7). In addition to the materials made with the use of rocks, some fragments of ceramic vessels and a structure of what appears to have been a fire were also found, formed by natural blocks of basalt and associated coals. The site is located in agricultural cultivation areas and its UTM coordinates are 345695/7000188. The traces

found are dispersed over an area of 60 meters in diameter from its central point and the integrity of the site is greatly altered due to agricultural activities and erosion factors.



Figure 7: Archaeological excavation of the LT-RB-I site, city of Chapecó.
Source: Lino (2009).

Only 200 meters away from the LT-RB-I site is the archaeological site LT-RB-II. It is a set composed of seven underground structures whose UTM coordinate at its central point is 345318/7000167. These structures have dimensions ranging from 4 (for the smallest) to 6m (for the largest) and depths between 30 and 60cm. In some, the landfill is still observed in its periphery, resulting from its construction, not exceeding 10 to 15cm in height by 2 to 3m in length. The structures are arranged at a distance that varies from 1 to 10 meters from each other, being 742 meters above sea level. The local vegetation cover consists of pasture and araucaria. Two of the six structures were excavated, where only a chipped lithic artifact was found.

The LT-RB III archaeological site is located at UTM

349265/6999749, systematic surface collections and subsurface excavations were carried out in an area of 60 meters in diameter, with a large amount of chipped lithic material, in addition to some few ceramic fragments. The site is very altered, mainly due to the agricultural activities developed on the site.

During the execution of the project, an area composed of a set of chips in silicified sandstone was located on half-slope terrain. The site was registered by the team as an LT-RB IV archaeological site, located at UTM 349503/69996957. Judging by the few artifacts found, the place is quite altered, mainly due to agricultural activities.

The LT-RB V archaeological site has UTM coordinates 350196/6999746, being close to the roadside in an agricultural area. Archaeological research at the site resulted in the discovery of a few chipped lithic artifacts in an area of 70m in diameter on a half slope. It is another archaeological site with evidence of alteration due to agricultural activities and other processes of soil erosion.

Finally, the archaeological sites LT-RB-VI (UTM 351146/7000288, LT-RB-VII (UTM 350864/7000261) and LT-RB-VIII (UTM 350759/7000376) appear to belong to the same settlement system and in the future it is intended to bring them together under a single name. It is a set of 26 underground structures, measuring between 4 and 6m in diameter and between 50 and 1m in depth, presenting an ellipsoidal shape. Three structures were excavated and did not present any type of archaeological material. These results require more research in the area to ascertain whether they are in fact structures built by the Jê people or whether they may be features formed by other reasons, natural or anthropic.

In summary, the location and research of eight archaeological sites brought more information to the prehistoric human occupation of the territory where the city of Chapecó is located today, more specifically bringing new data on the

occupation of the Jê people in the area. In this project an interesting work was also developed with the indigenous community of Toldo Chimbanguê, through the participation of Kaingang and Guaraní indigenous people in the excavation stage and through the development of a heritage education project at Fennó Indigenous School (Lino, 2009; Lino; Bruhns, 2011). The project is underway, through laboratory analyzes and dates that will be carried out and will surely bring more data on the subject.

7. FINAL CONSIDERATIONS

This article aimed to show how the local history is very old, how this ground was inhabited and known for thousands of years. We also seek to show the state of the art of archaeological studies and how the preservation of these assets and new research can contribute to understanding a chronologically past so distant.

Seen in these terms, the ancient settlement of Chapecó is inserted in the west of Santa Catarina and, more broadly, the settlement of the La Plata Basin, dates back to millennia and the archaeological remains are the only witnesses of this trajectory. Knowing this heritage is a right that the generation of the present cannot deny to future generations. Only through archaeological goods can information be obtained about these ancient societies and each archaeological site contributes to the understanding of panoramas much broader than the stories of cities or localities, since these definitions are relatively recent. Therefore, the preservation of the archaeological heritage requires the attention of public and private agents, as well as the population.

As we have seen, over the past few decades some research has been carried out, but the data still needs to be better analyzed. Anyway, they give us an idea of which societies inhabited the region long before the official creation of the city of Chapecó, showing that this territory has been occupied for thousands of years.

There is a wide field of research that can be explored

and local institutions such as Ceom /Unochapecó and Federal University of Fronteira Sul (UFFS) have contributed both to new investigations, as well as to education and protection of pre-colonial and historical archaeological heritage. With the substantial increase in research in the region in recent years - mainly due to the development of projects for licensing works such as dams and power transmission lines -, we can predict that in a short time we will have much more information on the subject. In addition to the researchers who have been working in the region for a longer time, we have a new and enthusiastic generation developing their first works.

In conclusion, it is worth saying that bringing the community closer to its heritage - which belongs to everyone, therefore public - is an important step in archaeological practice, but it also needs to be taken on by the local society. Work for its protection and make known to as many people as possible about the importance of these traces and how they are fundamental to better understand our oldest history. Scientific researches, publications, newspaper articles, museographic exhibitions and actions of education for the patrimony have contributed greatly in the last years to expand the information on the subject.

NOTAS

- 1 The study of the past human societies and the environment that surrounds it is the object of research in sciences such as: History, Archaeology, Paleontology, Anthropology, Geology, among others. When you go back in time, documents are rare and sometimes nonexistent, so we resort to Archaeology that deals with traces of houses and buildings, household objects and utensils, etc., therefore, material culture (Buccaille; Peséz, 1989). In general, Archaeology is a social science that studies the past of man and the environment he lived in, through objects, allowing to study both remote prehistoric times as well as the most recent histories. It is the only one among the humanities that includes a large period of time (Renfrew; Bahn, 1993, p. 425). The archaeologist has a set of methods and techniques developed in the field and in the laboratory, such as: location of sites, surveys, excavations,

written and graphic records, curation of the collections, analysis and interpretation of the traces found. As Archaeology seeks to understand the adaptations, cultural development and symbolic representations of societies, it depends on resources from other disciplines, both in the humanities and the earth and exact sciences (Prous, 2000).

- 2 In Brazil, between 1965-1970, the National Program for Archaeological Research (PRONAPA) was developed. In that context, the notion of archaeological tradition started to be used, that meant: "A group of elements or techniques that are distributed with cultural persistence", it gathers smaller units, local or regional, called phase, described as "any complex of ceramic, lithic, housing patterns, related in time and space, in one or more sites." (Chmyz, 1966, p. 14, 20). In the last decades, archaeologists have discussed the problem of using such terms. According to Araújo (2007, p. 11), these concepts were initially conceived as tools to systematize the knowledge coming from an unknown land, being at first devoid of any ethnological significance. Still according to the author, in view of this, the notion of tradition would be simply to name things, since the organization of data with a view to comparing, integrating and building knowledge is severely limited by the fact that these are groups and not classes (Araújo, 2007, p. 11-12).
- 3 Contract, salvage, preventive or rescue Archaeology are the terms most used in Brazil, for the recovery of archaeological remains that are in danger of destruction due to the construction of works with great environmental impact. According to Caldarelli and Santos (1999-2000), it is a contract archaeological service, performed by a remuneration negotiated between parties, only with the Conama (National Council of Environment) Resolution, of 02/23/1986, that the Environmental Impact Assessment is implemented and the archaeologist's participation in evaluation projects, more specifically in the elaboration of Environmental Impact Reports, regularizing and increasing the archaeology related to environmental licensing. When it is not related to the rescue resulting from works of environmental impact, the research is academic, carried out by professionals linked to universities, museums and other teaching and research institutions, who develop studies according to specific research questions.
- 4 Initially, she was linked to the Department of Anthropology at the Federal University of Santa Catarina and, in the mid-1990s, she established a link with the University of Vale do Itajaí (Carbonera, 2008; 2014).
- 5 Among the local and regional institutions that safeguard archaeological collections, we highlight Ceom / Unochapecó, with its seat in the city of Chapecó, among its activities is the Center for Ethnological and Archaeological Studies, which, in addition to safeguarding archaeological collections, has also developed dissemination and

- research actions around these goods.
- 6 The information presented in the reports by De Masi (2012) is dubious. For example, in the list of registered sites, we observed that for the city of Chapecó there are 195 sites (Table 2). However, a total of 140 sites with archaeological material are listed in the inventory.
 - 7 Currently, there are 206 registered sites in the National Register of Archaeological Sites of the National Historical and Artistic Institute (IPHAN), information about them is available on the institute's website: <<http://portal.iphan.gov.br/pagina/detalhes/236/>>.
 - 8 Silvestre and Buc (2015) note that shaft straighteners are common artifacts in Guaraní sites and that the use of these objects varies between the regularization of projectile rods, tembetás, calibration of necklace beads. The size of the pieces, as well as the size and depth of the grooves can vary, but in general they present metric regularities.
 - 9 In the general register of sites of the Uruguay Archaeological Rescue Project, this site received the registration number 225 (Goulart, 1995, p. 351, Vol. I / Tomo III).
 - 10 A typical Guaraní ornament, used by men between the chin and the lower lip.

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