Landscape of the Mind: Human Evolution and the Archaeology of Thought

John Hoffecker
New York City: Columbia University Press, 2011, 259 pp. (hardback), $50.00.
ISBN-13: 9780231147040.

Reviewed by SAMUEL P. GRIFFITHS
Centre for the Archaeology of Human Origins (CAHO), Department of Archaeology, University of Southampton, Southhampton SO17 1BF, UNITED KINGDOM; spg1e09@soton.ac.uk

This publication represents the growing development of research into cognition both from a biological perspective and an archaeological background. It brings together a number of fields of analysis (i.e., archaeology, biology, ecology, psychology…) to present a concise but equally in depth synthesis of current thoughts and research within these overlapping fields. Evidence is well presented throughout, something that cannot be underestimated in such a convoluted field as this. Overall, this is a much needed addition to the area of cognitive thought, an area of research that will become increasingly important within archaeology and paleoanthropology over the coming decades.

The first chapter concentrates on setting out and defining the author's aims and objectives—the search for modernity in the archaeological record. The very idea of modernity is tied with the complex ideas of the mind and its existence external to the biological body. The development of the mind is described through a transition from 'proto-mind' to the modern mind we are all seen to possess today. This defining element of modernity is suggested to appear by 50,000 bp and is associated with a number of archaeological appearances (art, music, specific stone tool repertoires). It is these archaeological appearances in association with language that develop Hoffecker's belief in a Super Brain or 'neo-cortical internet,' a connection of individuals who share common practice and symbolic knowledge such as language and art. It is these common phenomena that are stored within this 'neo-cortical internet' of the super-brain. It is the first inkling of this super-brain that is used to describe the proto-mind and, more directly, the capacity of early *Homo* species for external representation in the form of stone tool culture. The Early Stone Age (ESA) handaxes are seen to represent this externalisation of thought from the mind into the landscape of the individual. This argument is suggested through a discussion of the apparent lack of a natural analogy for plan-form of these enigmatic artifacts within nature, i.e., they are not a copy but a template. By discussing these artifacts as external representations outside of the body, the author places the early hominid mind within this transition from animal to *Homo sapiens*. Further, this brings in the idea of the mental template of Paleolithic artifacts, the very essence of the mental representation as a set form projected upon the raw material used, i.e., flint nodule knapped into a biface.

The third chapter brings through the ideas of modernity and the continuing research into its appearance or manifestation within the archaeological record. Steering away from the ideas of a shopping list of traits that define modernity, Hoffecker builds on Lyn Wadley's views of using evidence for symbolic expression and symbolic storage to create a framework then used to build and discuss ideas of modernity. Hoffecker puts some weight into the use of music (or its appearance) in defining modernity. Although I disagree with the idea that music is non-symbolic within modern culture, the use of this form as an indicator or 'important part of the modern mind' is interesting. Music could be seen as a non-functional element within this symbolic framework—a forum for creativity. The very fact that music appears to have no function puts it aside from other forms of symbolism which I believe is how Hoffecker would like to view music, i.e., separated but none the less associated with modernity. This chapter is brought to a conclusion with a discussion of history. Or, more specifically, that the development of the super brain is the beginning of history, where thoughts, reactions, and display are recorded within this 'neo-cortical internet'. The very nature of the brain as an organ is a record of reactions to environmental stimulii; reactions built on thought processes during the initial adaptation. Seeing the Super Brain as the arrival of an historical mind under this bracket underestimates the reactionary responses of all living creatures to environmental drivers such as the seasons or climate change. It could possibly be argued that this knowledge is more accessible through the Super Brain as the internet today makes information more accessible or that the evidence for its development is more fossilized within the archaeological record. The fact that knowledge is stored and passed on via various learning strategies by a number of living organisms brings into question the idea of an historical assignment to this specific change in ontogeny in the later Pleistocene.

Hoffecker continues out of the Paleolithic into a discussion of the rise of agriculture and civilization. He connects this with a restructuring of the Super Brain after reaching a 'threshold in the density of the population, ' a restructuring that allowed for such a large network of individuals to connect, creating city states and later nation states. This creates an interesting discussion on civilizations and their collapse over past millennia. One idea the author returns to is how this restructuring and the general structure of the states involved constrained creativity. It is the success of western Europe in this respect that Hoffecker uses as the exception

  ISSN 1545-0031
doi:10.4207/PA.2011.REV118

that proves the rule, with creativity exploding after 1200 AD, through the later medieval and into the modern era. The author wraps up this intriguing publication with a discussion of the possible future of the Super Brain. It is disappointing this chapter was not used as a concluding piece to bring all these ideas together into one framework. Nonetheless, this discussion is absorbing, presenting the idea of the existence of the Super Brain outside of the biological body, i.e., artificial intelligence. These theories seem to build from the author's belief that the Super Brain of modernity can be excluded from natural science and therefore can exist outside of the natural body.

The *Landscape of the Mind* attempts to discuss a number of extremely pivotal ideas within Paleolithic archaeology and paleoanthropology. Possibly no question is bigger than the specific manifestation of modernity and how we as researchers can fit this idea into frameworks of behavior and adaptation throughout the Paleolithic. Hoffecker's work is an addition to this area of research, which itself covers a number of disciplines. Its multi-disciplinary nature makes it a useful contextualization of the data involved. It does bring up a number of un-answered questions associated with the development of the Super-Brain: Where do core and flake assemblages fit within the framework of the proto-mind? How can the temporal element to the framework be explained? These are just some of the questions cognitive studies must begin to assess in future research.