INTEGRATING COMMUNITIES FROM THE PERSPECTIVE OF CONTINUOUS ARCHAEOLOGY:

A CASE STUDY OF RIO DE JANEIRO, BRAZIL

Integrando a las comunidades desde una perspectiva de arqueología continua: un estudio de caso de Rio de Janeiro, Brasil

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ABSTRACT

Archaeological research done in the port region of Rio de Janeiro has revealed the presence of a complex and well-preserved juxtaposing of building structures in the city's underground. Dated since the 16th century, when Rio de Janeiro became the center of political occupation for the Portuguese Crown, these remains are representative of colonial and post-colonial Brazilian history.

The port region of Rio de Janeiro is currently undergoing intense urban remodeling with a large volume of ongoing engineering work. At the same time, in 2012 Rio de Janeiro became the first city in the world to receive UNESCO's title of World Heritage as an Urban Cultural Landscape.

It is important to remember the specificity of Brazil's situation. Since a national society was formed greatly through a drastic separation between indigenous occupations and the European element, later enriched by African and other cultures, the current community often does not recognize its ties to the archaeological (and even historical) context. As a result, studies must not only reveal aspects connected to the country's past, but also include historical and cultural aspects of the current communities to ensure that the work incorporates the way in which each social group relates to heritage and what each group observes and recognizes as being heritage.

Among the great variety of social groups involved in this Program, we will highlight the African-descendant community since the research is being done

in archeological sites that corresponds to the largest necropolis of African slaves in Latin America. Therefore, the Program deal with dramatic events that still occupy a special place in the living history of current communities, requiring the development of procedures considering the strong cultural and social sensitivity of the African-descendant groups present in this area.

This exposition aims to analyze researches developed from the perspective of Continuous Archaeology, integrating communities with their past and expand their cultural identity. This exposition will also analyze the results obtained in the sustainable management of cultural heritage in search of an archaeology of the present. In light of this, the approach needs to be plural in its essence, once the past encompasses a great variety and complexity of possible messages, including a scientific one.

Key words: Continuous Archaeology, Rio de Janeiro, Brazil, port community, African descendant.

RESUMEN

Investigaciones arqueológicas en la región del puerto de Río de Janeiro han revelado la presencia de un complejo muy bien conservado que yuxtapone construcciones en subterráneo de la ciudad. Fechada desde el siglo XVI, cuando Río de Janeiro se convirtió en el centro de la ocupación política de la corona portuguesa, estos restos son representativos de la historia de Brasil colonial y post-colonial. La región del puerto de Río de Janeiro está actualmente en remodelación urbana intensa con un volumen grande de labor de ingeniería. Al mismo tiempo, de 2012 en Río de Janeiro se convirtió en la primera ciudad del mundo para recibir el título de la UNESCO Patrimonio Mundial como un paisaje Cultural urbano.

Es importante recordar la especificidad de la situación de Brasil. Puesto que una sociedad nacional se formó en gran medida a través de una drástica separación entre ocupaciones indígenas y el elemento europeo, enriquecida más tarde por África y otras culturas, la comunidad actual a menudo no reconoce sus vínculos con el contexto arqueológico (e incluso histórico). Como resultado, estudios deben no sólo revelar aspectos relacionados con el pasado del país, sino también incluir aspectos históricos y culturales de las comunidades actuales para asegurar que el trabajo incorpora la manera cómo cada grupo social se refiere al patrimonio y lo que cada grupo observa y reconoce como patrimonio.

Entre la gran variedad de grupos sociales involucrados en este programa, destacamos la afrodescendiente comunidad puesto que se están realizando las investigaciones en sitios arqueológicos que se corresponde con la necrópolis más grande de África esclavos de América inLatin. Por lo tanto, el acuerdo del programa con acontecimientos dramáticos que siguen ocupando un lugar especial en la historia de

vida de las comunidades actuales, que requieren el desarrollo de los procedimientos teniendo en cuenta la fuerte sensibilidad social y cultural de grupos de descendientes de africano presentes en esta área.

Esta exposición pretende analizar investigaciones desarrolladas desde la perspectiva de la arqueología continua, integración de las comunidades con su pasado y expandir su identidad cultural. Esta exposición también analizará los resultados obtenidos en la gestión sostenible del patrimonio cultural en busca de una arqueología del presente. En vista de ello, el enfoque debe ser plural en su esencia, ya que pasado abarca una gran variedad y complejidad de los mensajes posibles, incluyendo los científicos.

Palabras clave: Arqueología continua, Rio de Janeiro, Brasil, comunidad portuaria, afrodescendientes

1. CONTEXT

The process of historical and cultural awareness in Brazil is recent once it is connected to the legislation and social movements, which arose in the nineteen eighties with the implementation of the National Environmental Policy. This Policy regulated the environmental obligations and cares necessary to the implementation of a great number of developmental works which occurred in the country during its accelerated growth process. In addition to these environmental studies, the law includes the obligation of performing studies connected to archaeological, historical, and cultural heritage. Brazilian legislation grants this heritage the status of a Good belonging to the Union and its destruction is considered a crime against the Nation.

The environmental licensing of works includes the development of actions that guarantee the communities' involvement through public hearings to ensure the open debate of projects, their environmental impacts, the control measures, and risk analysis. Society's participation in these processes has incurred in several movements aimed at environmental management. In line with this environmental fight, society's questioning about their right over themselves – in other words, over their cultural and historical heritage – has grown considerably.

It is important to remember the specificity of Brazil's situation. Since a national society was formed greatly through a drastic separation between indigenous occupations and the European element, later enriched by African culture, the current community often does not recognize its ties to the archaeological context. This becomes more severe due to the fact that the construction of Brazilian History was traditionally made from the perspective of a dominant intellectual class and therefore the general population does not recognize it as being "their history". School curricula also do not include an effective history of minorities, despite their essential role in the formation and development of national society.

On the other hand, there are today in Brazil around 250 indigenous ethnicities distributed over approximately 400 pieces of land delimited by the government and where the majority of their current population inhabits. The country also has hundreds of "quilombos", territories which are also defined by the government and where the descendants of African peoples live. There are also a great number of traditional communities who are protected by legislation and include groups with local lifestyles, adapted to specific environments and with their own management dynamics.

As a result, a new area of action was created for Archaeology, where studies must not only reveal aspects connected to the country's past, but also include historical and cultural aspects of the current communities. In fact, the results of researches started to be analyzed and criticized by a greater number of participants because they are used, among other things, as means for civil engagement.

The community, therefore, is a partner and integrating part in the research projects whose main goal is the construction of a critical history produced together with the interested parties with the intention of valuing and promoting their cultural diversity.

In order for this to be possible, we follow the recommendation of guiding principles from UNESCO conventions regarding heritage and the involvement of the people in the care and preservation of their own cultural goods for the establishment of a culturally plural society. In practical terms this demands researchers who are aimed at integrating research, management of cultural goods, and the social groups involved so as to contribute to the strengthening of the existing ties between society, the past, and the present widening the interest in heritage and creating in parallel the necessary support for the preservation activities. Thus, beyond the practices, which are inherent to scientific research, researchers' social roles guide them to perform actions that include an understanding of the present seen as continuous history, and of the future.

In order for this to be real and effective, heritage must be seen and incorporated as a composing element of societies with acknowledged functions as vectors of their development and of collective well-being. Thus, the integration of the communities present in the region is indispensable to ensure that the work incorporates the way in which each social group relates to heritage and what each group observes and recognizes as being heritage.

From this approach, Archaeology contributes to society's search for discovering its relationship to the past, which involves several dimensions that frequently reflect broader social tensions and dynamics. These dimensions include procedures of identification, recovery, or oblivion of historical and cultural landmarks present in the region and which depend on local populations supported by public and private initiatives in order to stay alive.

It is precisely due to the fact that different cultures relate in different ways to memory and with the criteria that establish their paths to the construction of historical narratives (as the indigenous people) that efforts need to be directed so that the acknowledgement of heritage answers the specific and culturally defined regimes of preservation, memory, and historicity.

Finally, Brazilian society's current formation took place over the last 200 years in the majority of the country making it necessary for research to deal with a recent past. In this context we can find deep processes of destruction and rupture, as is the case of indigenous and other minority groups' history, including the disappearance of material universes and large remodeling of occupation territories as a result of colonization, urbanization, and industrialization. These events have led to changes in the identities of several traditional communities impacting the transmission of their cultural heritage. Therefore, research programs frequently deal with dramatic events that still occupy a special place in the living history of current communities, requiring the development of program lines and research procedures capable of boosting sustainable actions not only from the social and cultural point of view, but also from an economical and political standpoint.

The examples from the research programs in Archaeological and Cultural Heritage resented below have as their main directive the development of an Applied Science that allies the accomplishment of scientific research with the symmetrical involvement of local communities leading to an integrated treatment of scientific results and traditional knowledge and establishing a complementary relationship between Science and Tradition. In light of this, the approach needs to be plural in its essence, once the past encompasses a great variety and complexity of possible messages, including a scientific one.

2. STRATEGIC RESEARCH DESIGN

In order to accomplish the proposals indicated above we have elaborated a project design that aims to conduct studies on archaeological and cultural heritage integrated to the existing social challenges and contexts. This strategic research design is based on a group of concepts and guidelines that we will mention below in a synthetic way since they integrate diverse theoretical lines of thought that have been widely discussed by the specialized literature.

The concept of cultural environment represents the entry point of this project design due to a number of reasons. Firstly, conceptually speaking, cultural environment is the sum of the environment in its physical constitution and the cultural landscapes built by the different human groups that developed in the region throughout time in a long duration process. Therefore, they reflect the sum of intangible actives (traditional knowledge and practices from the communities that live and lived there) and their tangible results (from millenary archaeological sites to environmental management, historical buildings, among others). All

research projects that have the intention of creating sustainable management, preservation, and Cultural Heritage actions must consider the preservation of the physical environment since the traditional ways of living are integrated and adapt to the specific environments and through their own management dynamics.

Alternatively, in the specific case of Brazil, where communities frequently do not recognize the indigenous past as being their own, the Cultural Environment perspective offers an integrating tool for human experiences and makes the dialogue more fluid. Thus, we work from the perspective of Continuous Archaeology, including the acknowledgement of archaeological or historical ways of managing the environment as models to be considered in the search for sustainable procedures in the present and the future.

The valuing of local cultures is another of the fundamental elements of this Project Design, which is based on the construction of an engaged social network formed by civil society, local governments, and companies. Its aim is to produce knowledge and value other forms of knowledge that seem distant from the scientific universe. The attempt is to aggregate and value forms of knowledge that seem separated from the scientific universe. We include in this the integration of what is known as the citizen-scientist into the work teams. These citizen-scientists are all of those who posses aggregating knowledge as well as those who are involved in the management and preservation of this history. As we intend to present in more detail below, this perspective allows for a decrease of the large social distances that characterized Brazilian society. This is done through the valuing of the culture of the individual, the group, and the community and therefore strengthening their identities.

Two other important concepts also compose the basic context in which cultural sustainability is assessed in this project design: the principle of consilience and the principle of resilience. While consilience is the interdisciplinary unification of different knowledge and information bases for the creation of a unified marker for understanding of the studied realities, resilience related to a certain community's capacity of accumulating external cultural forms and integrating them without losing their original sense of unity or social cohesion. All communities, in larger or smaller scale, are subject to homogenizing economic and social pressures that are the result of globalization movements and require constant adaptations and reinterpretations that provoke a particular perspective within each community. Considering the elements that are interacting in the resilience process through transdisciplinary studies that come from consilience, brings about many essential measures for more effective and long-term results.

Finally, we would like to highlight that projects' sustainability has been mediated by the intensive use of technology and free media, such as community blogs, virtual museums, and models of interactive Cultural Environments work, among others, since every information that is generated by the projects is public and open to the integration of knowledge. The contributions of communities to the projects are therefore transmitted through accessible means and with a continuous feed of data from the part of the community integrated in E-Science and E-Learning platforms. This kind of instrument is an opportunity for recording the collected information, but more importantly, it is also an opportunity for everyone to be cocreator of these produced contents. We must also highlight that in Brazil internet access is widespread and includes even traditional indigenous communities so these tools play, in fact, an important aggregating role.

3. RECOVERY OF THE RIO DE JANEIRO PORT REGION

Archaeological research done in the port region of Rio de Janeiro has revealed the presence of a complex and well-preserved juxtaposing of building structures in the city's underground. Dated from the 17th century, when Rio de Janeiro became the center of political occupation for the Portuguese Crown, these remains are representative of colonial and post-colonial Brazilian history. The port region of Rio de Janeiro is currently undergoing intense urban remodeling with a large volume of ongoing engineering work. At the same time, in 2012 Rio de Janeiro became the first city in the world to receive UNESCO's title of World Heritage as an Urban Cultural Landscape.

This Project consists of different recovery work in a 5 km2 area in the port of Rio de Janeiro. It includes improvements in the roads and draining system, the construction of tunnels and overpasses, the construction of new streets and roads and commercial buildings. Different companies are responsible for the work, but the responsibility for the infrastructure work is the city's government and for the construction work, the entrepreneurs' responsibility.

In this context, the archeological research we have been developing over the last years in an area equivalent to five million square meters in the heart of the Rio de Janeiro port has some main challenges, such as:

- Understanding the historical formation and transformation processes in this area as Cultural Landscape, approaching the construction/evolution of the port structures from an archaeological perspective of landscape transformation throughout time.
- Responding to the scientific challenges of research in complex urban centers, especially regarding the balance between research and everyday life in the city in connection with limited space and schedule for the work.
- Choosing, whenever possible, the preservation of the archaeological structures
 present in the city is underground through joint work with archaeological heritage
 protection organs and the engineering teams for alterations to the project.

- Integrating this heritage into governmental plans and programs of urban management and society usufruct.
- A transdisciplinary team of researchers composed of archeologists, anthropologists, geographers, historians, social scientists, architects, and educators, as well as the technical management, information technology, and cultural marketing teams (90 professionals).

In this scenario, we focus on three strategic aspects of the research in this presentation:

- The application of predictive Archaeology methodology combined with the intensive use of technologies such as GIS, including geo-reference of the several coastal lines and hundreds of historic cartography to compare the various stages of local and urban landscape changes to the successive landfills. These charters are overlapped with current satellite images generating info ways, integrating aspects of current physical landscape to the georeferenced historical data judiciously collected in an extensive cartographic corpus;
- The use of 3D modeling in the reconstitution of structures and evolutionary scenarios for the formation of the port cultural landscape. This is as a tool of great quality for archaeological records as well as a strategy for making this knowledge more tangible for society as a whole;
- The real time production of documentation for archaeological heritage management organs and construction entrepreneurs, considering the dynamics and speed of decision-making required in these areas.

Regarding predictive archeology methodology, the port region of Rio de Janeiro has been through a series of landscape transformations, which have been documented in historical charters from the 16th to the 21st centuries and provided support for the elaboration of a Predictive Archeological Zoning plan using GIS technology. This tool includes geo-reference of the several coastal lines that the port region has already had. This made it possible to characterize these lines cartographically and compare the various stages of local and urban landscape changes to the successive landfills.

These charters can be overlapped with current satellite images generating info ways, which are applied to different stages of the research:

- Understanding modifications or reallocating work still during the detailing phase of the engineering project whenever possible;
- Establishing scenarios of structure types and stratigraphy that can be recognized during the prospection work on the field. In this case, the teams make intensive use of tablets containing maps and predictive analyses for each excavation area to be opened. The result of the prospecting is

sent in real time to the geo-processing area which, in its turn, retrofeeds the info ways and constantly updates the predictive zoning. This way it is even possible to correct and adjust problems related to the low cartographic accuracy, which is found in historical cartography due to its elaboration from different technologies.

• Establishing a methodology for archeological digs, with special attention to scientifically exclusive and significant data for the heritage in question, which is essential for deciding what to excavate and what to preserve.

Evidently, this type of modeling takes into consideration the possibility of finding situations that have not been registered by historical documentation in the city's underground as well as pre-historical contexts with specific patterns. Therefore, the model establishes researches in lots that escape our predictive models to deal with a full archeological heritage present in the region.

As a result of this practice, we have today a total of 45% of prospected area having located 85% of the archeological structures in the areas previously indicated by the predictive model as being high potential areas. In addition, 15% was located in areas of medium potential demonstrating the models high level of accuracy.

The second topic we will discuss in this presentation is the use of 3D modeling in the reconstruction of structures and evolutionary scenarios in the formation of the port's cultural landscape as a high quality tool for archeological register and as a strategy for making this knowledge more tangible for society as a whole.

An experiment developed during these first months of 2014 was applied to structures linked to the implementation of marine warehouses and berth decks since the 17th century as well as sunken ships. Research, in this case, includes knowing and registering the different construction techniques used. In order to do this, intensive procedures of building modeling which include geo-physical testing and laser-scan technology are applied. The final key-element in this interpretation is, as earlier defied, the concept of *landscape*, a reference that articulates and structures the interpretative models for the evolution of natural scenarios and the perception of society's roles in the construction of these environments through time.

Through the use of laser-scan physical reconstructions are now being made with the use of 3D printers which allow the elaboration of replicas. These can be applied to children's games in the nearby communities.

Finally, the third point to be highlighted in this presentation concerns the production of documentation in real time for the use of archeological heritage management organs and construction contractors in light of their need for high dynamics and speed in decision making. In this case, also intensive use of

technology is vital, allowing the quick elaboration of documents such as openings of the day, end-of-day closure bulletins, weekly reports, on-demand exceptional reports, and many other tools.

Besides the reports, every action executed in the land is integrated to the cartographic info ways making monitoring of the accomplished work and its results – positive and negative – possible by the management organs. These tools have proven to be especially important in moments when decision-making needs to be agile, for example, when there is identification of archeological remains during the constant monitoring of the work fronts.

Decision-making is also related to defining what deserves to be preserved in the city's underground. Essential elements in this decision are the level of exclusivity of the remains found combined with the state of preservation in which they are. In different moments, this has resulted in adjustments or alterations to the engineering projects in order to preserve the heritage. In these cases, it is essential to integrate the multidisciplinary teams formed by professionals such as archeologists, historians, engineers, and architects who compose the Archeological Program and are in dialogue with the engineering teams. In this dialogue, public heritage management policies from governmental organs establish the guidelines to be followed and decisions to be made in an integrated way.

4. FINAL CONSIDERATIONS

The case study presented here is an example of the different scientific and social contexts that exist in Brazil and the need for specific solutions to answer each one of them, even when based on a common programmatic line that allows the integration of knowledge to broader analyses of the formation and transformation of Brazilian society and its future.

This way, Archaeology and cultural heritage research serves not only as an instrument of contact between society and its past, but also between experiences and management alternatives that are being developed by other communities in the country. Social media are also highly focused in these actions, bringing together work groups of Cultural Heritage and allowing for the exchange of knowledge and management models.

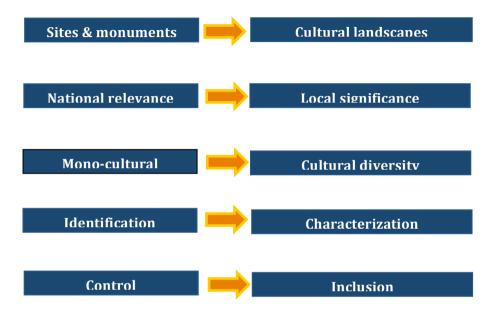
This initiative aims to form groups that will maintain the sustainability of the projects executed even after the company has left the area and that are headed by the communities themselves

As a final evaluation, we would like to present the cultural risk items established by the Program and monitored throughout the work, in consonance with UNESCO's guidelines:

HERITAGE RISK: destruction or altering of archeological heritage.

- SOCIAL RISK: loss of identity or meaning of this heritage to society in general
- SUSTAINABILITY RISK: loss of integration with government programs of management, planning, and development.

In order to control these risks and reach our goals, we observe the transformation items presented by the Valetta Convention of 2006:



English Heritage / Value-led decision making: The Valetta Convention and Bbeyond, 2006.

Through this group of practices and procedures, we aim to contribute to the handling of the rich archaeological and cultural heritage in order to obtain the scientific and social benefits for the valuing of Brazilian identity and for the preservation of its remains and landscapes. The handling of cultural heritage needs, therefore, to adhere to the tendencies that will mold the future, when society will gain a greater weight in the participation, analysis, and contribution of scientific researches by indicating priorities, following good handling practices, and defining new ways of appropriating their results.

5 BIBLIOGRAPHY

Anshuetz, Kurt F., Richard H. Wilshusen, and Cherie L. Sheick 2001 An Archaeology of Landscapes: Perspectives and Directions. *Journal of Archaeological Research* 9:157-213.

- Balée, William 2006 The research program of historical ecology. *Annual Review of Anthropology* 35:75-98.
- Barrett, John C. 2001 "Agency, the Duality of Structure, and the Problem of the Archaeological Record." In, *Archaeological Theory Today*, edited by Ian Hodder, pp. 141-164. Cambridge, UK: Polity Press.
- Bourdieu, Pierre 1977 *Outline of a Theory of Practice*. Cambridge, UK: Cambridge University Press.
- Bowser, Brenda J. & María Nieves Zedeño (ed.) 2009 *The archaeology of meaningful places*. Salt Lake City, University of Utah.
- Bradley, R. 2000. An archaeology of natural places. London: Routledge.
- Butzer, K. W. 1982 Archaeology as Human Ecology: Method and Theory for a Contextual Approach. New York: Cambridge University Press.
- Colwell-Chanthaphonh, Chip & T.J. Ferguson (eds.) 2007 *Collaboration in Archaeological Practice: engaging descendant communities.* Landham, AltaMira Press.
- Crumley, Carole 2006 Archaeology in the New World Order: what we can offer the planet. In Robertson, Elisabeth C., Jeffrey D. Seibert, Deepika C. Fernandez & Marc U. Zender (eds.) *Space and Spatial Analysis in Archaeology*, p. 383-395. Un. of Calgary Press.
- David, Bruno & Julian Thomas 2008 Introduction. In *The Handbook of Landscape Archaeology*, edited by B. David and J. Thomas, pp. 1-17. Left Coast Press, Walnut Creek, California.
- Diaz-Andreu, Margarita, Sam Lucy, Stasa Babic & David N. Edwards 2005 *The Archaeology of Identity. Approaches to gender, age, status, ethnicity and religion.* NY, Routledge.
- Dobres, Marcia-Anne and Robb John E. 2000 "Agency in Archaeology: Paradigm or Platitude?" In, *Agency in archaeology*, edited by M.A. Dobres and J.E. Robb, pp. 3–17. London: Routledge.
- Ferguson, T. J. & C. Colwell-Chanthaphonh 2006 History is in the land: Multivocal tribal traditions in Arizona's San Pedro Valley. Tucson, University of Arizona Press.
- Funari, Pedro Paulo A. 2004 *Public archaeology in Brazil*. In Merriman, Nick (ed) *Public Archaeology*, p. 202-210. London, Routledge.
- Gunderson, L & CS Holling (eds.) 2001 Panarchy: understanding transformations in human and natural systems. Washington, Island Press.
- Hall, Stuart 1987 The local and the global: Globalization and ethnicity. In *Culture, globalization, and the world-system: Contemporary conditions for the representation of identity*, ed. A. King. Minneapolis: University of Minnesota Press.

- Hicks, Ronald 2002 Ways of Inhabiting the World: Landscape Archaeology. *American Anthropologist* 104(1):315-320.
- Hodder, Ian (ed.) 2001 Archaeological Theory Today. Cambridge, Polity Press.
- Holling, CS 2001 Understanding the complexity of economic, ecological and social systems. *Ecosystems* 4:390-405, Springer-Verlag.
- Ingold, Tim 2000 *The Perception of the Environment*. Essays in livelihood, dwelling and skill. London, Routledge.
- Ingold, Tim 2010 The Temporality of Landscape. In: Preucel, Robert W. & Stephen A. Mrozowski (eds) *Contemporary Archaeology in Theory: the New Pragmatism*, p. 59-76. Malden, Wiley-Blackwell.
- Jameson, F. 1984 *Postmodernism, or The cultural logic of late capitalism.* New Left Review 146:53–92.
- Jen, Erica 2003 Stable or Robust? What's the Difference? Robustness, Stability, Persistence, Resilience. *SFI Working Papers* no 18. Santa Fe Institute.
- Johnson, Matthew 2007 Ideas of Landscape. Oxford, Blackwell.
- Jones, Martin 2007 Feast. Why humans share food. Oxford Univ. Press.
- Knapp, A. Bernard & Wendy Ashmore 1999 Archaeological Landscapes: constructed, conceptualized, ideational. In: Ashmore, Wendy &A. Bernard Knapp (ed.) *Archaeologies of Landscape: Contemporary Perspectives*, p. 1-30. Malden, Blackwell.
- Mc Fayden, Lesley 2008 Building and architecture as landscape practice. In *The Handbook of Landscape Archaeology*, edited by B. David and J. Thomas, pp. 307-314. Left Coast Press, Walnut Creek, California.
- McGuire, Randall H. 2008 Archaeology as Political Action. Berkeley, Un. of California Press.
- Moberg, Fredrik & Sturle Hauge Simonsen 2011 What is resilience? An introduction to social-ecological research. Stockholm Resilience Centre, Stockholm University.
- Morphy, H. 1995. Landscape and the reproduction of the ancestral past. In *The anthropology of landscape: Perspectives on place and space*, ed. E. Hirsch and M. O'Hanlon, 185–209. Oxford: Clarendon Press.
- Norton, William 2008 Humans, Land, and Landscape: a proposal for cultural geography. *Canadian Geographer/Le Géographe Canadien* 31(1):21-30.
- Preucel, Robert W. & Ian Hodder 1996 Nature and Culture. In Preucel, RW & I Hodder (eds.) *Contemporary archaelogy in theory: a reader*, p.23-38. Oxford, Blackwell Publishing.
- Preucel, Robert W. & Stephen A. Mrozowski (eds) 2010 *Contemporary Archaeology in Theory: the New Pragmatism.* Malden, Wiley-Blackwell.

- Renfrew, Colin 2003 Figuring it out. London, Thames & Hudson.
- Robb, John E. 2004 The Extended Artefact and the Monumental Economy: a Methodology for Material Agency. In *Rethinking Materiality: the engagement of mind with the material world*, edited by Elizabeth DeMarrais, Chris Gosden and Colin Renfrew, pp. 131-139. Cambridge, UK: McDonald Institute for Archaeological Research.
- Robrahn-González, Erika M. 2013 Construção do Meio Ambiente Cultural: Reflexões e Práticas no Brasil. *Direito E Sustentabilidade*.
- Sauer, Carl 1925 *The Morphology of Landscape*. University of California Publications in Geography 2(2):19-53.
- Scarre, Chris & Geoffrey Scarre (eds.) 2006 The *Ethics of Archaeology*. Univ. of Cambridge Press.
- Shanks, Michael & Randy McGuire 1996 The craft of archaeology. *American Antiquity* 61:75-88.
- Smith, C., and H. Martin Wobst (eds.) 2005 *Indigenous archaeologies: Decolonizing theory and practice*. New York: Routledge.
- Smith, Laurajane 2004 *Archaeological Theory and the Politics of Cultural Heritage*. NY, Routledge.
- Stavenhagen, R. 2002 Indigenous peoples and the state in Latin America: An ongoing debate. In *Multiculturalism in Latin America: Indigenous rights, diversity, and democracy*, ed. R. Sieder, 24–44. New York: Palgrave Macmillan.
- Stein, Gil J. 2005 The Comparative Archaeology of Colonial Encounters. In Stein, Gil J. (ed.) *Introduction: The Archaeology of Colonial Encounters: Comparative Perspectives.*, p. 3-31. School of American Research Advanced Seminar Series, Santa Fe, SAR Press.
- Tainter, Joseph 1988 *The Collapse of Complex Societies*. New York, Cambridge University Press.
- Tilley, Christopher 1994 Introduction to a phenomenology of landscape. Berg, Oxford.
- Tilley, Christopher 1999 *Metaphor and Material Culture*. Oxford, Blackwell Publishers.
- Watkins, J. 2000 Indigenous Archaeology: American Indian Values and Scientific Practice. Walnut Creek, AltaMira Press.
- Yaeger, Jason & Marcello A. Canuto. 2000 Introducing an archaeology of communities. In Canuto, Marcello A. & Jason Yaeger (eds) *The Archaeology of Communities: a new world perspective*, p. 1-15. NY, Routledge.

- Zedeño, Maria Nieves. 2000 On What People Make of Places A Behavioral Cartography. In *Explorations in Social Theory*, edited by M. B. Schiffer, pp. 97-111. University of Utah Press, Salt Lake City.
- Zedeño, Maria Nieves. 2008 The archaeology of territory and territoriality. In *The Handbook of Landscape Archaeology*, edited by B. David and J. Thomas, pp. 210-217. Left Coast Press, Walnut Creek, California.
- Zedeño, María Nieves & Brenda Bowser. 2009 The Archaeology of Meaningful Places. In *The Archaeology of Meaningful Places*, edited by B. Bowser and M. N. Zedeño, pp. 1-15. University of Utah Press, Salt Lake City.