perpetuate old inequalities in modern dress, rather than bring about "positive diversity", is a reiterated theme of these articles. Another common theme is the inherently problematic nature of a mercantile model invoking "competition" and "customers". The vexed issue of knowledge creation surfaces again in Mel Bartley's investigation of the relationship between research and policy in the case of the unemployment and health debate. Even when research is deemed desirable, what shapes the questions asked, and ignores others? All these essays are stimulating and provocative, and the authors do not shy away from exploring ambiguities in their evaluations of the losses and gains produced by change.

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David E Leary (ed.), *Metaphors in the history of psychology*, Cambridge Studies in the History of Psychology, Cambridge University Press, 1994, pp. xiii, 383, £37.50, $69.95 (hardback 0–521–37166–X); £12.95, $17.95 (paperback 0–521–42152–7).

Over the last twenty years, the subjects of metaphor and language have provided the grounds for an increasing rapprochement between practitioners and historians of psychology. This volume is a testimony to that rapprochement. Drawing together essays from prominent psychologists such as Karl Pribram and Jerome Bruner and respected historians like Karl Danziger and David Leary, the volume promises to "raise the consciousness" of its readers "regarding the uses—and abuses—of metaphor in the history of psychology". In this respect, at least, the work is largely successful.

The authors, "with eyes peeled for metaphor" (to use Bruner and Feldman's distressing phrase), assiduously catalogue examples of analogy across two thousand years of psychology and its philosophical and political precursors. There is some overlap in the subject matter of the contributions. Whilst Paul McReynolds and Theodore Sarbin explore the metaphors which have been employed in the characterization of both desired and uncontrolled motivation, James Averill takes just one source of motive, emotion, and demonstrates how this itself can be divided into at least six categories: ranging from inner feelings through to social roles. This concern with the social bases of psychology and selfhood informs Kenneth Gergen's essay, as he traces the various images which have been used to symbolize society.

The remaining essays concentrate on metaphors of consciousness and cognition. Bruner and Feldman contrast the passive metaphors of consciousness which populated the associative tradition with the creative or active model of cognition proposed by Charles Sanders Peirce. Likewise, Karl Danziger focuses on theories of psychological association, showing how the looseness of this metaphor has allowed various authors to construct an imperializing cannon which encompassed authors as diverse as Aristotle and Hume. Karl Pribram's essay and the co-authored contribution by Robert Hoffman, Edward Cochran and James Nead chart the deployment of images from computer processing and telecommunications in current models of the brain. These last two essays invoke a weird teleology, in which technological innovation is seen as providing a greater and greater approximation to the inner nature of the human mind.

The problem with most of these essays is that they all too often degenerate into simple lists of metaphors occurring within the different specialisms of psychology. There is no theoretical perspective or critique informing the volume as a whole, as Leary says, "No contributor had to sign an oath of allegiance." It might have been better if they had. Whilst many of the authors celebrate the role of metaphor as a heuristic device, only Danziger explores the connection which metaphor posits between scientific language and the social world. This could, in the spirit of the work, be attributed to the role of metaphor itself. Metaphor, we are told, "motivates" or "generates" further research. Such phrases

https://doi.org/10.1017/S0025727300061214 Published online by Cambridge University Press

gloss over and disguise the very real sense of social effort required in the transition from one theory to another.

On another level, much of the information in this volume also remains hidden. The book's organization, which combines Oxford notation with conventional footnotes and individual bibliographies, disrupts the natural flow of reading. The footnotes and bibliographies, which demonstrate a wealth of original research, remain obscured. This is a particular pity in the case of Leary's introduction, where the footnotes equal the length of their parent article. Nevertheless, this work does successfully realize its avowed aim of alerting the reader to the role of metaphor, demonstrating its function and power in both the history and the historiography of psychology.

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Laura Otis, *Organic memory: history and the body in the late nineteenth and early twentieth centuries*, Texts and Contexts, vol. 11, Lincoln and London, University of Nebraska Press, 1994, pp. xiii, 297, £35.00 (0–8032–3561–5).

Recent years have witnessed an upsurge of interest in memory and its maladies. The larger share of recent scholarship, in tandem with contemporary psychological preoccupations with trauma, repression and false memories, has focused upon the history of the psychodynamics of memory and forgetting as witnessed by Ian Hacking's *Rewriting the soul: multiple personality and the sciences of memory* (Princeton University Press, 1995). Laura Otis' *Organic memory* opens with an evocation of another set of contemporary concerns: the spectre of ethnic cleansing, the holocaust and the genome project, which she depicts as configurations of the clustering of history, race, heredity, and national identity under the sign of memory. Organic memory is Otis' appellation to designate the formation of such a nexus at the end of the nineteenth century, which, whilst officially discredited, continues to lead a metaphorical afterlife.

According to Otis, the theory of organic memory rested on two main pillars: Jean-Baptiste Lamarck's theory of the inheritance of acquired characteristics and Ernst Haeckel's biogenetic law, that ontogeny recapitulated phylogeny. Otis reconstructs how, through the work of figures such as Ewald Hering, Samuel Butler, Théodule Ribot and Richard Semon, the theory of organic memory came to be a Foucauldian *episteme* that pervaded western culture in the period between 1870 and 1918. Otis argues that a further constitutive element of the organic theory was represented by the *Völkerpsychologie* of Moritz Lazarus, Heymann Steinthal and Wilhelm Wundt, which analogized cultural and individual development. Otis states that the proponents of organic memory theory identified memory with heredity, and located history in the body: "by envisioning history as something accumulated by a race and stored within an individual, they rendered it potentially accessible" (p. 2). This had the effect of placing physiological phenomena, such as instinct, habit and memory on a continuum, as aspects of one underlying process. As a corollary, it served to link physiology together with individual and social psychology at a disciplinary level.

Otis claims that the theory of organic memory "pulled memory from the domain of the metaphysical into the domain of the physical with the intention of making it *knowable*" (p. 3). Here, her argument intersects with Ian Hacking's (for whom Ribot also plays an iconic role), that through the sciences of memory at the end of the nineteenth century, memory became the surrogate for the soul, and rendered the spiritual domain knowable.

Otis argues that the organic memory theory managed to become extremely popular, despite the opposition of figures as diverse as August Weismann, Henri Bergson, Aleksandr Luria, Kurt Goldstein, Hermann Ebbinghaus, and William James, through its metaphorical and analogistic powers, which gave voice to cultural concerns with race, nationalism and identity, whilst cloaking them in a scientific

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