

## HOPLOLOGY

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# Rock art describing fights in Serra da Capivara National Park (Brazil)

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### Abstract

**Background.** In South America, very little is said about sports and body practices' history before the European colonization period (from A.D. 1500) and one of the most important fields in revealing ancient history (including sport history) is archeology. In Brazil, one of the most relevant and rich places for preservation and study is the Serra da Capivara National Park (SCNP) which has more than 900 registered archeological sites. Its rock paintings register ancestral body activities, including fights.

**Problem and aim.** What does rock art demonstrate and represent about fights? Could this represent a culture of manual combat practices among the ancient natives of the region? The general objective of this study is to analyze and identify the scenes that permeate fight practices in the SCNP rupestrian records.

**Methods.** This is an archaeological research with incursion into the archaeological field (in loco) in exploratory format using the iconographic method and inferences from natives of the Brazilian territory.

**Results.** It was observed that some images demonstrate individual fights, others collective ones, and may refer to a mythical-ritualistic profile. In this direction, the natives' reports indicate possible rudimentary practices of body fights still practiced by Brazilian indigenous peoples.

**Conclusions.** Images were identified as individual and collective fights and, through the natives' narratives, it is inferred that the practices of body fights are constitutive cultural elements of several autochthonous groups, from the earliest period of history. However, it does not, necessarily, belong to the same groups that still practice these fights in Brazilian territory.

### Introduction

One of the most studied fields in the human sciences linked to sports is the history of sports. In Brazil, it is not different. This fact occurs due to the deep anthropo-

logical bias that sports carry in their constitution, being practiced (even if in a very rudimentary way) since the early days of humanity. Even so, in Brazil very little is said about the sports and body practices history before

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In other standard – e.g.:

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the European colonization period (Precabralian period<sup>1</sup>). Hence, several well-known authors addressed the history of sports in Brazil but left out body practices in its earliest period [Del Priore, Melo 2009; Melo, Fortes 2010; Booth 2011; Vamplew 2013; Tubino 2017].

Following this thought, one of the scientific fields that perform historical and field research on significantly ancient times is archeology. In Brazil, among others, the practice of archeology mostly searches for traces and data from extinct indigenous societies that lived in a distant past, leaving material remains as evidence of their existence [Barreto 1999]. According to Prous [1991], Brazilian archeology deserves all the interest and relevance on the world stage. It is asserted by Funari [2013] that one of the best-known names in archaeological research in Brazil was Niède Guidon, a French-Brazilian archeologist known worldwide for defending the hypothesis about the process of settlement in the Americas and for her dedication to the preservation of Serra da Capivara National Park (SCNP) in northeastern Brazil (southeast of the State of Piauí).

By relating Brazilian archeology with the SCNP (Figure 1), it is possible to observe a valuable link between them. Today, the SCNP has more than 900 registered archaeological sites within its 130,000 hectares (Figure 2) and it also holds the largest enclave of archaeological sites in the world. According to Bastos [2010], many anthropic remains have been found there, such as: arrowheads, chipped and polished lithics (“stones”), coprolites (fossilized human feces), skeletons and bonfires. The same author found that there are strong signs of human presence in southeastern Piauí, at least 20,000 years before present – BP<sup>2</sup>. In these archeological sites, images that expose fighting practices are also found. Among them, both paintings (made with dyes obtained from the surrounding environment) and engravings (incisions in the rocks) can be seen. However, what demonstrates and represents the rupestrian images about fights? Could this represent a culture of manual combat practices among the ancient natives of the region? Hence, after deeper analysis [Paiva 2017], it was decided to perform a field research study (*in loco*).

The general objective of this study is to analyze and identify the scenes that permeate fighting practices in the SCNP rock records. More specifically, it was also aimed to: a) hear the reports of indigenous people who still practice physical unarmed struggle, about their interpretations of these rock records; b) do a survey and organize a *corpus* of rock art on unarmed wrestling; c) verify what other researchers considered

on these traces; d) verify which indigenous ethnic groups still keep alive the practices of physical unarmed struggle in a ritualized way; and e) identify factors that may show a correspondence between archaeological and ethnographic data that point to an unarmed fight.

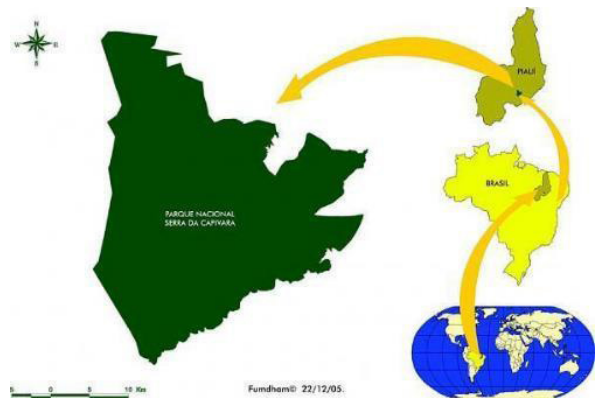


Fig. 1. Map of Serra da Capivara National Park (PI). [Source: FUMDHAM 2005]

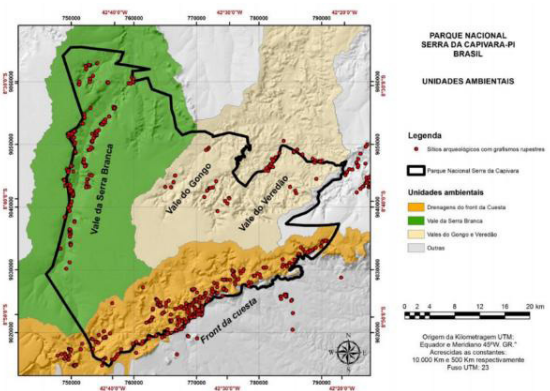


Fig. 2. Map with distribution of archaeological sites with rupestrian records (in red).

[Source: FUMDHAM/Pessis, Cisneiros, Mutzenberg 2018].

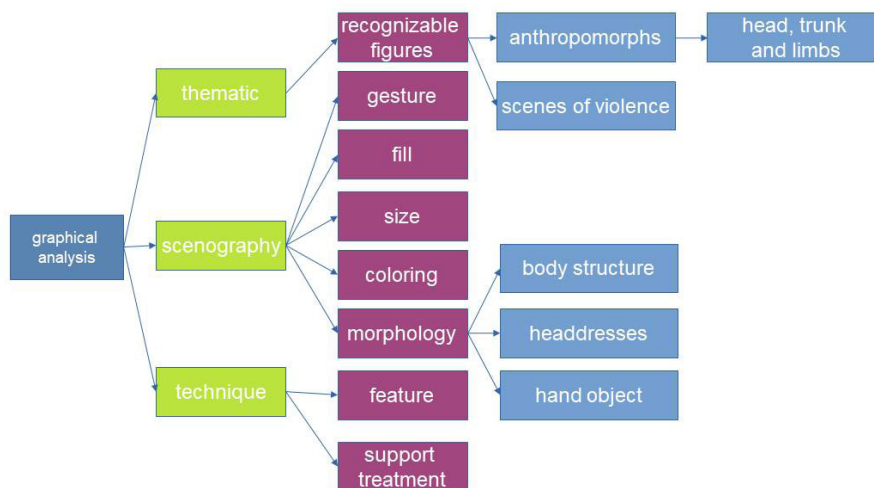
## Methods

This research is characterized as archaeological, and its *modus operandi* is the incursion into the archaeological field (*in loco*) in exploratory format. Upon arrival at the site, the photographic registration process was initiated for cataloging and subsequent identification of the images. Thus, this research uses the iconographic method, which seeks to express internal and external meanings [Cardoso, Vainfas 2012].

It should be noted that two incursions into the SCNP archaeological sites (October 2015 and June 2016) were necessary to obtain a reasonable number of photographic records, which could form a kind of *corpus*. At the first opportunity, twenty-one archaeological sites located in *Front da Cuesta* and in *Serra Branca Valley* were accessed (Figure 2). These surveys were based on the dimensions established by Anne-Marie Pessis [1994], organized in diagrams by Silva [2012], with the intent to characterize

<sup>1</sup> Pedro Álvares Cabral was the Portuguese navigator who “found” the territory that is now called Brazil.

<sup>2</sup> In Archeology, the term “Before Present” assumes 1950 as the base year, chosen as a reference to establish the calibration curves for radiocarbon dating (carbon 14 was preferred) [Martin 2005].



**Fig. 3.** Dimensions (Thematic, Scenography and Technique) to characterize and identify graphic patterns in rock paintings. [Source: Adapted from Silva 2012].

and identify patterns in rupestrian paintings (Figure 3) to classify these manifestations by cognitive recognition in a hypothetical preliminary way. Thus, the main elements used to recognize and characterize a fight scene, such as violence [Silva 2012] or war [Paiva 2017], were the “space division and positioning of the figures in the scene; movement of one figure towards another; rhythmic movement of arms, legs and body; (...) figures showing some part of the body being hit, indicating aggression” [Silva 2012: 51]. Note that not all sites had fight scenes. However, it was relevant to access them in person to understand, *in loco*, the graphic similarities and differences, which the archaeological literature on the region classified as Tradition<sup>3</sup>, Subtradition<sup>4</sup> and Styles<sup>5</sup> [Pessis 1994; 2003; Guidon 1981, 1984], reflecting on their respective dates<sup>6</sup>.

3 “Tradition” refers to the visual representation of an entire primeval symbolic universe (natural and imaginary), which may be millennial [Pessis 1994, 2003; Guidon 1981, 1984]. In the SCNP, the “Northeast Tradition” predominates, dating between 15,000 and 6,000 years BP [Pessis, Cisneiros, Mutzenberg 2018]. It is characterized by recognizable traces (human figures, animals, plants and objects) and the “pure”/ “geometric” ones, which cannot be identified.

4 “Subtradition” defines a group detached from a tradition and adapted to a different geographical and ecological environment, implying the presence of new elements [*Ibidem*].

5 The most particular class resulting from changes in a subtradition is called “Style”, denoting differences in technique and graphic presentation, with thematic innovations reflecting the creative expression of each community [*Ibidem*].

6 For the rupestrian records in the SCNP, a chronology was established based on decades of archaeological research, as follows: 1) “Serra da Capivara” style – Dating: between 15,000(?)–12,000 up to 9,000 BP (Closed contour; continuous traces figures etc.); 2) “Serra Branca” style – Dating: 9,000–6,000 BP (Human figures filled with vertical lines; Wealth of adornments and objects, etc.) [Pessis 2003, 2013; Pessis, Cis-

## Results

It was not difficult to understand, through analysis published later [Paiva 2017, 2019], that the terms “fight” or “violence” could denote different social references but were treated in the same way in most studies conducted at the SCNP. For example, they likewise encompassed scenes of: anthropomorphs’ fighting (carrying artifacts/ “weapons”); hand-to-hand combat (without carrying objects); execution (deliberate violence in which the antagonistic anthropomorph does not seem to take defensive action) etc. On that basis, the first step, therefore, right after the collection of this initial *corpus*, was to segregate the hand-to-hand fight scenes (without the use of artifacts/ “weapons” and “execution” references) from the others. It is worth mentioning the analysis [Paiva, Silva 2016] found from one of these records (Figures 12–13). After the exploratory field research, the literature review and image analysis began. The fight scene recorded at the “Toca do Nilson do Boqueirao da Pedra Solta” archaeological site was emphasized. The relative – partial – dating, based mainly on the context of the archaeological ensemble and stylistic domain, indicated that it may contain a dating of at least 9,000 years B.P.

neiros, Mutzenberg 2018]. Referring to the specific method of dating, Pessis, Cisneiros and Mutzenberg [2018: 43] assert that there is not, for rupestrian paintings in the SCNP, only one form of dating. To be reliable, it requires “a set of results from different techniques capable of positioning, in time, the studied painting (...)”. For example, “(...) when two painted figures are in partial relation of superposition. The superposition analysis provides the certainty of the order of precedence of the realization of the figures, allowing to segregate layers of graphic superposition”.

7 Stylized rupestrian record of a human figure – head, trunk and limbs [Martin 2005].

Three hypotheses were listed, after concluding image analysis: a) it is not the continuity of the same pair of anthropomorphs, when vertically observed, being, in fact, four pairs consisting of eight different anthropomorphs; b) fight scene with a possible “game”<sup>8</sup> feature, not in a “war”<sup>9</sup> context (when compared to others in this theme); c) in line with the above, I would not refer to an increase in violence due to possible local demographic pressure<sup>10</sup>. Thus, an inference of possible mythic-ritualistic aspects was presented.

Nevertheless, approximately eight months after the first incursion, another visit was accomplished to the archaeological sites in *Front da Cuesta*. New remains were accessed, slightly expanding the initial *corpus* of rupestrian paintings with fight scenes. According to Vidal [1992], it was understood that these rock figures can be analyzed from their symbolic dimension, as part of a visual representations system. Pessis and Guidon [1992: 20] consider them “(...) a source of anthropological information, as they are graphic representations of the social representations of the ethnic<sup>11</sup> groups that performed them”. Yet Souza [2009: 13] realized that they reflect a certain socioenvi-

8 “Game” is placed in quotation marks, as although, for example, the indigenous body fight (Ex.: Huka-Huka in the Xingu Indigenous Territory – XIT) may encompass the concept of game, as considered by Huizinga [1999] and Caillois [1990], because this research is about a very old and distant period of time from the aforementioned authors. Here, one could easily enter Marvin Harris’s [1976] *emic* (from a person within the culture) *versus etic* (a scientific observer description) relationship. In this way, something like, for example, a “playful game” can reflect one more category of the researcher understanding. For that past group, it could bring other references. On the other hand, there is a question: would a “playful game” not be tautological? After all, is there any game that is not, at its core, playful?

9 Just like “game”, using the term “war” can be based on the same *emic/etic* problem.

10 Pessis [2003, 2013] correlates the increase in rock records of scenes of violence in the SCNP with possible local demographic pressure.

11 The works of Pessis [2003, 2013] point to conclusions about the SCNP paintings in reference to ethnicities and specially in relation to rituals. Reinaldo Morales Junior (2002), in turn, made an approximation considering the mask rituals of Alto Xingu (Brazil). Luciano de Souza Silva’s works [2009, 2012] are based on the identification of rupestrian paintings in the SCNP, on variations of their adornments (“diadems/headdresses”?) and objects, such as propellers, “bordunas”, etc. However, there is a vast amount of literature (archaeological, ethnological, historical and ethnohistorical) that refers these artifacts to indigenous peoples, before and during the colonial encounter. Etchevarne [2009: 43] also alludes to the myriad of indigenous elements found in figures of anthropomorphs in the Northeast Tradition: “headdresses, armbands, gaiters, baskets, nets, weapons (clubs, spears, arrows, propellers), maracas, bags, petticoats, masks, among others”.

ronmental context and that they are also “(...) a form of representation of part of this daily life and the complexity of individuals. (...) it represents the group’s social life, characterized by particular social markers that can be identified in the scenography”. Thus, rupestrian paintings can clearly present information about the groups that inhabited and/or transited the SCNP region in the pre-colonial period [Martin 2005]. Even in the early days of his studies, Guidon [1979: 4] wrote an article detailing that, among the paintings found, some were based on well-defined themes, such as “(...) performance of ceremonies or combat scenes (...)”. Thus, it is worth mentioning that although Pessis [2003, 2013] considers that the process of painting some of these records may have recreational purposes, especially in older periods, most of them should be perceived as a kind of human “writing”, or better, of social communication.

These works helped to create a direction for initial reflections on rupestrian paintings with fight scenes. However, this research sought to stick to the scenes in which it could be correlated with a “game”, favoring physical unarmed struggle without the possession of artifacts / “weapons”. Thus, although the initial number of scenes exceeded ten<sup>12</sup>, for this approach, it converged to only four. Here, therefore, is a fraction of the initial *corpus* (Figures 4-13)<sup>13</sup>, including vectorization<sup>14</sup> and complementary contextualization:

Figure 4 is a rupestrian record located at the archaeological site Toca da Fumaca 1 (also called Toca da Roca

12 It is understood that this amount is very low, considering more than 900 sites in the SCNP with rupestrian records. This fact was not ignored by archaeologists. For example, Buco [2012: 434, emphasis added] reported that: “the violence theme, despite being a minority, is the one that impresses the most (...)”. Yet Silva [2012: 59, emphasis added] stated that his research “(...) encountered with the reduced number of sites issue. (...) It is considered an unrepresentative element in graphic spots, in proportion to the high number and diversity of graphics in the Serra da Capivara region (...)”.

13 For the aesthetic aspect, it was decided not to allocate archaeological scales in the images. However, for the analyses, images with scale provided by FUMDHAM were used. Thus, the anthropomorphs ranged from 3 to 6 centimeters, approximately, in Toca da Extrema 2 and Toca do Joao Arsenia sites. In Toca da Fumaca 1 and in Toca do Nilson in Boqueirao da Pedra Solta, they varied between approximately 7 and 15 cm.

14 Also called “segregation” or “graphic stripping”. According to Silva [2012: 65], it is a technique that uses a program or *software* to transform an image into essential lines and points, with the perspective of modifying its elements separately: “(...) automatic or manual color enhancement (brightness, contrast, saturation, color level adjustment). Applying color curve effects to highlight the paintings and carrying out the elaboration of the virtual decal using a color selection tool (edit, rotate, move, recolor, among other changes)”.

at Sitio da Pedra Furada 1) in *Front da Cuesta*. About the represented motor action, it seems to be a common record in the SCNP to represent a hand-to-hand fight without artifact/“weapons” in hand. One of the anthropomorphs attacks through control/domination, suspending the other figure completely. These two are the only ones fighting, among other records on this site, so the non-constitution of a collective fight scene is latent. The graphic style<sup>15</sup> suggests a minimum dating of 9,000 BP. This site was registered in 1973<sup>16</sup>.



Fig. 4



Fig. 5

**Figures 4-5.** Detail of the hand-to-hand combat at Toca da Fumaca I Archaeological Site (Figure 4) (Note: contrast increased by 35% in Word 2013 – Microsoft Office) and vectorization (Figure 5). Source: Author 2015. Vectorization: Nilmon Filho.

15 Simple figures, without filling, suggesting body painting, without ornament, rounded lines, small, fully filled and with a predominance of the red color, belong to the Serra da Capivara Style [Pessis 2003, 2013].

16 Record of Toca da Fumaca I archaeological site. National Registry of Archaeological Sites (CNSA). Available at: < [http://portal.iphan.gov.br/sgpa/cnsa\\_detalhes.php?16550](http://portal.iphan.gov.br/sgpa/cnsa_detalhes.php?16550)>. Accessed on 10th. Aug. 2017.



Fig. 6



Fig. 7



Fig. 8

**Figures 6-8.** (Wide) fight scene at Toca da Extrema 2 Archeological Site (Figure 6), vectorization (Figure 7) and scene detail (Figure 8), in which two anthropomorphs fight without weapons. Source: Author 2015 (Note: contrast increased by 50% in Word 2013 – Microsoft Office). Vectorization: Luciano de Souza Silva.

Figure 8 details hand-to-hand combat without artifacts / “weapons”, painted in the archaeological site named Toca da Extrema 2, at Serra Branca Circuit (Serra Branca Valley). Registered in 1973<sup>17</sup>. This combat seems

17 Record of the Toca da Extrema II archaeological site. National Registry of Archaeological Sites (CNSA). Available at: < [http://portal.iphan.gov.br/sgpa/cnsa\\_detalhes.php?6888](http://portal.iphan.gov.br/sgpa/cnsa_detalhes.php?6888)>. Accessed on 10th. Aug. 2017

to be the central point of the action represented as a collective scene of “violence” (Figure 6), where 19 anthropomorphs composed the thematic (better visualized by the vectorization in Figure 7). Pessis [2003, 2013] rates this wide fight scene (Figure 6) in Serra Branca Style dating at least 6,000 BP.



Fig. 9

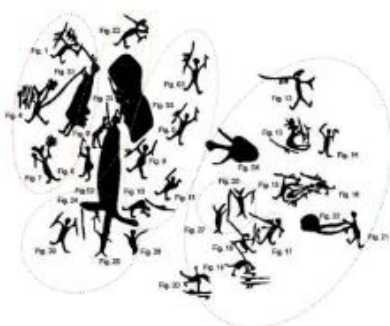


Fig. 10



Fig. 11

**Figures 9-11.** (Wide) Scene of a fight at Toca do Joao Arsenia Archaeological Site (Figure 9), vectorization (Figure 10) and scene detail (Figure 11), in which two anthropomorphs fight without weapons. Source: Author 2015 (Note: 30% increased brightness and 50% increased contrast in Word 2013 – Microsoft Office). Vectorization: Luciano de Souza Silva.

Figure 11 represents detail of a possible hand-to-hand fight in the Toca do Joao Arsenia archaeological site, located in the Serra Branca Circuit. Registered in 1975<sup>18</sup>.

18 Record of Toca do Joao Arsenia archaeological site. National Registry of Archaeological Sites (CNSA). Available at: < [http://portal.iphan.gov.br/sgpa/cnsa\\_detalhes.php?7358](http://portal.iphan.gov.br/sgpa/cnsa_detalhes.php?7358)>. Accessed on 10th. Aug. 2017.

Although situated in the context of a scene of “collective violence” (Figure 9) with 29 anthropomorphs confirmed via vectorization (Figure 10), differences in representations from other sites (Figures 4 and 8) can be seen by the fact that the presumed anthropomorph had been suspended by the arms and not by the head [Souza 2009]. It was also noticed the absence of the rest of the body contour. Silva [2012: 76] raised the hypothesis that this record appears as an exception to other figures; however, with the vectorization work, “(...) a continuity of trace and homogeneity in the color of the figures was evidenced (...)”. After graphical analysis [Souza 2009; Silva 2012], it was observed a similarity with the scene at Toca da Extrema 2 site (Figure 6). From this combat (Figure 11) the presentation plan of the “collective violence” scene as a whole was referenced. Pessis, Cisneiros and Mutzenberg [2018] highlight this fight scene (Figure 9) in Serra Branca Style, dating at least 6,000 BP

Although the scenes at Toca da Extrema 2 and Toca do Joao Arsenia sites had been pointed out as “collective violence” or “war”, those at Toca da Fumaca I and Toca do Nilson sites were not. Regarding the first, no analyses were found in the literature. However, about the second, Justamand [2007: 98] characterized it as a “Scene of violence”. Bucu [2012] considered it as “Playful Game” or “Duel”, representing conflict situations and did not classify it “(...) as scenes of violence because we chose to observe this art as a representation of different ritual activities and various types of parties, where games, imitating conflict situations, are part of the activities, a kind of training” [Bucu 2012: 480]. It is worth emphasizing its characterization by mixed motor actions, encompassing percussion techniques (or “impacting” - Figure 13, pair of anthropomorphs n.º 2) with the domain (or “grab” - Figure 13, pairs n.º 1, 3 and 4). It should be noted that in another view at the recurrence of the graphic pattern in the body fight scenes without artifact/“weapons” in the SCNP [Paiva 2018], there was pictorial repetition of domain or “grab” action, but not of percussion. In other words, it reoccurs in several sites (Figures 4, 8 and 11), anthropomorphs in similar postures to those of pair n.º 4 (Figure 13), demarcating domain by the arms and/or head of the antagonist in suspension. However, whether in the archaeological literature or in field research at the SCNP, only this scene was identified (Figure 12) with mixed motor actions, which also does not exclude the possibility that there are others in the SCNP and have not yet been found. Additionally, it should be noted that the site “Toca do Nilson do Boqueirao da Pedra Solta” was registered by Niede Guidon in 1979<sup>19</sup>.

19 Record of Toca do Nilson do Boqueirao da Pedra Solta archaeological site. National Registry of Archaeological Sites (CNSA). Available at: < [http://portal.iphan.gov.br/sgpa/cnsa\\_detalhes.php?7224](http://portal.iphan.gov.br/sgpa/cnsa_detalhes.php?7224)>. Accessed on 10th Aug. 2017.



Fig. 12

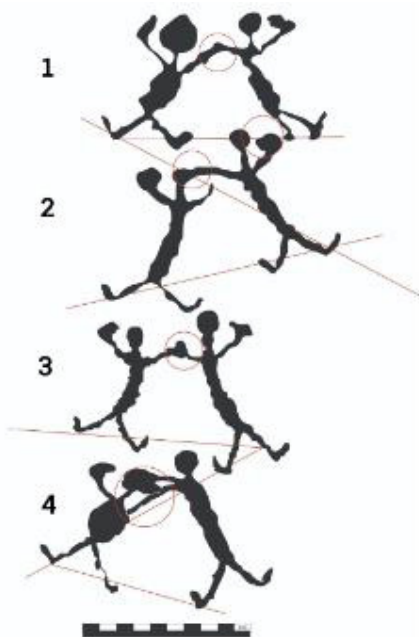


Fig. 13

**Figures 12-13.** Fight scene detail at Toca do Nilson Archaeological Site in Boqueirao da Pedra Solta (Figure 12) and vectorization (Figure 13). Source: Author 2015 (Note: 20% increased brightness and 30% increased contrast in Word 2013 – Microsoft Office). Vectorization: Luciano de Souza Silva.

## Discussion

The fight scenes at the Toca da Extrema 2 (Figure 8) and Toca do Joao Arsena (Figure 11) sites seem to be a guide for inferences from this graphic pattern [Paiva 2018] as they refer to the broader scene of collective

antagonism. That is, maybe painted on purpose to differentiate themselves from others that could confuse communication, like a dance. Thus, Pessis [2013: 168] states that, “the presentation system, from a graphic point of view, evolves very slowly in relation to the meanings”. Around the pair fighting hand-to-hand (without artefact/“weapons”) (Figures 8 and 11), there are other anthropomorphs with a wealth of feather adornments (Diadem? /Headdress?), carrying some objects (warlike and non-warlike) and throwing others (e.g., by propellers) (see Figures 7 and 10). In these two scenes, some figures are represented as being hit by the objects. On another spectrum, it should be noted that in practice during a real hand-to-hand fight, the posture represented there is little martially effective, suspending the opponent by the arms or head. However, it is noteworthy that the (de)coding of these representations with their respective meanings belong to authors in a very distant period and are no longer accessible.

However, another fertile environment for possible inferences about these paintings can be reached by ethnoarchaeology, that is, by articulating archaeological and ethnographic data. However, how to exercise abstraction in this area for rupestrian paintings in the SCNP, since in addition to such a remote period, there are no more settlements of indigenous peoples in the region?

A possible answer to this question can be proposed by the conversation with Professor Dr. Niede Guidon in 2015, when she gave an interview revealing her memories of a chance event, which occurred when a group of Upper Xingu indigenous was invited to the SCNP for “festivals” of the “discovery” of Brazil:

(...) when it was the celebration of the 500<sup>th</sup> anniversary of the discovery of Brazil, Fernando Henrique came here and the 500th anniversary ceremony was opened here. (...) So, I invited an indigenous tribe to come and participate. I thought the Indians should be present. (...) They came, they did a dance, a performance at the ceremonial. Following the whole ceremony, when Fernando Henrique left, I took them to see the paintings. When they arrived (...) and saw those representations of human beings, side by side, they all got into the same position and started dancing and singing. (...) It means something, do you understand? They saw that scene which we call “ceremonial scene” and they started doing that, you know? (Guidon, 2015, 23:22 min)

It appears from this account by Guidon, that a kind of “trigger” occurred when observing the rupestrian vestiges. According to Mithen [2002] in *The Prehistory of the Mind*, this “trigger” can be best explained as a “mnemonic device”. This device would act as a symbol that carries a set of information. Thus, whoever perceives this graphic code, can immediately understand what information is intended in this image and reproduce the act that is being represented. The symbol, when viewed, would

refer to a series of ideas beyond what is being seen, or better, visually represented. It carries a symbolic content that raises a broader content, beyond that represented figure. In other words, a kind of “memory of the world”, used as a “mental map of the surrounding environment”, facilitating the “search for information about the environment and **human** and animal behavior” [Mithen 2002: 276, emphasis added].

Notwithstanding, other researchers explored the rock records in the SCNP later, comparing them with indigenous ethnological iconography, when possible. Morales Junior [2002] identified anthropomorphs in the SCNP using masks similar to those used by some Upper Xingu peoples in spiritual rituals. Furthermore, it is worth noting that Buco [2012] presented relational inferences, among other groups, similarly, citing Upper Xingu. In addition, two events in 2018 stand out. The first was the record of participation of an Upper Xingu native in a documentary series (“O Espirito da Luta”, 2020) filmed at the SCNP. This freely referenced his apprehensions about the rupestrian paintings, while transiting through the sites. The second was the visualization by other Upper Xingu people ( $n = 10$ ) – the same ethnic group as the previous one – of photographic records of the sites he visited. These events raised a new question: would Guidon’s account correspond to something isolated, or could the “mnemonic device” operate again?

The details of these events were discussed by Paiva [2021], reaching two main conclusive results: a) some scenes inferred by several researchers as “war” or “collective violence” (Figures 6 and 9) mostly presented “mnemonic device” as ritual (game) of throwing darts with propellers<sup>20</sup>; b) the fight scene at “Toca do Nilson do Boqueirao da Pedra Solta” site, for most of the indigenous people, was related to Huka-Huka<sup>21</sup>. Promptly, a relevant observation is that not only that group of Upper Xingu people, in 2000, could identify and even trigger body practices through the “mnemonic device”, associating them with their memories. It was not an isolated phenomenon.

<sup>20</sup> This does not exclude the possibility that, in a remote period of precolonial history, their engagement was more closely related to “collective violence” or “war”, rather than “game”.

<sup>21</sup> A peculiar fight practice that is a symbol of the culture and *ethos* of the people from Upper Xingu [Mocarzel, Columa 2020]. Although their predominant motor actions are of domain or grasp, in the ethnography carried out in Upper Xingu [Paiva 2021], the existence of only one valid percussion technique was perceived (similar to a “slap on the face”). Thus, the “mnemonic device” could operate, encompassing this specificity, given the graphic representation of the pair of anthropomorphs No. 2 (Figure 13). Furthermore, the vectorization of this vestige indicated four distinct pairs fighting, concomitantly. In the interethnic fights in that region, after the main combats, collective fights occur with (up to more than) four pairs in confrontation, simultaneously.

Nevertheless, bearing in mind the inferences presented by the researchers *versus* the apprehension from indigenous people, after all, could we conform these scenes as “physical unarmed struggle” or “war”/ “collective violence”? Without access to the codes of those past groups, this will remain an open question forever. However, from the graphic pattern of a body fight without the use of artifacts/“weapons” (Figures 8, 11 and 12), it can be inferred, at least for didactic purpose - with no pretension of presenting a hasty conclusion - that the fight scene at Toca da Fumaca 1 site (Figure 4) cannot be classified as “collective violence”/“war”. Furthermore, there are only two figures fighting. These could not be associated (at the current stage of research) with the other scenes (and figures) from the same site. In another focus, although the figures with motor actions of domain (or grasp) of the fight scene at Toca do Nilson site of Boqueirao da Pedra Solta (Figure 12) indicate a graphic pattern similar to those of other sites (Figures 4, 8 and 11), the anthropomorphs do not carry artifact/ “weapons”. If we consider the broad scene, observing the vectorized detailing of the others with collective pattern (Figures 7 and 10), the graphic pattern does not correspond to that observed by the vectorization of this site (Figure 13). The Extrema 2 and Joao Arsenia sites are pointed out by several researchers as “collective violence” or “war”. As previously mentioned, by the indigenous people, it was associated with the Upper Xingu game of throwing darts with propellers – also an activity of collective effort. In return, if for the “etic” and for the “emic” there are no doubts about the inferred collectivity of these paintings; on the other hand, at least for the latter, the mnemonic device indicates something else. They awaken to rituals that are distinctive from the one evoked by the fight scene at Toca do Nilson site in Boqueirao da Pedra Solta. Therefore, although visually collective, they associated it to individual physical unarmed struggle that, at a given moment of the ritual, occur simultaneously.

## Conclusions

It is not possible, in such a remote period and with the absence of references (codes) of groups that made these paintings, to decode these records in a capital way, taxing them absolutely as “game<sup>22</sup> (playful?)” (And even as “war”). These are hypotheses based on reflections arising from uninterrupted archaeological research in the region, accomplished for nearly fifty years [Paiva 2017, 2019]. However, this does not prevent inferences from being presented, considering the literature and anthropological fieldwork, as well as insights into the archaeological area.

<sup>22</sup> Although the issue of intensity is not discarded, which is often latent, certainly, there is no violence with a deadly purpose.



Furthermore, the temptation – at first – to proceed with ethno-archaeology based on direct analogy was suppressed as new theoretical keys allowed us to analyze what the indigenous people understood from these paintings, starting from their own cosmology and *ethos*. Due to the earlier period that these figures were made and the fact that the current indigenous populations do not carry out such paintings in the same way, it is noted that any approximations through direct analogy were fully disregarded. Thus, there was no intention to present evidence about an alleged objective relationship between the rupestrian manifestations of fights, located in the SCNP, with the body techniques practiced by some of the indigenous peoples nowadays. On the other hand, if the trigger activated by the “mnemonic device” cannot obtain the codes used by the ancestral groups that painted them; in another measure, it was possible to reflect on the recurrence of the phenomenon that allows some of the Upper Xingu people to understand (and interact) with those records in their own way.

## References

1. “O Espirito da Luta” (2020), *Arqueologia da luta*, serie 2, Academia de Filmes/Combate, 2020 [in Portuguese].
2. Barreto C. (1999), *A construcao de um passado pre-colonial: uma breve historia da arqueologia no Brasil*, “Revista usp”, no. 44, pp. 32-51 [in Portuguese].
3. Bastos S. (2010), *O Paraíso e no Piauí: a descoberta da arqueóloga Niede Guidon*, Editora Familia Bastos, Sao Paulo [in Portuguese].
4. Booth D. (2011), *Historia do esporte: abordagens em mutacao*, “Recorde: Revista de Historia do Esporte”, vol. 4, no. 1 [in Portuguese]. Available at: <https://revistas.ufrj.br/index.php/Recorde/article/view/723/666> (Accessed: September 20, 2021).
5. Buco C. (2012), *Arqueologia do movimento: Relacoes entre Arte Rupestre, Arqueologia e Meio Ambiente, da Pre-historia aos dias atuais, no Vale da Serra Branca* (Parque Nacional Serra da Capivara, Piauí, Brasil), PhD thesis, Universidade de Tras-os-Montes e Alto Douro, Vila Real [in Portuguese].
6. Caillois R. (1990), *Os Jogos e os Homens*, Edicoes Cotovia, Lisboa [in Portuguese].
7. Cardoso C.F., Vainsfas R. [eds.] (2012), *Novos dominios da historia*, Elsevier, Rio de Janeiro [in Portuguese].
8. Del Priore M., Melo V.A. [eds.] (2009), *Historia do esporte no Brasil*, Unesp, Sao Paulo [in Portuguese].
9. Etchevarne C. (2009), *As particularidades das expressoes graficas rupestres da Tradicao Nordeste, em Morro do Chapéu, Bahia*, “Revista Clio-Arqueologica”, vol. 24, no. 1, pp. 41-60 [in Portuguese].
10. Etchevarne C. (2007), *Escrito na pedra: cor, forma e movimento nos grafismos rupestres da Bahia*, Organizacao Odebrecht, Rio de Janeiro [in Portuguese].
11. Fumdham. A Fundacao, Available at: <http://fumdham.org.br/fumdham/> [in Portuguese]. (Accessed: July 30, 2017).
12. Funari P. A. (2013), *Arqueologia no Brasil e no mundo: origens, problematicas e tendencias*, “Ciencia e Cultura”, vol. 65, no. 2, pp. 23-25 [in Portuguese]. Available at: <https://dx.doi.org/10.21800/S0009-67252013000200010> (Accessed: September 20, 2021).
13. Guidon N. (1979), *As pinturas rupestres do Piauí*, “O Estado de Sao Paulo – Suplemento Cultural”, year III, no. 147, pp. 9-11 [in Portuguese].
14. Guidon N. (1984), *As primeiras ocupacoes humanas da area Arqueologica de Sao Raimundo Nonato – Piauí*, “Revista de Arqueologia – Sociedade de Arqueologia Brasileira (SAB)”, vol. 2, no. 1, pp. 38-46 [in Portuguese].
15. Guidon N. (2015), *Interview* [out. 2015]. Interviewer: Leandro Augusto Paiva dos Santos. Sao Raimundo Nonato, 2015. One .mp3 file (24 min) with transcript [in Portuguese].
16. Guidon N. (1981), *Tradicoes e estilos da arte rupestre no sudeste do Piauí* [in:] Museu de Historia Nacional, *Catalogo da Exposicao Pre-Historia Brasileira*, Universidade Federal de Minas Gerais, Belo Horizonte, pp. 19-20 [in Portuguese].
17. Harris M. (1976), *History and significance of the emic/etic distinction*, “Annual Review of Anthropology”, vol. 5, no. 1, pp. 329-350.
18. Heckenberger M. (2001), *Estrutura, Historia e Transformacao: a cultura xinguana na longue duree, 1000-2000 d.C.* [in:] M. Heckenberger, B. Franchetto [eds.], *Os Povos do Alto Xingu: Historia e Cultura*, Editora da UFRJ, Rio de Janeiro, pp. 21-62 [in Portuguese].
19. Huizinga J. (1999), *Homo ludens: o jogo como elemento da cultura*, Sao Paulo, Perspectiva [in Portuguese].
20. Justamand M. (2007), *O Brasil desconhecido: As pinturas rupestres de Sao Raimundo Nonato – Piauí*. Doctoral thesis, Pontificia Universidade Catolica, Sao Paulo [in Portuguese].
21. Martin G. (2005), *Pre-historia do Nordeste do Brasil*, Editora Universitaria da UFPE, Recife [in Portuguese].
22. Melo V.A., Fortes R. (2010), *Historia do Esporte: panorama e perspectivas*, “Fronteiras”, vol. 12, no. 22, pp. 11-35 [in Portuguese]. Available at: <https://ojs.ufgd.edu.br/index.php/FRONTEIRAS/article/view/1180/724> (Accessed: September 20, 2021).
23. Mithen S. (2002), *A Pre-historia da mente: uma busca das origens da arte, da religiao e da ciencia*, Editora Unesp, Sao Paulo [in Portuguese].
24. Mocarzel R.C.S., Columa J.F. (2020), *Lutas e Artes Marciais: aspectos educacionais, sociais e ludicos*, OMP, Manaus [in Portuguese].
25. Morales Junior R. (2002), *The Nordeste Tradition: Innovation and Continuity in Brazilian Rock Art*, Doctoral thesis, Virginia Commonwealth University, Richmond.
26. Paiva L. (2021), *Joetyk: uma Antropologia da luta corporal alto-tinguana*, Masters dissertation, Universidade Federal do Amazonas, Manaus.
27. Paiva L. (2019), *Lutas na Pre-Historia: Ensaio Antropologico e Historico*, Alexa Cultural/EDUA, Sao Paulo [in Portuguese].
28. Paiva L. (2018), *Padroes graficos nos registros de lutas corporais na Pre-Historia do Brasil* [in:] *Anais do 5º Encontro*

- Nacional de Artes Marciais e Esportes de Combate (ENAM- MEC)*, PROPESP/UFGA, Belem, vol. 1, pp. 1-35 [in Portuguese].
29. Paiva L., Silva L. (2016), *Vestigios ancestrais de lutas no Brasil: existiu "MMA" na Pre-Historia?* [in:] *II Simposio Nacional de Lutas, Artes Marciais e Modalidades de Combate*, UFRJ, Rio de Janeiro [in Portuguese].
  30. Paiva L. (2017), *Vestigios rupestres de lutas no sudeste do Piaui: producao e difusao cientifica (1970-2016). Graduation monograph*, Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro [in Portuguese].
  31. Pessis A.M., Cisneiros D., Mutzenberg D. (2018), *Identidades Graficas nos Registros Rupestres do Parque Nacional Serra da Capivara*, "FUMDHAMentos", vol. XV, no. 2, pp. 33-54 [in Portuguese].
  32. Pessis A. (2003), *Imagens da Pre-Historia*, FUMDHAM, Sao Raimundo Nonato [in Portuguese].
  33. Pessis A. (2013), *Imagens da Pre-Historia: os biomas e as sociedades humanas no Parque Nacional Serra da Capivara*, FUMDHAM, Sao Raimundo Nonato [in Portuguese].
  34. Pessis A., Guidon N. (1992), *Registros rupestres e caracterizacao das etnias pre-historicas* [in:] L. Vidal [ed.], *Grafismo Indigena: estudos de antropologia estetica*, Studio Nobel, Sao Paulo, pp. 19-33 [in Portuguese].
  35. Pessis A. (1994), *Registros rupestres: perfil grafico e grupo social*, "Revista de Arqueologia – Sociedade de Arqueologia Brasileira (SAB)", vol. 8, no. 1, pp. 283-289 [in Portuguese].
  36. Prous A. (1991), *Arqueologia brasileira*, Editora Universidade de Brasilia, Brasilia [in Portuguese].
  37. Silva L. (2012), *Padroes de apresentacao das cenas coletivas de violencia humana nas pinturas rupestres pre-historicas da area arqueologica do Parque Nacional Serra da Capivara – PI*. Masters dissertation, Universidade Federal de Pernambuco, Recife [in Portuguese].
  38. Souza L. (2009), *Caracterizacao das cenas de guerra da subtradicao varzea grande na area arqueologica da Serra da Capivara – PI. Graduation monograph*, Universidade Federal do Vale do Sao Francisco, Petrolina [in Portuguese].
  39. Tubino M. (2017), *O que e esporte*, Brasiliense, Sao Paulo [in Portuguese].
  40. Vamplew W. (2013), *Historia do esporte no cenario internacional: visao geral*, "Revista tempo", vol. 19, no. 34 [in Portuguese]. Available at: <https://www.scielo.br/j/tem/a/yRB9r8rf3PcSpfSp4s7Jkkw/abstract/?lang=pt> (Accessed: September 20, 2021).
  41. Vidal L. (1992), *Grafismo Indigena*, Studio Nobel, Sao Paulo [in Portuguese].

## Sztuka naskalna opisujaca walki w Parku Narodowym Serra da Capivara (Brazylia)

**Słowa kluczowe:** archeologia, walki, historia sportu, grawrunek naskalny, Park Narodowy Serra da Capivara, Brazylia

### Abstrakt

Tło. W Ameryce Południowej bardzo niewiele mówi się o historii sportu i praktyk ciała przed okresem kolonizacji europejskiej (od 1500 r. n.e.), a jedną z najważniejszych dziedzin w odkrywaniu starożytnej historii (w tym historii sportu) jest archeologia. W Brazylii jednym z najbardziej odpowiednich i bogato zachowanych miejsc do badania jest Park Narodowy Serra da Capivara (SCNP), który ma ponad 900 zarejestrowanych stanowisk archeologicznych. Jego malowidła naskalne rejestrują aktywność ciała przodków, w tym walki. Problem i cel. Co pokazuje i reprezentuje sztuka naskalna na temat walk? Czy może to reprezentować kulturę manualnych praktyk walki wśród starożytnych tubylców tego regionu? Ogólnym celem niniejszego badania jest analiza i identyfikacja scen, które przenikają praktyki walki w zapisach wygrawerowanych na skałach SCNP.

Metody. Jest to badanie archeologiczne z wkroczeniem na pole archeologiczne (*in loco*) w formacie eksploracyjnym przy użyciu metody ikonograficznej i wniosków od rdzennych mieszkańców terytorium Brazylii.

Wyniki. Zaobserwowano, że niektóre obrazy przedstawiają walki indywidualne, inne zbiorowe i mogą odnosić się do profilu mityczno-rytualnego. W tym kierunku raporty tubylców wskazują na możliwe podstawowe praktyki walk cielesnych nadal praktykowane przez rdzennych mieszkańców Brazylii. Wnioski. Obrazy zostały zidentyfikowane jako walki indywidualne i zbiorowe, a dzięki narracjom lokalnych mieszkańców wywnioskowano, że praktyki walk cielesnych są konstytutywnymi elementami kulturowymi kilku grup autochtonicznych, od najwcześniejszego okresu historii. Jednak niekoniecznie należą one do tych samych grup, które nadal praktykują te walki na terytorium Brazylii.