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SAMBAQUIS THE BRAZILIAN SHELL MOUNDS: WHAT IS THAT ALL ABOUT?

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Abstract: Brazilian sambaquis, as other shell mounds all around the world, are prehistoric sites that represent extraordinary strategies of coastal adaptation. They are intentionally build and preserve cultural as well as biological remains. Thousands of burials offer precious material for bioarchaeological investigation. Differences in cultural and environmental conditions along 6,000 years, as well as a peculiar geographical distribution along the southeastern coast of Brazil, make these sites interesting subjects to investigate adaptability and health. Their disappearance was about 1,300 years before present. Their possible contact with ceramists and other people are still to be explained.

Key words: Sambaqui, shell mound, Brazil, coastal adaptation, funerary monuments

Resumé: Les sambaquis brésiliens, comme d’autres amas coquilles du monde, sont parmi les groupes prehistoriques du Brésil qui signalent le développement d’une stratégie extraordinaire d’adaptation au litoral. Sa construction fut intentionnel et c’est possible y rencontrer des vestiges culturels ainsi que biologiques. Les milliers de sépultures préservées aux sambaquis sont une source assez importante pour la recherche bio-archéologique. La distribution géographiquepeculaire, au long du litoral sud et sud-est, ainsi que les changements culturels et d’environnement pendant 6,000 d’années, faisaient les sambaquis très intéressants pour les investigations sur la santé et l’adaptabilité. Sa disparition à l’environ 1300 ans BP et la possibilité du contact aux groupes ceramistes sont encore sujets qui restent à expliquer.

Mots clés: Sambaqui, amas de coquilles, Brésil, adptation au litoral, monument funéraire

The symposium BIOARCHAEOLOGY AT THE MIDST OF SHELLS was proposed to discuss similarities and differences between the shell mounds in Portugal and Brazil. To help the participants discussing the proposed theme the organizers decided to add brief comments to the oral presentation presenting the state of art on the archaeology of the marine and riverside shell mounds. This paper reports the archaeology of the Brazilian marine sambaquis, emphasizing the interest in recovering and analyzing more bioarchaeological data about the people who built those mounds.

Sambaqui is the local name for Brazilian shell mounds, a very common type of prehistoric site. Similar to other ones that are found all around the world, they are also burial places. Preserving human skeletons, the sambaquis are extraordinary windows that let us know more about lifestyle and health in the past. In Brazil the sambaquis does exist especially along the southeastern coast, as an expression of a new economic strategy of intense exploitation of the environments close to the estuaries, lagoons, mangroves and sea. The biggest marine sambaquis are found in Santa Catarina State, but others of smaller sizes are also found in Rio de Janeiro, São Paulo, Paraná and Espírito Santo States, where more than one thousand of them have already been registered. Most of them have been destroyed before any research. About 5% of them were minimally excavated and less than 1% provided human remains for scientific studies.

These sites are composed by layers of mollusk shells, fish bones and other faunal remains charcoal, polished as well as flaked lithic instruments as axes, grinding stones, arrow points among others. Archeological structures such as hearths and burials with different types of funerary offerings are also found (Prous, 1992; Figuti, 1993; Gaspar, 2000; Gaspar et al., 2008). Although excavated for more than one hundred years, there is no consensus among scholars about them and classifications are based in different criteria such as morphology, geographical location, shell composition, etc. Zoo liths, beautiful polished stone sculptures representing animals are found in some of them (Prous, 1992). Ceramics is present in a small number of sites, grouped in the same area. The interpretation of sambaqui has changed through time. First they were viewed as midden left over by small mollusk eating nomadic bands. Today they are seen as monumental constructions intentionally built as landmarks by sedentary fisher groups (DeBlasis XXX, Figuti, XXX, DeMasi, XXX).

Despite temporal and regional variation, there are unifying factors among the sambaquis that allow to try to interpret them as a “cultural unit”, as proposed by Gaspar (1994/1995). Eating, feasting, working, burying the dead and daily activities were carried out at the same sopot. Differences among the sites are not necessary because of cultural differences but they may express adaptability along the coast, changing economy, feeding habits and
even the use of certain artifacts, as strongly suggested by
the variability even inside the same site.

Today the *sambaquis* are recognized as the expression of intentional accumulation of shells and soil to build platforms. In Brazil these territorial marks can reach 30m high and 400m length (Fig. 8.1). Such a building effort certainly required a big amount of energy, a lot of social organization. Big groups and long periods of continuous occupation occurred in some sites. There are hundreds of burials in the biggest *sambaquis*. Most of the *sambaquis* are grouped in coastal areas signaling to the areas rich in natural resources and fresh water supply, but also to some kind of social articulation. Archaeological remains proved that fishing, collecting shellfish/plants and chasing terrestrial and marine animals were the main economic activities. Low mobility, abundance of resources, bigger groups, some social complexity and possible social interaction between sites is supposed to have occurred (Lima, 1999-2000). Ideological, aesthetic and religious development is inferred from the burials.

Coastal environment provides good and abundant proteins for food. The Atlantic forest and the restingas provide fruits and other starch sources. The existence of predictable natural resources along the coast was a positive factor to explain the success of *sambaqui* lifestyle. Sharing simple and efficient artifacts made of mammal and shark teeth, fish and mammal bones, shells, simple flaked rock crystals and pebble stones, the well succeeded *sambaquis* expanded in time and space. Amazing polished stone artifacts (Fig. 8.2) in the graves point to cultural variability along the coast. As of now, about 1,600 skeletons were recovered in 60 different Brazilian sites. One of the biggest questions for bioarchaeologists today is if they are able to elucidate the unity and diversity of that people. For many decades questions about the biological characteristics of the *sambaqui* people have been asked (Alvim, 1978). New answers to ancient questions come from the studies on paleopathology, paleodiet, paleodemography.

Geographical distribution of the *sambaquis* and their temporal persistence (8,000 to 1,300 BP). Brazilian sites distinguish from sites in other parts of the world, this richness points to a well succeeded strategy in tropical environments. At the same time it helps to explain variability in culture and biological cost of each lifestyles.
These characteristics are guidelines to discuss paleoepidemiological models for *sambaquis*. Their adaptability was proved by the ability to explore different ecotones along the productive and predictable coastal waters, resulting in the intense exploration of the mangroves, beaches, shallow water lagoons, rocky coastal reefs, sandy plains and estuarine areas as fishing-hunting-collecting fields.

Holocene *sambaqui* lifestyle had the climax between 5,000 and 3,000 y.b.p. The consequences of the contact with other prehistoric people is not clear, in special the ceramists that arrived at the coast 800 to 1,300 years before present (Gaspar, 1994-1995). When the villages of the Itararé tradition and the Tupi and Guarani finally dominated the coast, *sambaqui* people was not there any more. For some authors, lifestyle based on the water born resources was simply adapted to include domestication of plants like manioc, maize and yams. The systematic use of seasonal natural carbohydrate provided by seasonal sources such as Brazilian pine could happen along with the water protein intake in coastal environments. New data on paleonutrition may help to elucidate this hypothesis in the next future (Weslowski et al., 2007). A great number of coastal sites are not characteristic *sambaquis* but share common artifacts and economic characteristics, suggesting that changes and diversity may have just been adaptive. Village settlements with or without ceramics can be found especially along the last millennia in the areas where *sambaquis* were dominant 4,000 or more years before. Comparative studies of groups living in true *sambaquis* and other sites will possibly help to elucidate their possible biological relationships.

Concerning our present research, some questions are in the base of the bioarchaeology of the *sambaquis*: Were all the *sambaqui* groups similar? What was the biologic impact o their cultural differences? What was the impact of their lifestyles in health? Were they really well adapted as supposed? Which were their biological relationships to other prehistoric people?
Referências bibliográficas


