Brainiacs

Nikolas Rose and Joelle M. Abi-Rached, *Neuro: The New Brain Sciences and the Management of the Mind*, Princeton University Press, Princeton NJ, 2013. 352 pp., £48.95 hb., £16.95 pb., 978 o 69114 960 8 hb., 978 o 69114 961 5 pb.

The title of Nikolas Rose and Joelle M. Abi-Rached's new book on contemporary neuroscience captures the broad scope of the authors' project, but belies their resolutely even-handed approach. Written in a spirit of 'critical friendship', the work is intended as a 'rapprochement' between the humanities and neuroscience. Rose and Abi-Rached state that they intend to follow one particular OED definition of criticism: 'Rather than fault finding or passing censorious judgment, we are critical here in the sense of "exercising careful judgment or observation; nice, exact, accurate, precise, punctual." As such, they refrain from making bold, sweeping claims about the implications of neuroscientific research. Rose and Abi-Rached are wary of insisting on the radical novelty of the present, of overemphasizing the influence neuroscientific discourse has on current understandings of subjectivity or of downplaying scientists' own sensitivity to the limitations of their research.

Drawing primarily on scientific literature and public policy documents rather than mass media sources, Rose and Abi-Rached set out to provide a tour of a large and uneven terrain. They locate the origin of neuroscience in the early 1960s, identifying the advent of a qualitatively new attitude to its object of study: the brain. This moment was not only significant in terms of disciplinary formation but, the authors argue, crucially represented 'an event in epistemology and ontology'. They trace the emergence of what they term the 'neuromolecular gaze' - a mode of observation that sought to anatomize the mind, redefining the brain as 'an intelligible organ that was open to knowledge'. An engaging history of medical imaging technologies is sketched, focusing on the powerful role images have played in constructing our understanding of the psyche and tracing the complex mediations that occur in rendering the invisible visible. The authors argue that a connecting thread links nineteenth-century techniques like physiognomy and phrenology to the development of fMRI (Functional Magnetic Resonance Imaging), the discovery of which has launched a new 'industry of visualization'. They caution against confusing a simulated image of brain function with

the qualitative experiences those functions might correlate to; an image of blood flow is not an image of human emotion. A more sympathetic appraisal is given of the application of research undertaken on animals to humans. Although the authors point to the potential pitfalls of such work, they are critical of those who seek to overemphasize the uniqueness of the human species, concluding that complex, careful and nuanced translations can take place that cross the animal-human divide.

Many problems are identified with current diagnostic procedures as enshrined in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM) - the checklist approach to identifying symptoms and the associated proliferation of disorders. Here the discussion hinges on the danger of medicalizing normality, of pathologizing everyday life - 'normality', it turns out, 'is hard to diagnose'. All these labels and the medications associated with them are insufficient when faced with the suffering of living humans in a social world: 'Mental disorders are problems not of brains in labs, but of human beings in time, space, culture, and history.' The problem for Rose and Abi-Rached is that this insight is something that neuroscience itself is capable of addressing. Instead, they suggest that the concept of neuronal plasticity, which situates the brain in time, provides a fertile alternative to crude reductionism. Brains are no longer separated from the bodies and worlds in which they live but are malleable and open to intervention: 'The plastic brain becomes a site of choice, prudence, and responsibility for each individual.' Similarly, work on mirror neurons emphasizes the importance of intersubjectivity and conceives of the brain as a product of evolution, 'open, mutable, and in constant transactions with its milieu'. The brain becomes the site not of destiny but of possibility.

The authors are clear that the implications of this conception of the brain are ambivalent. If the brain is capable of being reshaped this opens up new possibilities for state intervention on a neuronal level. Childhood is key here. The 'screen and intervene' approach reverses the logic of the *DSM*: rather than

basing judgements on behaviour *a posteriori*, this model aims to identify susceptibilities before they manifest themselves and to strike pre-emptively. The future-oriented logic of risk assessment is extended to human life.

Rose and Abi-Rached convincingly trace the emergence of 'a biology that is open for intervention and improvement, malleable and plastic, and for which we have responsibility to nurture and optimize'. Sometimes, however, it is difficult to determine whether their analysis is descriptive or prescriptive. The Foucauldian vocabulary that has characterized Rose's writings on these subjects is still present here but is more muffled than in previous works (the most cited author in the book's bibliography is Rose himself). Biopower is identified, its features dispassionately outlined, but the authors' measured tone prevents them from making any interventions of their own.

The book's self-proclaimed conciliatory approach seems to apply exclusively to scientists rather than to others working in the social sciences and humanities, about whom they are less generous. These murky figures – often vaguely referred to en masse with the adjective 'many' – are implicitly cast as hysterical, simplistic or superficial critics, too hasty and extreme in their judgements. Meanwhile, Rose and Abi-Rached's

own explicitly value-laden statements slip by almost imperceptibly. Take, for example, the claim that there is nothing inherently malign 'in the intertwining of researchers' hopes for academic success, hopes for a cure for one's loved ones, hopes for private financial advantage for individual scientists and for companies, and hopes for public economic benefits in terms of health ... tangled webs ... permit of no easy ethical judgments.' Ethical judgements might not be easy, but that does not mean they cannot and should not be made. It is easy enough to point to the intricacy of the world, but just because the webs are tangled does not mean they don't ensnare people and shouldn't be torn down or at least reconfigured. Such questions are firmly off the agenda here.

The book's introduction ends by asserting that neuroscience challenges notions of the self as atomized individual and could thus become an 'ally of progressive social thought', but it is difficult to ascertain what Rose and Abi-Rached intend by this. Neuroscience, they insist, has not fundamentally reconfigured how people understand themselves but has provided a material underpinning for existing assumptions about self-improvement, choice, responsibility and agency: 'Once more, now in neural form, we are obliged to take responsibility for our biology,



to manage our brains in order to bear the responsibilities of freedom.' This does accurately capture the dominant vocabularies at work in neuroscience, but overall the authors seem content to position themselves within this decidedly neoliberal discourse. Such a version of selfhood emphasizes human adaptability. But openness to change is not identical with agency and volition. Instead, it is combined with an emphasis on the disintegration of the conscious subject. Rose and Abi-Rached claim that there is an overlooked affinity between neuroscientific understandings of the self and accounts of subjectivity that emerged from the humanities in the late twentieth century (here they mention anthropologists Marcel Mauss and Clifford Geertz, as well as Jacques Lacan, Louis Althusser and the more recent neurologically inspired philosophical work of Thomas Metzinger). The notion of a coherent, 'conscious, self-identical, autonomous', 'unified, purposive, intentional, and self-aware' self is an artefact of history. But, if anything, this vision of a non-conscious, automatic subject open to management sounds like the enemy of progressive social thought.

'Unless there is continued theoretical effort, in the interest of a rationally organized future society, to shed critical light on present-day society and to interpret it in the light of traditional theories elaborated in the special sciences, the ground is taken from under the hope of radically improving human existence', Max Horkheimer declared in his programmatic

essay 'Traditional and Critical Theory' (1937). The conscious subject is crucial to the project of critical theory, a twentieth-century current of thought that Rose and Abi-Rached do not engage with, despite its focus on the production of scientific knowledge. Does contemporary neuroscience challenge the very existence of human subjects capable of consciously intervening in the course of history? On an ontological level Rose and Abi-Rached do not come to such an audacious conclusion, preferring to point to the continued overlapping of different models for comprehending human subjectivity. The way I pick up a glass might be governed by non-conscious perceptual processes, but that does not prevent me from being able to consciously smash it, spill out its contents or turn it upside down.

However, by advocating 'collaboration beyond critique', the authors make their priorities clear. Intervention remains the purview of the experts and authorities upon which they base their study and with whom they are professionally engaged. Critique, like the spectral entourage of social critics that haunt their text, is implicitly aligned with crude judgements, with insensitive and destructive polemic blind to the intricacies of reality. But this betrays the limitations of their own analysis. The real challenge for those committed to social change is to engage subtly with the often uncomfortable insights of contemporary neuroscience without forsaking critique.

Hannah Proctor

Apart

Derek Hook, (*Post*) apartheid Conditions: Psychoanalysis and Social Formation, Palgrave Macmillan, Basingstoke, 2013. 256 pp., £55.00 hb., 978 1 13703 299 7.

The insight that 'social formations may themselves exhibit patterns of psychic causality' has informed an important strand in the history of psychoanalytic thought. What is surprising, perhaps, is that, apart from a handful of studies over the years, relatively little systematic work of this kind has been done in a South African context. Making an excellent case for the explanatory power of psychoanalysis in South Africa, Derek Hook's (*Post*)apartheid Conditions is thus a welcome addition to the literature.

The most powerful parts of the book revolve around narrative, specifically what Hook terms 'personal

narrative'. Hook's guiding assumption is that, as commonly understood, narrative is produced in order to foster social ties through recognition by others. In a personal narrative one thus presents oneself as one would wish to be seen by others. Understood in psychoanalytic terms, the transaction remains at the level of the ego, and thus of what Jacques Lacan termed the imaginary. The task of the psychoanalyst is not to reinforce the ego of the analysand by affirming the truth of the narratives that he or she produces, but instead to bring to light unconscious processes, which, although not acknowledged, serve