

Book review

**Review of
“The Encultured Brain: An Introduction to
Neuroanthropology”**

edited by Daniel H. Lende and Greg Downey, MIT Press, 2012

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Review of 'The Encultured Brain: An Introduction to Neuroanthropology'

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Imagine, if you will, you had to fit a sieve onto a curled-up hedgehog. The basic shape and configuration seem made to match, but when you actually try to put them together you quickly realize that the patterns of spines and holes are not really aligned and that you need to match individual spines with individual holes, watching in frustration how the first spines escape from their holes as you move on to others.

This is the task that neuroanthropology is facing: both the neurosciences and anthropology are concerned with human coexistence. They ought to learn from each other. Yet both are heterogeneous fields in themselves, often diametrically opposed in epistemological stance and far apart in methodological approach. So where do you start? As it turns out, 'The encultured brain' is an excellent place. It is a thoughtful introduction to what neuroanthropology may be, what it may bring to the study of human coexistence and what it will not.

The editors – Daniel H. Lende and Greg Downey – define neuroanthropology as a cross-disciplinary endeavour to study 'brains in the wild', that is, the interactions of brain(s) and culture(s) across spatial and temporal scales, 'exploring the synthesis of nature and nurture while cutting through idealized views of biological mechanisms and cultural symbols' (p. 24). The volume opens with a broad introductory section outlining the notion of the encultured brain and situating it theoretically and to a lesser degree methodologically within the literature on human and primate evolution, social cognition and learning, niche construction, and neural development. The two case study sections provide empirical material on human capacities and skills as well as human problems and pathologies. The volume closes with a thematic analysis across the case studies, which culminates in a brief survey of the trajectories this approach might take.

Chapter 2, 'Neuroanthropology and the encultured brain' (Downey and Lende), is certainly one of the best texts written on this subject. It achieves four things. (1) It carefully deconstructs the many essentialisms and determinisms that linger in the history of anthropology. The unity of human types – be it natural, psychic, or cultural – is dissolved

in neuroanthropological thinking. (2) It challenges social and cultural anthropology to examine their prevalent notions of culture as to how they fare across different analytical scales and vis-à-vis neurobiological matters of concern. (3) It calls up practice-orientated notions of enculturation, enskillment, embodiment, and enbrainment and develops a rationale for processual analyses of human development, activity, and interaction. (4) Linked with chapter 1 by the same authors, it delineates neuroanthropology from multiple experimental traditions, from critical neuroscience, from an anthropological emphasis on the human condition, and from the burgeoning neuroimaging literature.

The key to the introductory section as a whole, including an excellent chapter by MacKinnon and Fuentes on social cognition, evolution and niche construction, is its humility. The authors work towards the integration of neuroscience and anthropology as a grand vanishing point. Yet at every step they appreciate that this integration is out of reach. They stay away from the multiple theory-of-everything traps, appreciate the processual character of such an endeavour and are neither sucked into easy polemics or rash reductions nor tempted by cultural relativism or vulgar constructivism.

The introductory section sets the bar very high for the case studies, which cover a diverse range of topics, including learning in medical and illness practices and martial arts as well as reconceptualizations of addiction, trauma, depression, and autism. All of them challenge established material or semiotic explanations and attempt to show that a neuroanthropological approach may provide a ‘thicker’ analysis of complex phenomena. They are commended for an irreductionist stance that forbids itself to reduce either brain, culture, or social relations to context for the respective Other. All of them to a greater or lesser degree need to paper over the cracks between the different thought styles they are trying to merge. Each individual case study falls short of a truly symmetrical analysis between matter and meaning. Yet putting these ‘failures’ next to each other and reading them relationally, a picture begins to emerge of human enskillment and its problems that carefully considers the patterning of material-semiotic practices across different spatial and temporal scales.

The volume demonstrates the need for empirical work that goes beyond adding data from different approaches. Collaborative research designs across disciplines will be key to the development of this field. Particularly to those from ethnographic traditions, this is a major challenge – but then again: so is fitting a sieve onto a hedgehog.