

Records Rock Art (Engravings) in the Santa Catarina Coast: a literature review on studies in this region

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The graphic records shown in different regions of Brazil have long been associated with companies from outside of Brazil. The associations linked forms of written features as belonging to the Phoenicians, Egyptians and Mesopotamians. However, since the decade of 50/60 these approaches have been put aside to make way for a systematic study which looked at the records as a means of graphic communication associated with the different groups who settled and interacted in all the land *Brasilis*. With regard to the study of graphic records (prints) of the coastal region of Santa Catarina and neighboring islands can be seen through a literature review that there is a incongluence about the authorship and dating for these events. So, this article raises some propositions about the types of prints made in the region and propose studies conducted through the three possible authorship for these social manifestations pictographic. Keywords: Rock Art Records; Engravings in Santa Catarina; Social authority

Os registros gráficos evidenciados nas mais diferentes regiões do Brasil foram durante muito tempo associados a sociedades vindas de fora do território brasileiro. As associações ligavam as formas de escritas características como pertencentes aos fenícios, egípcios ou mesopotâmicos. Contudo a partir da década de 50/60 essas abordagens foram sendo deixada de lado para darem lugar a uma forma sistemática de estudos que contemplavam os registros gráficos como meios de comunicação inerentes aos diferentes grupos que se fixaram e interagiram em toda a *terra brasillis*. No que se refere aos estudos dos registros gráficos (gravuras) da região litoral de Santa Catarina e ilhas adjacentes podemos observar, através de uma revisão bibliográfica que há uma incongluência acerca da autoria e da datação para essas manifestações. Assim, esse trabalho busca levantar algumas proposições sobre os tipos de gravuras realizadas na região e propor através dos estudos já realizados já realizados três possíveis autorias sociais para essas manifestações pictográficas.

Palavras-chave: Registros Rupestres; Gravuras em Santa Catarina; Autoria Social

1. INTRODUCTION

Archaeology acts in the rescue, study and conservation of archaeological goods. With his methods and techniques, the inheritance of different cultures is increased in value. In the vestigial universe that the Archaeology has the responsibility to study and to preserve we find cave paintings and engravings. They are important for the recognition of the identity of prehistoric groups. From the decade of 1950/60, the study of American as well as Brazilian cave paintings begun to be systematized. It was realized the variety of information they might provide for the archaeological inquiry. Initially it was considered that the rock's registers were recent. It was supposed they had been created by the Indians with whom the first colonists maintained contacts. Therefore they were not waking interest for the investigators (PROUS, 1992; GASPAR, 2003; LIMA FILHO, 2010).

Nevertheless, with the realization of archaeological inquiries of academic hallmark, in the decades of 1970 and 1980, this inheritance began to be valued. The human presence was noted in relatively ancient periods so much in Americas, like Brazil. Great quantity of sieges was discovered with paintings rock in the most varied Brazilian regions. On that Guidon (1982) affirm what:

In Brazil, the discoveries of new rich regions in paintings and engravings rock's multiplied in the last years. Today, it is possible to affirm that, in most of the rocky regions of Brazil and, in individual, in the Northeast region there are shelters or caves that served of support for these demonstrations picturais, especially where there were conditions of preservation.

The first inquiries carried out on these paintings and engravings rock's in the Northeast region of Brazil and in other regions of the country were not presenting archaeological context. One was doing, therefore, exhaustive descriptions of these above-mentioned registers. It was done, so a preliminary classification atemporal and without archaeological context. For the understanding of the life of the Prehistoric groups, Martin (2008) argues what:

The registers rock's [paintings and engravings] are, undoubtedly, an inexhaustible fountain of anthropological informations and they must be studied under several aspects, (...). The multiple analysis of the register rock will provide us answers also multiple, of great value for the knowledge of the Prehistoric society that carried out them.

In this form there is justified the necessity of enlarging the studies in painting rock, since the scale of informations what same they can provide is of total relevance for the contextualization of an above-mentioned area and for the recognition of the identity of his authors.

It is important to emphasize that in this inquiry we proceed from the assumption of what each cultural group has his standard of behaviour, his "modus vivendi et operandi". It is gestures and cultural own aspects that distinguish it of the groups connected with other cultural traditions. The registers rock's are not only the cultural demonstration of an individual, but of a group what the individual belongs. The producer is the revealing subject of the cultural expression of his group. The cultural structure of the group determines or influences the gestures and habits what the author expresses in the products that it produces. In this field the graphic production is included also, when there has the engravings rock's a place guaranteed like part of this cultural production.

In this form, one understands that every individual is a dependant of his way and reveals, in the cultural expressions, the experience of his social group. Being so, the affiliation of the engravings to a tradition or to a subtradition keeps on being a way for the identification of the cultural trunk that there belonged the authors of the grafisms of the archaeological sieges. His identification stops, however, being the initial proceeding of an inquiry to be the result of many comparative studies of grafisms contextualizados.

In this form, this article looks in the form still incipient for some objectives, between them we stand out:

- Bibliographical revision on the studies of the graphic registers in the South Coast of SC;
- Characterization of these graphic registers;
- Attempt of these grafisms connect with the groups installed in the region in the periods Colonial-daily pay;
- It looks for insertion of same in a chronological picture appropriate to reality of inquiry in the area;

2. THEORETICAL PROCEEDINGS AND METODOLOGICOS IN THE STUDY OF CAVE ENGRAVINGS

Cave engravings as well as paintings provide information about the way of life and of the social relations that groups or groups were maintaining among them in a given territory, or in a much more definite area. The combination of information provided by the studies in painting and engraving are of total relevance for a characterization of an occupied area not only by a single group but by successive groups of individuals who lived, remained and interacted with this above-mentioned habitat, when there they left marks that can be diagnosed and interpreted by archaeologists.

In agreement with Pessis (2002), the engravings are objects carved, found in archaeological sites, resulting as a product from the action of doing voluntarily incisions or marks on support of any nature, by means of the use of instruments, chosen in the nature or done for this finality. Still in agreement with Pessis, in archaeological terms they represent the most ancient tracks of graphic demonstrations. In the region of the Serra of Capivara National Park, the engravings found in the archaeological sites are predominantly not figurative and majority also unrecognizable. Different from the ones found in the coastal inhabitant of Santa Catarina and adjacent islands (SIQUEIRA, 2010).

The engravings, however, are predominantly located near to water courses, where there is a bigger exposition to the rain, wind, sun and to human interference, so there is a bigger degradation of these graphic registers, besides a bigger transport of sediments and its tracks possibly located in site, making this study impossible very often. It is needed to notice in which carved type they are inserted, as well as the conservation of its archeological context that supplies us with data so that we can analyze them. In comparison with the cave paintings, the engravings suffer more actions that damage them, due to exposition to the natural agents, because of being in open areas most times, while the paintings are found predominantly in shelter under rock.

We have to emphasize that besides finding the engravings inserted in the places described previously, also we can check their presence in shelters under rock and very near to creeks and ponds (PESSIS, 2002). The studies about cave art applied to engravings allowed that a traditional division was established by Guidon (1989) classifying them like Itacoatiaras of the East, Itacoatiaras of the West and Gongo, these traditions were created to designate cave graphics carried out through the technique of engraving on isolated blocks or on the walls and grounds of the shelters under rock. Still in an extent of this discussion the most ancient dating for engravings shown up in the area of the PARNA Serra da Capivara ranges between 5.650 to 5.890 and 7.840 to 7.600 years in the Toca dos Oitenta site (SIQUEIRA, 2010).

In this research we look, through a bibliographical revision of authors like Aguiar (2003), Comerlato (2005) and Keller (2005) to connect to the kind of graphic execution in three cultural groups as: the Hunters-collectors, the Itararé and the Guaranis who lived in the coastal region of Santa Catarina and adjacent Islands, having Campeche Island as a significant example. We look to establish parameters connected with the records of studies on this above-mentioned theme, to propose as a suggestion to identify the type of technique applied for production of the engravings, trying to identify elements that were allowing to establish a partial social authorship for themselves, having three groups quoted previously like possible authors of this type of pictorial demonstration.

The bibliographical revision looked to identify if a preference takes place over a specific technique for production of the engravings found in the whole region and even the preference of supports and their locations.

2.1. TRADITION OF ENGRAVINGS RUPESTRES IN BRAZIL AND THE STUDY OF SAME LIKE MEDIA COMMUNICATION

Several dating was and still has been done on engravings in the most different regions of the globe; nevertheless we are going to keep the most significant ones designated for Brazilian regions. So in the south-east region of Brazil, a dating was obtained for the engravings of the site Lapa do Boquete, located at the Valley of the Peruaçu, Minas Gerais, providing a date from 12.000 to 9.500 years BP, this chronology was in association with the level of an ancient level of occupation (PROUS, 1992). The most ancient for the Brazilian territory is located in the site Lapa de Poseidon, located in Montalvânia, Minas Gerais, which supplied a dating of 55.000/-5.000 years, in agreement with Watanabe. This chronology became a target of great discussion between the investigators of the area, not believing in an occupation in the distant past in the South America.

The first classification for register carved in the Brazilian Northeast was formulated by Guidon (1989), which proposed a preliminary classification based on the morphology and on its geographical dispersal. So, the engravings were classified in:

- **Itacoatiara of East**, typical of all the Northeast of Brazil, found mainly in the edges of rivers and creeks, marking waterfalls or points where the water persists during the time of drought.
- **Itacoatiara of West** consists of a predominantly presentation of pure graphics, spreading out from Bolivia up to the western limit of the area of Saint Raymond Nonato, appearing up to the north of Minas Gerais. Found mainly in rocky supports of waterfalls, lakes, fountains or natural deposits of water.
- **Gongo** is a tradition represented in only one site, Calderao of the Deolindo, characterized for being a natural deposit of water. Where their representations are found of pure graphics, besides having animals and human forms.

Another tradition for engravings besides the already presented ones is found. The Geometrical tradition established in the Northeast of Brazil for pure graphics pure, that presents geometrical forms, is established also by André Prous (1992), attributing to the carved graphics from the Northeast to the south of the country, which remember some of the geometrical forms, when figurative representations are not existing almost completely.

The great difficulty in the study of these traditions is due to these tracks were represented generally in water courses, making difficult to relate them to some group and consequently with the culture material, besides the difficulty of obtaining data that could establish them chronologically. Another difficulty in the study of cave engravings results from the lack of bibliography related mainly to this line of inquiry, which makes difficult the analysis of these tracks (PESSIS, 1991).

We understand that any graphic representation must be studied like the form of communication. We consider cave registers like a system of communication of prehistoric groups, from the capacity of producing an image up to that symbolic and mental time for the extern universe in rocky supports. The lack of information on the context of the time in which the graphics were carried out is a great problem to the study of the cave registers.

It is in the characterization of a context that we have to situate the author of the graphic practice, endowed of cerebral, visual and manual capacities, for which the image is the instrument of knowledge and that is taken, by cognitive activities, to observe, to imagine and to translate these contents in technical activity, in graphic activity (PESSIS, 1991).

In an archaeological context, we find indicators that show the relation of the man with the environment, taking into account the process of adaptation to the way. To try to analyze the set of a society, we cannot analyze only an aspect of the culture, it is necessary to develop an analysis in the context and the relation of the material tracks so to obtain indicative data that could characterize a culture.

The technique and the revision presented above, carried out by other authors are the key points for inferences around the possible one or more social authorship of (s) groups that carried out the above-mentioned engravings in the region in regard. These elements will be the principal points mentioned in this inquiry as how it was put previously, trying associate these engravings to one of three principal groups that lived to coastal south of Santa Catarina and adjacent islands (KELLER, 2005). In agreement with Pessis (1992), for the engraving, for the analysis of the technical characteristics starts to have bigger importance, due to these registers did not offer elements of recognition. It is important to mention the objective of this inquiry does not center in a thorough analysis of the engravings, but yes in establishing a possible relation of production of them for groups previously described.

To reach the objective of the inquiry, information was searched about the technique of execution of the carved graphics, environmental and archaeological context in the region of Santa Catarina and also in the adjacent islands, all these information were collected through a bibliographical revision.

It was taken into consideration some panels of cave engravings once by the stage of this current review we do not dispose of complete information about the types and detailed locations about them. It was still looked to locate some graphic stains in the rocky supports range of the area taking as reference identified pictures on the consulted bibliography of the production of the region.

3. RESULTS AND DISCUSSION: THE ENGRAVINGS OF THE COASTAL INHABITANT OF SANTA CATARINA AND ADJACENT ISLANDS – MEDIA AND POSSIBLE SOCIAL AUTHORSHIPS?

In agreement with Binford (1983), the culture is defined as the extra somatic form of adaptation of the human beings. The culture is the result of the relation that exists between the processes of subsistence, economy, social systems, rituals and technology. These relations are the product of the interaction of man with the environment and society. These processes are connected with the external way, the flora, fauna, climate, geology and time, as well as it was proposed by David Clarke in 1976, composing the system of functioning of the society and so being the result of the interaction of these aspects, so present between man and nature. It can be diagnosed and characterized through the material culture, in other words, of the archaeological register when they were left by previous populations.

This way the quantity of information on the graphic profile produced by the groups that lived in the region of Santa Catarina is quite vast and significant [1]. Previous studies (ROHR, 1969; AGUIAR, 2001), noted that the Santa Catarina Island has important sites of cave art scattered for the rocky soil of its beaches and in several adjacent islands (COMERLATO, 2005). During the works carried out in the whole region there could be shown up three traditions that lived in the area before the arrival of the Europeans: the hunters and collectors, the Itararé and Guarani. For some investigators as Prous (1992) the possible authors of the cave art of this region would be tied to the groups of hunters-collectors and to the Itararé (group that concentrated on the area on a subsequent period).

According to Aguiar (2001) the engravings of the region and of the adjacent islands follow still two moments of production: more ancient of narrow furrows, bigger stress of the symbols and bigger incidence of patina, what might be connected with hunters and collectors; and more recent, of more wide and quite marked furrows, predominance of circles and less incidence of patina, this period made a list to the Itararé tradition.

We consider this information due to present geological and environmental factors in the region, in other words, the presence of ecology and favourable climate so that the Pre Colonial populations enjoyed excellent quality of life (AGUIAR, 2003).

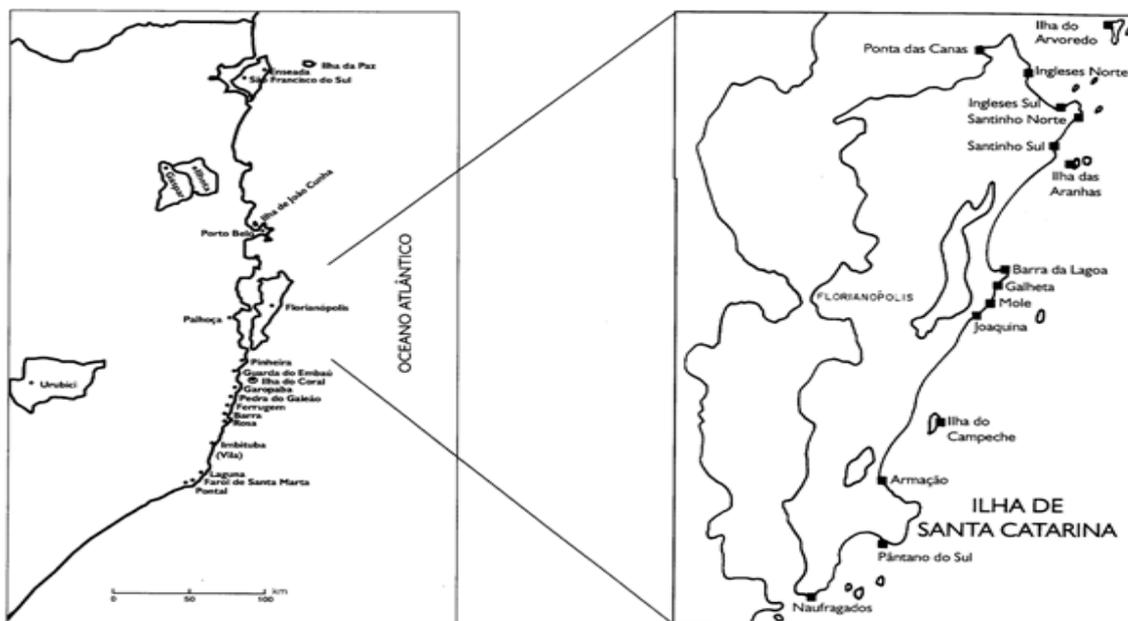


Figure 01: Map of the Island of Santa Catarina with rock art sites evidenced. Fonte: Comerlato, 2005.

Understanding of the local ecology appears basic to establish the first interpretative tests on the petroglifos of the Santa Catarina Island. The ecology presents deep relations with the economy and with the way of life of human groups that lived in the whole region (EVANS-PRITCHARD, 1978. in. AGUIAR, 2003). Among the cave representations located in the area

we can identify at hypothetical level scenes connected with the sea, fishing, the economy of subsistence itself and day by day of these groups that were installed in different periods of time in the region.

Would such symbols (these representations) make a list to the nice magic – it supposed to motivational element? They are just some examples of the questions brought in the inquiries in the area. These signals are located in their great majority intrusive basaltic rocks with a relatively fine granulation. Many authors try to make a list of these graphics to group's sambaqueiros to try to establish possible relative dating for these graphic productions (PROUS, 1992).

The dating for some of these sites turns around 10 %, and they were all realized in Santa Catarina, note the absence of dating for the adjacent islands to this above-mentioned material culture. Among the most ancient dating for these graphic registers we find one that situates them between 4.330 B.P and 5.000 B.P. (AGUIAR, 2003). Still in the context of the discussion of social authorship for the above-mentioned engravings, Foot.

Rohr suggested the Guaranis like authors' of this signs due to the similarity with the art applied in typical group funeral urns, putting so the engravings in a dating not superior to 1000 A.P. Nevertheless studies carried out by the UFSC demonstrate an occupation that varies between 7.000 and 8.000 years for the region. These engravings could be inserted in this time scale, which might be identified if careful analyses of the furrows were effectuated.

In what it refers to the type of signs, two types are identified, as of character are naturalists: antropomorfos (lifted arms), simple and double masks, human footprints and also the presence of zoomorphism like fishes. Regarding the geometrical motives it was observed the constant presence of parallel, wavy, vertical, horizontal aspects, zigzags, and circles, single and with divisions, concentric, as well as, the presence of a series of triangles with apexes directed up and down (AGUIAR, 2003) [2].



Figura 1 - Painel da Ilha dos corais. Figuras antropomórficas associadas a círculos e triângulos. Esquerda: Fotografia mostra detalhe do painel. Direita: relevo de contato do painel completo.

Figure 02: Cave Representation of SC. Fonte: Aguiar: 2001.

As to the possible meanings the divergence between investigators become still bigger. By way of presentation we will show some conjectures about the meanings of the engravings of SC.

Second ROHR (1969) *“On the contrary for Indians' joke or common places, these places had for the Indians great importance. This hypothesis confirmed and strengthened by the location of the petroglifos in beaches, the bravest and furiously beaten for the big waves of the high sea, so, places that instil fear, respect and dread”*.

For Aguiar (2001) the wonder and the respect for these signs is clearly observed by part of the fishermen who were wandering for all this region. According to him *“the fishermen had*

much respect for the "signs" were avoiding passing near, since they were considering sacred places, connected with hidden strength".

This belief as to these signs was still tied by the presence of same, as soon as they were located in basaltic dark rocks and since other totally indecipherable times presented themes very often understanding. Without counting still what same were located in places of difficult access.

Regarding the specific technique of execution of the engravings from Santa Catarina we can say, on basis of the bibliography consulted, they presented the following characteristics: they were in most of the cases prepared well and quite definite engravings, serving like a sort of landscape landmark. Near the furrows they presented painting, which might have been added soon after the production of them or carved in a subsequent period as well. They were carried out using a sort of abrasion with help of water and they used a sort of polishing with sand. Notice the presence of furrows scraped with stone or it scours and the depth vary between 1 to 5 mm, reaching still 5 cm of width.

Pointing still to questions about the production and duration of these graphic registers in the current state, it is impossible to say some questions do not stand up about the state of conservation and preservation of the same. So by the bibliographical revision it can be noticed the preoccupation from the authors with the constant abandon that is dedicated to this cultural inheritance. This problem can take into consideration the ignorance of the population about the importance and the meanings of these registers like inherited object of a group that lived and interacted in the whole region for a significant period of time. This lack of knowledge added up to the disregard of the authorities with the absence of clear and efficient politics about the conservation and preservation, are contributing to the quick disappearance of this pictographic art. In the past century, hunters of treasures and mining enterprises were responsible for the destruction of great part of this inheritance. According to the bibliographies consulted for this inquiry, 80 % of the graphic registers of the region of SC and near islands have already disappeared due not only to the entropic action, but also to intepéricos factors. Nowadays inspection policies and preservation began to be taken into account, but they act still in quite incipient way [3 e 4].



Figure 03: Device parietal site Santinho I Beach, SC. Fonte: Rohr, 196.



Figure 04: *Sad Device parietal site, Ilha do Campeche, Florianopolis – SC. Foto: Comerlato, 2005.*

4. CONCLUSION

This article had as a goal to try to characterize through a bibliographical revision, to diagnose and to propose through the technique of production observation of engravings in the region of Santa Catarina and also in some adjacent islands, some possible social authorships for those, as well as a significant quantity of hypotheses to the diversity of considered types as their possible social authorships. This way for not having realized straight analyses in the engravings of this region we will present here through the bibliography consulted possible groups that in straight or indirect form will contribute to production and perpetuation of this pictographic collection. It is important to emphasize that the authors themselves pointed on this study diverge about authorship of these graphics. Considering the whole theoretical and methodological discussion, as well as the characterization of the area and of the types of graphics presented in the previous pages, a simple doubt still persists: And the authors? Who would in fact be the persons in charge for this type of graphic production so richly identified in the coastal of Santa Catarina and in its most varied adjacent islands?

Based on these conjectures it is possible to affirm that in the current state of this work there are a series of problems about the inference of the social authorship of the engravings. And that the absence of absolute dating for the same / relative performed dating (few ones in quantity) still do not supply an accurate picture for interpretations of scientific structured character. Even so some authors try through careful analyses to establish possible social authorships. About this subject COMERLATO (2005) is going to propose that:

As for the authorship of the engravings rock's, there are two means: the hunters-collectors or the potters of the linguistic group Gê. The siege Marries of Stone, prospectado for sounding, 200 AD has his occupation dated in 1.040 ±, being able to be associated to the engravings of the same cave. Piazza identifies the cave like part of the phase Urubici which it indicates an occupation daily pay-pottery with scrapers, beaters and hands of pylon.

For Aguiar (2003) the Guaranis as defended by other authors they would not have been the authors of the engravings of the coastal inhabitant of Santa Catarina due to the absence of reports of character etnohistórics. According to him:

The absence of etno-historical reports that were making reference to a Guarani in practice of the production of the art rock puts in doubt the possibility of which these would have been the authors of the grafisms rock's. So, it is believed that the hunters and collectors and the itararé have done the rock art from the Saint's Island Catarina (AGUIAR, 2003).

As observed it is difficult to establish a cultural affiliation, subject that keeps on being the “stone in the shoe” of the archaeologists who work with the engravings and also with some paintings located in the coastal region of Santa Catarina and adjacent islands. Nevertheless significant advancements are taking place in the whole region like the Mapping Program of Cave Art Sites. So with a well prepared and an extensive database, many comparative studies will be able to be done in the future. We believe that as in the analyses cave painting, dating and chemical-physical studies are of basic importance to establish safe inferences and to propose a picture of occupation, production and dispersal much more prepared and safer for the region in regard. Provided with other information to situate these engravings in the time and in the space and so to define or at least to propose, with more solid bases, one or more possible social authorships for the whole area. There is the challenge for the new group of investigators (archaeologists) committed to the archaeological potential of the region.

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