

Material Cultures, Material Minds: The Impact of Things on Human Thought, Society, and Evolution.* Nicole Boivin. Cambridge, UK: Cambridge University Press, 2008. 288 pp.

Reviewed by Christopher S. Peebles

More than 50 years ago C. Loring Brace (the physical anthropologist, not the religious scholar and social reformer of the same name) offered a modest but revolutionary proposition: culture was, he said, in and of itself, an ecological niche, the ecological niche of humans; it was part and parcel of nature and thereby essential to human nature (Brace and Montagu 1965). Retaliation against this position was swift and dismissive, especially from the archaeologists. They invoked Alfred Kroeber's "superorganic": it asserted that culture was completely independent of nature. Lesley White's embrace of Kroeber's proposition, plus his view that culture advanced in proportion to per-capita energy production, was offered as a theoretical justification for an independent cultural order, albeit one dependent on language, that was humankind's means of adaptation to its environment. Julian Steward proposed that cultures themselves had ecologies, hence his term "cultural ecology," and that anthropology should focus on the technologies, organizations, and knowledge that formed the "core" of subsistence system; the remainder, as Robert Lowie had posited, was epiphenomenal, a thing of "shreds and patches." These, plus Karl Marx, plus an unconsidered behaviorism, were the materialist position embraced by most archaeologists in North America and the British Isles.

Nicole Boivin has offered a reasoned rediscovery and up-to-date restatement of Brace's position. However, she had been educated in the post-processual (post-structural) school of archaeology, which rejected each and all of the materialist presuppositions above as scientific. This broad based English and Continental European movement had rejected the materialism of White, Steward, and Marx. It had rejected the structuralist approaches of Claude Lévi-Strauss and Jean Piaget. It also had rejected, by default, the behaviorist position implicit in much archaeological research. It embraced a textual approach to archaeological remains, partly based on Clifford Geertz's (1973:5) reading of Max Weber—"man is suspended in webs of significance he himself has spun" (Boivin, p. 12). It deployed Ferdinand de Saussure's postulate that the choice of signs (signifiers) is arbitrary although for Saussure the relation of signifier and signified is not arbitrary. Furthermore, it accepted the deconstructionist position of Jacques Derrida where signs (signifiers) took on meaning only from their relation to other signifiers and without reference to the signified and to the world. Thus, they asserted, there was no rational basis for the evaluation of any argument because absences were as important as presences and any text offered unlimited opportunities for hermeneutic exegesis and signs run wild.

It is against this background that the author experienced an Epiphany. She had gone to the field first as a geoarchaeologist, intent on examining microstratigraphy in north Indian Neolithic house floors as evidence for the developmental cycle of domestic groups. Thus she brought rigorous, empirical, scientific training to a textual framework of interpretation: a materialist approach in an idealist universe. It was her subsequent work as an ethnoarchaeologist that led her

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to question the presuppositions upon which she had founded her earlier research. When she asked women in a Rajasthan village what the red plaster around doorways and other parts of their houses meant, the answer she got was the red soil was Laksmi, the Hindu goddess of good fortune (2). The answer was not phrased in terms of a representation of Laksmi, not in terms of a contrast to, say, blue or to Krishna, or any other elements and contrast sets, but as identity. In this instance, red was index or icon rather than symbol; it was firmly tied to its signified in a non-arbitrary but metaphorical way. Minimally, she had moved from a universe governed by the thought of Saussure, as modified by Derrida and others, to the pragmatism of Peirce; more specifically, she was led to question several long-held distinctions, such as between material and ideal, nature and culture, mind and matter.

Her critique of the sign when it is divorced from the material world, including its separation from the human body, led to a discussion of embodied metaphors (Lakoff and Johnson 1980) and cognition that extends beyond the mind and brain and into the body and beyond (Clark 1997). The points that she makes connect the material mind to the material world and that "...matter represents, but it does not do so in an arbitrary manner" (81). The material world touches human emotions and thought; it is part of the stuff of experience; it is a part of the "horizon of expectations" one carries about; and, as it is experienced by archaeologists, it certainly transcends the merely representational: "Indeed, one of the most interesting things about the material world is the way in which it *differs* from language, from code, and from representation" (127). It is clear to the author that matter has agency: it can cause and it can constrain human reason and human choices. For example, among many agricultural groups, renewal of dwellings made from impermanent materials—mud and thatch—serve to renew kin ties of particular kinds and underscore gender roles and duties. What happens when, without other changes in technology and subsistence, fragile building materials are replaced by concrete blocks and tin roofs (160-165)? Certainly the structure of society will be weakened and perhaps transformed through the agency of building materials.

There is a complex set of relationships among environments, organizations, things, and organisms. When the focus is placed on the organism's genetic endowment in this equation, the resultant set of methods and theories stress the co-evolution of genes and culture (Durham 1991). When the emphasis is placed on the cultural (material and symbolic) aspects of the equation, the resultant framework is termed "niche construction" (Odling-Smee, Laland, and Feldman 2003). The author uses niche construction theory to dissolve several mutually exclusive dichotomies enumerated above: mind/body, culture/nature, material/ideal. Without explicitly stating it, she embraces a temperate form of realism: there exists "out there" a real world independent of the knower that we as individuals and as a species must deal with. What niche construction theory entails, whether for earthworms, beaver, or humans, is the proposition that organisms construct ecological niches for themselves as part of their being-in-the-world, as a way of counteracting and buffering the vagaries of a hostile environment. This act of construction, which for humans incorporates their symbolic faculties, themselves an evolutionary product, covers the full range of material, organizational and phenotypic assets of our species. As the distinguished linguist Derek Bickerton has written very recently: "Human culture is just the human niche" (2009:11). As the author writes here (181-224) and V. Gordon Childe wrote 80 years ago (Childe 1936) we have truly made ourselves.

The great strength of this work is the way in which the author dissolves the antinomianism asserted by various factions within archaeology (and returns us back to the future C. Loring Brace offered in the early 1960s). The value of the work will be in how it is extended and actually used to create questions that can be taken to the field and to museum collections.

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This review has been published posthumously. The editor introduced minor stylistic changes to the original text.

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