

An omelette of men

Stefan Jonsson, *A Brief History of the Masses: Three Revolutions*, Columbia University Press, New York, 2008, viii + 231 pp., £21.50 hb., 978 0 231 14526 8.

What forms can collective political action take today? As it works through its long, hesitant goodbye to the working class and grapples with this question, much of today's left political thought seems to be drawn to a political vocabulary which marks its distance from the talismans of classical Marxism (party, proletariat, class, revolution...) while drawing on a radical tradition in which notions like people, multitude or democracy take centre stage. Though it may be coded in terms of radical sameness or incompressible difference, the political subject that is invoked is generally unspecified in terms of its social location or composition. Indeed, evading placement and identity, slipping through the categories of the powerful, is often taken to gauge the very radicality of the challenge posed to the status quo by collectives variously described as invisible, indiscernible, uncountable or molecular. In this respect, the claims of the multiple against 'the One' (of sovereignty, authority, supremacy), and the idea of a politics that will not suffer 'representation' are present among a host of otherwise disparate thinkers.

But this is a peculiar predicament. How, after all, can one resurrect ideas of the people or of democracy without positing a moment of unity, for instance in the concept of popular sovereignty? Likewise, what does it mean to think a process of collective emancipation without some organizational and representative – which is not to say parliamentary – dimension? Are we simply to decree the formlessness of the collective? If we simply take the notion of 'people' as an index of these problems, we can see how the field of radical theory splits into different orientations: those who pit an immeasurable multitude against a sovereign people compelled to dominate and measure itself, those who seek to identify the excess of an unruly *plebs* over against a normative *populus*, those for whom the people is a merely formal and empty signifier prized by struggling particularities, and so on and so forth.

As Stefan Jonsson's references to the likes of Rancière and Agamben suggest, the volatile amalgam of political ontology (the one and the multiple) and political aesthetics (the representability of the collective) that lies at the core of much recent radical

thought plays a significant role in this book. In a familiar gesture, the ontological and the aesthetic are woven together through the theme of *exclusion* – the many *unseen*. As Jonsson announces, *A Brief History of the Masses*

is dedicated to the uncounted and countless ones who have ended up outside the frame. But above all [it] is about the frame, the ways in which human beings are partitioned, separated, and divided, about the visible and the invisible lines drawn through the social terrain that prohibit the majority from approaching the centre of the picture.

The book is divided into three essays, each taking its bearings from a 'revolution' – the French 1789, the Belgian 1889 (or, more precisely, 1886), the East European or global 1989 – and an artwork, respectively David's *The Tennis Court Oath*, James Ensor's *Christ's Entry into Brussels in 1889* and Alfredo Jaar's *They Loved it So Much, The Revolution*. Each of these 'size XXL artworks' is intended to convey a kind of truth about 'the beginnings of politics: society degree zero', and to gesture towards 'the ultimate end of politics: a self-sustaining democracy, or a permanent revolution'. The 'masses' in the title thus indicate the ambiguity, registered here at the level of its visual figuration, between the excluded and menacing many (mob, crowd, *populace*, *foule*, *canaille*, *misérables*, *Pöbel*) and some kind of constitutive and constructive collective force (the revolutionary masses storming the stage of history).

Jonsson is also sensitive to a dimension that is only tangentially registered by the artworks under consideration: the question of number. Number is both an index of the strength of popular claims (as in the 'unlimited numbers' called upon by the London Corresponding Society in 1792) and the primary element of the new 'biopolitical' science of population control – variously described as 'political arithmetic', 'moral arithmetic' or 'social mathematics' – which conjures up, as in the work of Adolphe Quételet, an average man (*l'homme moyen*) out of the instruments of probability. The ambivalence of the masses (excluded and constituent) is also reflected in the contradictory ways in which they

come to be ideologically demonized and governmentally managed. Despite Jonsson's periodization – which sees the masses moving from the democratic majority, to the destitute poor, and further to the workers' movement and the faceless crowds confronting the solitary artist – we could say that the Burkean fear of the masses as bearers of fanatical abstractions is never fully supplanted by the statistical formatting of populations, or indeed by the liberal democratic representation of a people which is thereby neutralized.

The principal merit of Jonsson's book, abetted by an essayistic approach which turns digression into a virtue, lies in exploring these ambivalences, particularly through the horror and fascination that characterize the voyages of the 'included' into the dark and crowded recesses where the masses seem to dwell. We thus encounter Carlyle's romantic paean to the 'fever-frenzy' of the sans-culottes in *The French Revolution* of 1837, the plebeian Phoenix romantically depicted as 'the Death-Bird of a World'. Victor Hugo's phenomenology of Parisian *misère* is traced to its origins in contemporary populationist and criminological reflections on the 'dangerous classes', but again under the sign of ambivalence: though for Hugo the masses are 'brutishly and fiercely voracious', they can also 'be made sublime' – that is they can become a people. In Flaubert instead, whose *Sentimental Education* is the focus of one of Jonsson's sub-chapters, the masses are simultaneously an object of disdain and of cold observation. Flaubert, writes Jonsson, 'is the first writer to systematically turn the masses into an aesthetic object', the consummate people-watcher, ignoring the political impetus behind the crowd, and contemplating it instead as 'a field of black corn swaying to and fro', or 'like a spring-tide pushing back a river, driven by an irresistible impulse and giving a continuous roar'.

This turn to organic and inorganic metaphors for the mass or crowd as threatening but inconsistent multiplicity – among which 'swarm' perhaps reigns supreme – recurs throughout. Emblematically, it features in Adolphe Thiers's juxtaposition between *le peuple* and *la multitude confuse*, a disorganized mass which seems refractory to law and sovereign control. But the most potent emblems of how the political upsurge of the masses comes to pose an aesthetic problem concern two barricades: the painting *The Barricade* by Ernest Meissonier, a grim rendering of the corpses of the defeated workers of 1848 by an ex-captain of artillery of the National Guard (right), and Victor Hugo's stunned description of the barricade raised in the Faubourg Saint-Antoine in *Les Misérables*. The first, which Jonsson takes up from T.J. Clark, gives us the

mass not as excluded but as exterminated, an *omelette d'hommes* (as a contemporary critic condemned it) where the bodies of the vanquished are initially indiscernible from the street, the paving stones and the surrounding houses. Not exclusion, but depoliticization as death, a terminal becoming-inorganic, is the fate of these masses. But, as the second barricade, Hugo's, intimates, sometimes the political force of the mass can also be grasped through its products. Accordingly, even though the masses remain 'off-screen' in what Jonsson calls 'the most spellbinding description of urban architecture in all world literature', the political ontology of a multiple-without-one makes its menacing mark. Anarchic material multiplicity and a kind of rebellious cacophony translate the elemental politics of the masses into a kind of monument of destruction, a combative work of installation art:

Of what was it built? Of the material of three six-storey houses demolished for the purposes, some people said. Of the phenomenon of overwhelming anger, said others. ... Everything had gone into it, doors, grilles, screens, bedroom furniture, wrecked cooking-stoves and pots and pans, piled up haphazard, the whole a composite of paving-stones and rubble, timbers, iron bars, broken window-panes, seatless chairs, rags, odds and ends of every kind – and curses. It was great and it was trivial, a chaotic parody of emptiness, a mingling of debris. ... The shouting of orders was to be heard, warlike song, the roll of drums, the sobbing of women, and the dark raucous laughter of the half-starved. It was beyond reason and it was alive; and, as though from the back of some electric-coated animal, lightning crackled over it. ... It was a pile of garbage, and it was Sinai.

I've followed Jonsson's beguiling tangents rather than honed in on his focal points. In part, this is because the organizing principle (three artworks, three revolutions) is quite loose. But it is also because, at least as concerns two of the three 'size XXL' pieces, those of David and Jaar, the artworks raise problems for Jonsson's overall project. In the case of the David, we are clearly dealing with the passionate display of an assembled constituent 'people', which bears a very ambiguous relation to the excluded masses (the *sans-culottes*) which will soon thereafter make for a far less presentable revolution. Jonsson compellingly traces David's passage to a spiritualized symbolization of the people in the dead Marat (who interestingly appears in *The Tennis Court Oath* writing, with his back to the delegates), also noting the painter's role in organizing the revolution's spectacles of civic religion, but the theoretical lens he adopts, that of Pierre Rosanvallon's

distinction between a political people-as-sovereign and a serial people-as-society, is unpersuasive. It leaves out any sustained reflection on the ‘self-activity’ of the masses, and how the latter may not just exceed but also reshape the capacities of representation – something that Hugo’s barricade certainly dramatizes.

The weakness of Jonsson’s approach lies in the ease with which he slips into a number of commonplaces in contemporary political-aesthetic discourse, for instance the ubiquitous refrain about the ‘unrepresentability’ of the political. Often this entails conflating the philosophical and political senses of representation. It also makes patent the dangers in thinking of politics primarily under the modes of appearance or visibility. When Jonsson declares that ‘Possibly, the primal scene of democracy resists representation altogether’, we might be tempted to retort that there is no such thing – except, as with any primal scene, as a legitimating myth or founding fantasy. This problem also bedevils the weakest of the three essays in the book, the one which takes its cue from Alfredo Jaar’s light-box installation on the melancholy resonances between 1989 (the date of its exhibition) and 1968. Though not devoid of further edifying digressions, this essay exemplifies the widespread tendency for political aesthetics to slip into negative theology.

Jonsson proposes that, like the Commune, the Eastern European revolutions of 1989 are marked by



the fact that no images come close to attaining their ‘core’, their ‘political essence and social pathos’. The model here seems to be one of incarnation, as if, beyond the iconic freeze-frames, we could have been given the truth, whole. But why should art abet this drive to hold the real thing in our gaze, to ‘see’ the revolution? Can’t it partake in revolutionary processes, or even reflect back on them, without this ultimately melancholy wish for representation-as-revelation? The melancholy is evident as Jonsson turns to Jaar’s works on Brazilian gold mines, the representation of Third World child poverty and the Rwandan genocide. The artistic articulation of mass politics slips here into the rote quandaries about representing the unrepresentable, which so much recent thinking about aesthetics has been mired in, with the attendant, and potentially trivializing, confusion between horrendous carnage and aesthetic sublimity. It’s very unclear whether this rumination on missing images can really, as Jonsson suggests, ‘give voice and representation to those who are marginalized’, or whether it doesn’t instead function to further obscure political dynamics, transforming oppression, exploitation and even extermination into issues at once aesthetic and metaphysical, but not truly political.

The obvious absence of *the* revolution of the twentieth century, 1917, is here not simply an oversight, but serves rather as a symptom of the short circuit that affects much contemporary theorizing about political aesthetics, with its peculiar oscillation between, on the one hand, the nineteenth-century promises of a democratic politics of appearance and, on the other, the mourning for the closure of the short twentieth century and the dissipation of its ‘passion for the real’ – for which ‘1989’ may serve as a shorthand. Exclusion from representation was not the dominant concern of the militant modernism of the tens and twenties, which did not reduce the problem of political aesthetics to that of being visible or invisible, represented or unrepresentable, appearing or not appearing. The broader belief that politics is fundamentally about new ways of being seen, about forcing inclusive transformations in the regime of the sensible, is a sign of how difficult it is to think a politics beyond democratic recognition, a politics where the collective reorganization and emancipation of the senses might be on the agenda. Beyond a salutary nod to

the tradition of direct democracy, and the customary suggestion that democracy is a conflicted signifier, Jonsson's book does not address whether democracy should indeed be politics' last word, its one and only regulative ideal.

Jonsson's book is strongest where his attention to the historical material takes him away from the contemporary generalities that affect art-political discourse, and which he himself succumbs to, running together into a bland and imprecise admixture of Derrida and Rancière, Balibar and Rosanvallon, Negri and Agamben (with the latter improbably but tellingly presented as an advocate of the 'indefatigable power of people to cooperate'). Whence the interest of the middle essay, which enlists the sprawling phantasmagoria of Ensor's *Christ's Entrance into Brussels in 1889* for an investigation into the shifting relations in the *fin-de-siècle* between madness, Messianism and mass politics. The most arresting dimension of Ensor's painting – which Jonsson brings into contrast and contact with Le Bon's psychology of mass contagion and Strindberg's *Little Catechism for the Under Classes* – is its neglect of the aesthetic canons that oversee the depiction of the relations between the individual and the collective, but above all its evasion of the choice between the mass-

people as heroic symbolic actor and the mass-mob as merely biological enemy or inorganic debris. Under the red banner of *Vive la Sociale!*, Ensor depicts social ontology as a kind of collective hallucination, neither obviously benevolent nor definitely threatening. And, as Jonsson perspicuously notes, what we are given is no longer a single, homogeneous mass, but an aggregation of masses with different compositions and varying origins. Ensor maximizes the divergences and contrasts within the painting, rescinds the border between faces and masks, and refuses any point of identification (the Christ figure, crucially, provides neither leadership nor resolution; he is simply, as Jonsson notes, 'a mediatory figure that neutralizes the forces that block change'). Ensor's painting, with its emancipatory model of collective hallucination, its social disorganization of the senses, shows that a political aesthetic of the mass (or the crowd, or the multitude) cannot be reduced to an unproblematic democratic striving for visibility, recognition or representation. *Larvatus prodeo* ('I advance masked') could also serve as the motto for a political art which evades, as Ensor did, the melancholy idea that art is there to make the people visible and recognizable, as though such an aesthetics of democracy held the secret of emancipation.

Alberto Toscano

Masculine holes

Alexander R. Galloway and Eugene Thacker, *The Exploit: A Theory of Networks*, University of Minnesota Press, Minneapolis, 2007. 197 pp., £35.50 hb., £12.00 pb., 978 0 81665 043 9 hb., 978 0 81665 044 6 pb.

After two decades of writings on network societies, network culture, network science and actor-network theory, the network seems far from having exhausted its power to pose a problem for contemporary thought. This collaboration between Alexander R. Galloway (author of *Protocol: How Control Exists after Decentralization*) and Eugene Thacker (author of *Biomedica* and *The Global Genome*) recapitulates the theory of networks to throw it off again, pushing it a little bit further on the way to formulating new understandings of more adequate and productive forms of power and resistance. As the authors of *The Exploit* put it: 'The existence of networks invites us to think in a manner which is appropriate to networks.' For Galloway and Thacker, the network is not simply a technology, but a political ontology. It is clear by now that such political ontology cannot be an 'essence' of networks that automatically places them beyond power. It is no

longer possible simply to oppose networks to hierarchies, because networks appear today as a technology of power, and because hierarchies and power centres have 'evolved downwards'. As perspectives as diverse as those of Michael Hardt and Antonio Negri, on the one side, and John Arquilla and David Ronfeldt, on the other, have clarified, we are confronting a 'fearful new symmetry': that of networks fighting networks.

This demystification of networks, then, is what propels the new network theory today, which must now confront almost two decades of knowledge about and of networks. Three issues appear crucial to the theory of networks as explicated in this book: the problem of the 'life' of networks; their topological features; and the reformulation of sovereignty and political conflict. The problem of the life of networks is obviously crucial to the re-elaboration of the Foucauldian notion of biopolitics, which is key to contemporary reformulations of

the nature of sovereignty. As a biopolitical technology, Galloway and Thacker argue, networks are technologies for the management of vital processes. At the most basic level, we can speak of the bio-informatization of life – of biological processes as flows of data that allow for a constant monitoring of the life of populations – but also of the abstraction of ‘biological protocols’ from the natural to the social level. If informatics is the mode of representation of life under biopolitics, networks are the mode of its control. However, beyond this subsumption of life by networks, the relation between biology and networks presents other challenges. It poses, according to Galloway and Thacker, the question of the inhuman/unhuman character of life. This nonhuman quality, which the authors find politically challenging about networks, is constituted by the power of that which one can find below the level of the individual (the virus) and that which overtakes it and carries it along (the swarm). The biopolitical nature of networks, their peculiar kind of life, then, exposes the limits of a *too human* understanding of networks, and questions modern notions of political agency

The question of the life of networks is a critical point for this book. The network in fact needs active subjects in order to exist, but at the same time undermines their agency by its very nature, by embedding it into sets of relations, and by the fact of being somehow *alive*. This is not the anthropomorphic agency of actors to be found in actor-network theory, but a non-humanity that affects directly the powers of the subject. Networks thus undermine from within the political liberalism which informs much network theory with its emphasis on universality, contingency, agent-based action, negotiation, public vetting and openness. They create a ‘tension between intentionality and agency, of individuals and groups, on the one hand, and the uncanny, unhuman intentionality of the network as an “abstract” whole’, on the other.

The notion that networks present natural features, and in particular that they are subject to natural laws, has been the subject of many popular science books that publicize the findings and theses of an emergent network science, at whose heart we find the mathematics of graph theory. By positively introducing a topological approach to networks, which pictures them topographically as a ‘finite set of points connected by a finite set of lines’, graph theory has produced the most common representations of networks. In so doing, it has engendered sets of universal topologies (such as centralized, decentralized and distributed), and formulated the so-called ‘laws of networks’: ‘Network science assumes a minimally vitalistic aspect of networks – a

metaphysics of networks, seeks universal patterns that exist above and beyond the particularity of any given network.’ One needs only to think about the popularity of ‘power laws’, which postulate that distributed networks over time will inevitably tend to produce a concentration of links (from which one could deduce that democracy also inevitably produces inequalities). In this passage from a natural-statistical law to politics lies an obvious problem, which the book underlines. It is not simply a matter of denouncing the political ‘incorrectness’ of network science, but of providing a more substantial critique of the understandings of networks fostered by graph theory. Graph theory tends to freeze networks in static snapshots, which make invisible their inner complexity and variability, while also proposing a reductive division between active nodes (as subjects) and passive edges (as actions carried out by the nodes). Networks, for Galloway and Thacker, thus need to be thought starting from their heterogeneity and duration, from the unstable relations between internal and external differences, and from their processes of individuation, which individuate a network as well as its nodes. If a network is, in the first place, a set of relations, then it must be made clear that these relations are variable and complex, internally and externally, and hence, in a sense, edges precede nodes, as relations precede individuals. Networks participate in a topological continuum within which they acquire limitless numbers of dimensions and multiple, exceptional topologies, thus fostering divergences as well as convergences (a kind of ‘metamorphosis’ as the book suggests). In this sense, the process of individuation of a network is never complete. By missing out on the intrinsic heterogeneity of networks, and underestimating their variability and complexity, network science proves misleading in providing a political ontology of networks. Galloway and Thacker thus suggest we need to turn, on the one hand, to Bartalanffy’s ‘general systems theory’ (in opposition to Wiener’s cybernetics and Shannon’s information theory) as a more adequate science of networks, and, on the other, to the medieval concept of individuation, as renewed by Gilbert Simondon, for philosophical inspiration.

An adequate political ontology of networks then proceeds from this primacy of the edges over the nodes, from the notion of the intrinsic inconsistency of networks, from an understanding of multiple network topologies as evolving within a varied topological continuum, and as expressing a life which is not quite human. From these premisses follow a key question of this book: the challenge of networks to sovereignty, and to the forms, stakes and modes of political conflict.

The book starts with a recollection of a provocation launched by a major network theorist to the authors. In an email exchange, Geert Lovink challenges one of the main theses of the book, which continues, in this regard, Galloway's solo reflection in *Protocol*. Real political power does not reside within the protocols that Galloway and Thacker posit as the key location for the expression of power in networks. Real political power is exercised by people such as George W. Bush, not by Jon Postel, the former administrator of



the Domain Name System. Galloway's contention, in fact, is that the control of networks proceeds immanently through the informing power of protocols that regulate relations within and across networks. Thus the distribution of power to the nodes is the very condition for their control. Lovink's provocation stimulates a challenging engagement by Galloway and Thacker with the transformations undergone by sovereignty and the possibility of individuating new kinds of 'networked sovereigns'.

Galloway and Thacker contest Lovink's statement by pointing out how even the sovereign command expressed by the power of the president of the United States to declare war implies a whole set of relations, which, à la Foucault, sustain it and enable it. It was the merit of Hardt and Negri's book, for them, to have pointed out the networked character of Empire, and the

fact that Empire is not America. On the other hand, this leaves open the question of the forms and modalities that sovereignty assumes in networks. The authors hence construct an interesting theory of how networks, which superficially appear as free from external control, are not only internally controlled through protocols, but also subject to 'topstight and oversight' and can in some cases be mobilized by a single global command; what they call 'global command events'. A networked sovereign is characterized by its capacity to turn the network into a weapon system by forcing its nodes to act as executors of a single command. Such a command does not need to be overly dramatic; it could even just be a matter of releasing a new version of software. The network sovereign is he or she who can 'flip the switch' and get a network to obey and carry out its command.

This is, however, an exceptional topology inasmuch as the regulation of networks is usually achieved in a much more mundane and daily manner, through the invisible power of protocols which 'sculpts' the life of networks. And, yet, this life that, according to Galloway and Thacker, is sculpted by protocols remains too narrowly defined at the level of bioinformatics. One cannot help but think at this point about another book, unfortunately as yet untranslated into English, Maurizio Lazzarato's *Puissances de l'invention*, where the organizing power of networks clearly operates within a social ontology of difference and repetition which foregrounds the 'forces of memory'; that is, those forces of subjectivation which express themselves through the actions of wanting, desiring and believing. The power of protocols, their immanent power of control, needs to address the problem of the double individuation, of bodies and minds, and the power of the impersonal ontological forces of memory.

Galloway and Thacker argue that the notion of resistance is problematic in understanding political conflict in networks. Resistance implies a defence of something that has been achieved and an active shift of power from one set of agents to another (as in negotiations between unions and employers). Resistance belongs to other types of struggles, which networked conflict does not render obsolete so much as supplement. Successful counter-protocological action works through the 'exploit'; that is, those 'resonant flaws' which networks produce by virtue of their working too well. The exploit, a term taken from hackers' vocabulary, indicates not simply a 'hole', but also a line of flight through which to project a potential for transformation, thus creating new and exceptional topologies out of which the new asymmetrical threat to networks might

arise. In the case of network conflict, what seems important to the authors is not so much resistance as ‘impulsion’, a ‘thrust’ and even a ‘hypertrophy’. And yet if the ontology of networks is that of relations – that is, as Sadie Plant has argued, a feminist ontology – why centre its political tactics around such masculine ‘thrust’? What about those processes of topological and ethical ‘invagination’, which also seems necessary for the purposes of collecting, nurturing and consolidating antagonistic network forces?

Tiziana Terranova

Neuromanticism

Catherine Malabou, *What Should We Do with Our Brain?*, trans. Sebastian Rand, Fordham University Press, Bronx NY 2008. 104 pp., \$55.00 hb., \$18.00 pb., 978 0 82322 952 9 hb., 978 0 82322 953 6 pb.

In a post-Fordist era of ‘cognitive capital’, in which scientific and quasi-scientific discourse are increasingly pressed into service in and as the knowledge economy, a critical engagement with those sciences in the ascendant under this regime is crucial. Whilst numerous attempts have been made – typically as some variant of Foucauldian biopolitics – to ascertain the strategic stakes of the life sciences, a detailed engagement with the sciences taking cognitive processes as their focus has remained somewhat in abeyance. To be sure, skirmishes with the cognitive and the neurological have been assayed here and there, but a detailed conceptual analysis of the implication of the brain in broader strategies has been lacking. In this short book Catherine Malabou has ‘rectified and sharpened’ the analysis of the concept of plasticity that she proposed in her book *The Future of Hegel* (2005) in order to explore what she sees as the ‘exact correlation between descriptions of brain functioning and the political understanding of commanding’ and thence to propose the development of what she calls a culture of ‘neuronal liberation’.

Where her work in *The Future of Hegel* had focused on the way that Hegel takes up and transforms the concept of plasticity through his reading of Aristotle, *What Should We Do with Our Brain?* makes a slightly different move: shifting from canonical texts in the history of philosophy to a corpus of texts – incarnated by cognitive science – which are somewhat more difficult to delimit. *What Should We Do with Our Brain?* examines four versions of the concept of plasticity:

developmental, modulational, reparative and a sort of intermediate plasticity – a figure of plasticity that allows Malabou to make the links between the other three figures clearer, as well to provide a more convincing account of how one can move from the biological givens of the neuronal to the realm of experience and freedom, an undoubted problem for an ensemble of sciences which have firmly nailed their colours to the mast of reductionism. The first three figures of plasticity can be explicitly reconstructed from out of the findings of neuroscience as descriptive of states of fact. However, the fourth figure, which Malabou argues to be implied by the other three, reinstates a fissured and discontinuous dialectic of the nature–culture relation where scientists generally see smooth continuity (when this relation concerns them at all).

This fourfold figuring of the concept of plasticity endeavours to account for the fashioning of identity through the play of the negative, which, Malabou thus argues, is at work within the neurosciences. More pointedly, it aims to awaken a ‘consciousness of our brain’. The fundamental Hegelian point here is that the plasticity of the brain, as she repeats (at numerous points throughout the book), ‘is a work, and we do not know it’. Malabou’s fourth, ‘meta-neurobiological’ (i.e. theoretical) figure of plasticity, distinguished from the ostensibly neutral descriptive quality of the three other figures, is thus closely tied to the key claims of this book.

Perhaps the most important of these is that scientific descriptions of the brain and its functioning have historically worked so as to legitimate specific configurations of the structure of work. With the breakdown of the Fordist model of production and the emergence of a new era of post-Fordist flexible specialization, the prevailing neuronal metaphor is no longer one of centralized command but one of connectionist networks. Drawing on Boltanski and Chiapello, Malabou argues for slightly more than a close fit between neuroscientific discourse and political discourse: there is an exact correlation and the biological and the social ‘mirror’ each other in the new figure of command put into play under post-Fordism. Whilst this claim obviously places quite a specific burden of responsibility on scientific discourse for thickening the ideological screen separating us from reality, it also has a bearing on the motivation for arguing for both the desirability and the necessity of articulating Malabou’s claim for her figure of *intermediating* plasticity. The claim is that without taking into account the breaks or gaps in the account that the neurosciences offer of the transition from the biological to the mental,

these sciences are necessarily led to make ideological assumptions, such as the crudely Darwinistic one made by Damasio about those humans who benefit from more and richer connections among their neurons. These ‘most harmonious and mature of personalities’ (presumably those individuals who can lose billions in ill-advised banking deals in the day time, go to the opera at night and sail a yacht at the weekend) have the mental flexibility to be the managers and erstwhile masters of the universe incarnating the contemporary spirit of capitalism. Such ideological characters are interposed within an account aimed at explaining the transition between the neuronal ‘proto-self’ to the consciousness of the singular individual and, of course, are not instantiated with the warrant of properly produced scientific evidence.

Malabou claims that the specific ideological functioning of neuroscientific discourse becomes particularly evident in the way that it tends to elide the difference that should be made between *flexibility* and *plasticity*. Where plasticity implies – in various ways – an activity of self-forming which moves ‘between sculptural moulding and deflagration, which is to say explosion’, its cognate term, flexibility, tends only to imply the passive register of adaptation to external circumstance (the same harmonious and mature personality naturally reselected for fast-track retraining as a schoolteacher). It is, of course, not difficult to see where this leads: look at the plethora of books published on the borders between management science and New Age self-help that exult in flexibility at work. Or attend a back-to-work interview at your local Job Centre. It is flexibility that, Malabou argues, occludes the more unruly concept of plasticity in the neurosciences and accounts for the ambivalent, ideological functioning of the latter.

Unlike the flexibility which makes us all into multi-tasking minions able to take the initiative to do all the work our bosses prefer to delegate, the concept of plasticity contains a nuance of explosive energy which the flexible new entrepreneurial worker, apparently, knows nothing about. Malabou evinces an intense interest in developments in cognitive science and is at pains to point out the ways in which current research depicts the brain’s curiously self-organizing historicity. For an organ that was for many years considered the model of automated, deterministic functioning and for a generation of critical thinkers raised to display a practically innate scepticism towards the reductionist strategies of the natural sciences, this is a remarkable situation. Indeed it is this non-deterministic, a-centred quality to brain functioning that leads Malabou to posit

the necessity of a new culture of *neuronal liberation*. Almost in spite of themselves, the cognitive sciences – not withstanding the residual advocates of what is charmingly called ‘good old-fashioned AI’ – have started to disclose an image of the brain and of the neuronal components of thinking processes that is radically at odds with the deterministic automaton which still suffuses – and confuses – discussions about the ‘hardwired’ nature of our neuronal ‘circuits’.

For Malabou, the rearticulation of the different figures of plasticity at work within the neurosciences thus entails a politico-philosophical task: to cultivate an awareness of the plasticity of the brain. The historicity of the brain supports her claim that ‘we’ ‘make’ it and ‘biological alter-globalism’ is the form that neuronal liberation for her takes – a dialogue between philosophers such as Hegel and the neurosciences in which the negativity of the dialectic allows us to substitute a different possible world for the ideologically shaped world implied in ‘neutral’ scientific description.

What Should We Do with Our Brain? poses some



interesting and challenging questions about the role of cognitive science in the contemporary era. However, there are a number of problems with this account. The specific claim about the ideology implied in scientific discourse is not, of course, particularly new – well before Althusser posited the ‘spontaneous philosophy of the scientists’, Marx’s acerbic comments about Darwin and Hobbesian individualism made clear the problematic discursive articulation of scientific research in biology. More particularly, whilst Malabou develops her argument with panache (albeit at times allowing the labour of the negative to become quite laboured), one cannot help but think that an opportunity to develop a more detailed exploration of the articulations of neuroscience and production has been missed here, beyond the seductive play of representations. Take the current popularity of drugs such as Prozac. Presumably

in Malabou's view, such forms of medication are the product of an ideologically informed vision of brain functioning – and of the highly capitalized production models of the pharmaceuticals industry. Does this mean that a person suffering from debilitating depression is living an alienated relationship to his or her brain? And what kinds of medication might a newly 'non-ideological' neuroscience yield? Should militants take Prozac? Of course, for the Hegelian that Malabou is, following the play of representations in the development of a concept is only right and proper, but it does yield its own synaptic misfirings, such as the question 'is the difference really all that great between the picture we have of an unemployed person about to be kicked off the dole and the picture we have of someone suffering from Alzheimer's?' Equally, the less dogmatic reader might twitch a little at the claim that Gilles Deleuze is one of the 'rare' philosophers to take an interest in neuroscientific research.

Ultimately Malabou's call for cultivating an awareness of brain plasticity seems a little fruitless beyond the specific interest of pointing out some of the gaps and tensions in recent neuroscientific research. Whilst

her claims about the ideological padding of such research are persuasive, it is difficult to see how a neuroscientist might respond to her call for them to attend to the ideological implications of their work: scientists stopped listening to philosophers a long time ago and the congruence between a Hegelian narrative of dialectical identity and their own accounts of brain functioning is not likely to make them jump for joy in their laboratories. The 'we' in Malabou's account is necessarily a 'we' which accepts the authority of a specific set of scientific discourses to pose the questions that are worth asking – only then to deconstruct those discourses. But more pointedly perhaps, the book's strategy of developing a reflexive appeal for the cultivation of neuronal self-knowledge focuses energy where it isn't needed. A more concrete and productive act of resistance might be to exploit the plasticity of one's own neurons so as to ask questions which refuse the auspicious claims of science to legislate on which are the questions worth asking. In a world where work impels us to be flexible but not to be plastic, surely it would be better to cultivate neuronal plasticity as such, not just our awareness of it.

Andrew Goffey

Childing the mother

Lisa Baraitser, *Maternal Encounters: The Ethics of Interruption*, Routledge, London and New York, 2009. xi + 185 pp, £45.00 hb., £14.95 pb., 978 0 415 45500 8 hb., 978 0 415 45501 5 pb.

Maternal Encounters is an original, creative book, meticulously thought out and crafted. It will be a necessary starting point for future work on mothering and maternal subjectivity. In it, Lisa Baraitser develops a novel approach to the possibility of a specifically maternal subject position. Drawing on Christine Battersby's account of the female subject position, that of an embodied self able to become-two in giving birth, Baraitser aims to uncouple maternal from female subject positions. She suggests that the former is the position of someone female-identified who is (in addition to being female) in a relation of something like care for a child. Thus, 'I use the maternal to signify any relation of obligation between an adult who identifies as female, and another person whom that adult elects as their "child".'

Baraitser situates her exploration of maternal subjectivity in particular opposition to the traditional psychoanalytic focus on the mother as an object in

relation to the child – whether as the first and deepest object of the child's desire, as an object internal to the child's psyche, as in Freud, or as the most important external object (person) who becomes the crucial internal structuring figure within the child's personality, as in object-relations theory. Baraitser convincingly shows how this limited focus on the mother as object persists even in the psychoanalytic feminism of Jessica Benjamin, despite Benjamin's adamance about the importance of recognizing maternal subjectivity. For Benjamin, it is vital for gender equality that the child come to recognize, through the mother's surviving his/her attempts to 'destroy' her in fantasy, that the maternal other is beyond his/her control and is an autonomous subject. This in turn requires that the mother must be able both to respond benignly and creatively to the child's fantasy attacks and to actually manifest autonomy by engaging with things outside of the child – work, a lover, and so on. Thus, Benjamin's

focus is still on the benefits of these things to the child, not the mother, while her theory despite itself burdens mothers with the expectation that they should ‘survive’ the child’s attacks. But, as Baraitser asks, what if they don’t? And is caving in to the child’s demands really so bad anyway?

Against these kinds of objectifying approach, Baraitser explores the potential of maternity to generate new experiences and, ultimately, a new mode of subjectivity. Her ‘quasi-methodology’, as she calls it, is ‘anecdotal theory’, a member of the family of more-or-less autobiographical approaches which feminists (among others) have adopted to avoid the authorial God’s-eye-view. Baraitser draws on her own experiences as a mother, specifically experiences that jarred in some way – that were uncomfortable, inexplicable, that did not fit with her preconceptions or expectations of motherhood: her struggle around town encumbered with toddler, toddler’s pram, arsenal of bottles and food containers; bursting into tears when her child goes off into sleep; feeling uneasy about having given the child his name. She takes such dissonant experiences as the starting point from which new and distinctive aspects of maternal subjectivity can be articulated. Thus, as she also says, her book is a ‘partial phenomenology’ of maternal experience; but the experience serves as ‘raw material’ on the basis of which Baraitser re-examines and revises relevant discussions from Levinas, Kristeva, Irigaray and Badiou among others.

Let me isolate four elements of Baraitser’s partial account of maternal subjectivity: alterity, interruption, love and the encumbered body. First, regarding alterity, Baraitser adopts Sara Ruddick’s view that a child is an “‘open structure” whose acts are irregular, unpredictable, often mysterious’. To be responsible for a child is to be responsible for one who is unassimilably other to oneself, who is living in their own time, oriented away from the mother towards the future, out of symmetry with the mother whose orientation is towards the child. Yet the mother returns to herself changed out of this encounter, discovering herself in the child for the first time – discovering herself *as* a mother, someone called into being *by* the child, and who is new and strange from the perspective of her pre-maternal self. (Baraitser draws on Levinas’s view of the father–son relation, wilfully adapting it to mother-and-child.) At the same time, Baraitser does not want to see this becoming-a-mother as the dramatic, wholesale transformation of the self which it seems to be according to much recent life-writing about the experience of motherhood. Baraitser instead suggests that the maternal self undergoes change as a result of

the mundane, repetitious everydayness of caring for the child in their alterity. Out of this mundane repetitiveness, something new emerges.

Baraitser’s exploration (second) of interruption and maternal time is one of the most novel parts of her book, and it especially spoke to my own experience of motherhood. Whatever the mother is doing, however she feels, she is constantly interrupted by the child’s demands – what Baraitser describes as micro-breaches to her durational experiences. The child’s cries and extreme affective states call forth a response from the mother, whether she likes it or not. Repeated interruptions of this kind bring about a ‘change in the mother’s experience of her temporal being’ – in particular, they tend to make sustained reflective thought impossible. Baraitser suggests that a new form of self-relation can emerge here:

Though thought is arrested by the constant interruptions that a child performs on the maternal psyche, a more ‘organic apprehension of the present moment’ is made available – those intense moments of pleasure or connectedness that mothers report, moments that ... allow access to a somatic or sensory mode of experiencing which may have been unavailable previously.

The new form of self-relation that we glimpse here is non-egoistic, a somatic immersion in the flow of events.

Third, Baraitser seeks to distinguish maternal love for the child from maternal desire for a third term different from the child, by identification with which the child can separate itself from its mother. Versions of this latter emphasis on desire are found in Jessica Benjamin, as we saw, and in Kristeva. For Kristeva, the loving mother *is* the desiring mother – the mother who desires the father, as opposed to the excessively caring, clingy mother who, by being excessively absorbed in her child, impedes his or her efforts to separate. The mother can love by identifying with her *own* mother who (hopefully) loved her in the same way. This identification gives the mother the narcissistic satisfaction that compensates her for lovingly sacrificing her union with the child for that child’s own sake. So, Baraitser objects, there’s no room in Kristeva’s ‘herethics’ for *alterity* in the child, since the child is loved as the mother’s own self, relative to the mother who is identified with her own mother. In contrast, Baraitser puts forward a picture of maternal love as love directly for the child, crystallized in moments when the mother realizes that now there are two, looking at the world from the point of view that there are two radically disjunct experiences, hers and the child’s.

Fourth, and in contrast to feminist writing on pregnant embodiment, Baraitser explores the mother's distinctive modes of interacting materially with objects in the long years *after* the birth of her child(ren). She identifies a pervasive tension between the mother's heightened sensory awareness (of her surroundings, the dangers they pose, the child's demands and needs, the various constraints to be juggled) and her slowed-down movement, slowed down by the child and the plethora of objects that the mother has to manipulate around a world of largely parent-unfriendly places and things. She compares the encumbered mother to the free-runner who also finds new ways to move around the environment and who re-creates that environment's spatiality in the process.

Let me raise some questions. Baraitser defines the maternal subject position by the mother's relation to the *child* – in the neutral. However, I take it that for Baraitser subjectivity is necessarily male or female: for her maternal subjectivity includes the idea that the mother is female; like Ruddick, she is wary of the proliferation of talk about gender-neutral 'parenting'. Isn't the child too, then, as the mother and others relate to them, necessarily male or female? From this perspective, I wonder whether the kind of maternal relation to the child which Baraitser explores is more of a relation to a male than a female child. In many psychoanalytic accounts of the child's early relation to the mother, the child turns towards the (empirical or symbolic) father as the personification of difference, of the future, the new, the adventurous, the outside – as opposed to the mother as the past, the home, the old and familiar, the inside. Perhaps mothers might therefore be more prone to experience mothering a son as 'interrupting' a (symbolically maternal) past. And if the child's time is not the mother's, is future-oriented, then does this tacitly imagine the child to be male, in contrast to the female time that is typically seen as past-oriented, cyclical, repetitious? Moreover, Baraitser draws her idea of two radically disjunct experiences from Badiou on sexual difference, which again suggests that the child in question may be symbolically male.

But to raise such questions is to return to what Baraitser calls the 'backward-looking' view of maternal experience which psychoanalytic thinkers have adopted when they have addressed the mother as subject: the view that the mother's relation to the child is the repetition of her past relations to others and especially of her relation to her own mother. That is, in mothering the mother draws on her internal image of her own mother; and/or she relates to her child *as* her mother, as the one with whom the mother-child bond of her own infancy

is restored; and/or she identifies with her own mother in relation to the child positioned as her younger self; and/or she corporeally becomes her mother, singing and babbling in her mother's voice. Baraitser does not deny that all of this may go on, but she wants to highlight alternative, relatively unnoticed, aspects of maternal experience: the newness of the child and of the mother as called into being by that child.

However, perhaps the child's calling the mother into being is itself the repetition of the mother having had her subjectivity elicited by her own mother in infancy (taking it, with Kristeva as Kelly Oliver reads her, that the maternal body elicits difference from the child prior to any intervention by the father – Baraitser discusses this). Perhaps, then, the mother cannot avoid identifying her own mother in her child and (simultaneously) in herself, because in undergoing a transformation at the call of the child, she passes back through the transformations of her own infancy which her mother called forth in her – she is reminded, somatically, not necessarily consciously, of how fundamentally constitutive of her this relation to her mother was. The newness of the child may be the maternal past of the mother, a past that remains ever-new because no self can ever fully digest it.

Alison Stone

A matter of emphasis

Damian F. White, *Bookchin: A Critical Appraisal*, Pluto Press, London, 2008. xvii + 236 pp., £50.00 hb., £16.99 pb., 978 0 745 31965 0 hb., 978 0 745 31964 3 pb.

In a 1966 article in the journal *Anarchy*, entitled 'Ecology and Revolutionary Thought', Lewis Herber (aka Murray Bookchin) argued that 'ecology is intrinsically a critical science – in fact, critical on a scale that the most radical systems of political economy have failed to attain.' Ecology has this 'critical edge' precisely because it reveals the ultimate dependency of modern urban, industrialized states upon nature and also how the disruptive consequences of these supposedly progressive social forms effectively turn humanity into a 'destructive parasite' feeding off and destroying the complex and diverse organic basis of its own existence. The global scale of these interventions was, Bookchin claimed, 'literally undoing the work of

organic evolution'. Interestingly, in this same article he suggested, as an example, that the 'mounting blanket of carbon dioxide, by intercepting heat radiated from the earth into outer space, leads to rising atmospheric temperatures, to a more violent circulation of air, to more destructive storm patterns, and eventually ... to a melting of the polar ice caps'.

This, perhaps, exemplifies what White refers to as Bookchin's 'eerie prescience', which was by no means restricted to forebodings about 'global warming'. Just before Rachel Carson's *Silent Spring* hit the bookstores in 1962, Bookchin (as Herber) was publishing his own critique of *Our Synthetic Environment*, exposing the reckless use of pesticides like DDT, the dangers of feeding hormones to domestic livestock, the health effects of excessive urbanization, and warning about 'low-level' radioactivity. As always, his ecological concerns were inseparable from his political analysis, because his argument, as the *Anarchy* article stipulates, was that we face 'a crisis not only in natural ecology but, above all, in *social ecology*' – a term that was to become synonymous with his work. Interestingly, the rather different version of this essay reprinted in *Post-Scarcity Anarchism* (1971) simply states: 'what we are seeing today is a crisis in social ecology' – arguably an omission of some significance, but perhaps also an indication that Bookchin now understood social ecology in 'synthetic' Hegelian terms. Obviously, then, his reference to destructive ecological parasitism must be read in this light, not as a biologically reductive critique of human beings per se (for Bookchin remained wedded to an Enlightenment humanism and rationalism), but as a wide-ranging and fundamental socio-political critique of contemporary social systems. And, of course, it is this admixture of ecology, left-Hegelianism, humanism and libertarian socialism that still incites admiration and hostility in varying proportions.

Bookchin's polemical excesses and argumentative intransigence were certainly a major cause of such hostility. As White remarks, Bookchin was 'a harsh and often ungenerous critic and this was often returned in kind'. While he was highly critical of Marxism, he often seemed, especially to other anarchists, to have inherited the doctrinaire attitude of so many of its adherents; albeit as an apparatchik of his very own 'party line'. Movements that initially appeared to be potentially complementary with, or even directly indebted to, his ideas would later find themselves condemned as manifestations of a politically dangerous *irrationality*. For example, in 1973, we can find Bookchin, like all subsequent radical ecologists,

making a vital distinction between a resource-based, reformist, instrumentalist *environmentalism* and an *ecological* approach that regards 'diversity as desirable for its own sake'. What is more, he goes on to claim that diversity is 'a value to be cherished as part of a spiritualized notion of the living universe'. This neatly mirrors Arne Naess's distinction between 'shallow' and 'deep' ecology, also published in 1973 (although Bookchin wisely avoids making any claims about biospheric egalitarianism). Indeed, as late as 1984, Bookchin was happy to contribute a chapter to Tobias's edited collection *Deep Ecology*, where he again extolled the virtues of an ecological 'ethics' and 'a vision of the world that has been raised to the level of an *inspired* metaphysical principle'. Yet, by 1986, the new introduction to *Post-Scarcity Anarchism* complains of the 'cooption' and 'tarnishing' of social ecology and the 'utterly reactionary perversions of its truth', and by 1987 this 'perversion' has been explicitly identified with deep ecological 'deviations'. Deep ecology is now labelled a vague form of 'spiritual Eco-la-la' and 'an ideological toxic dump' that is potentially 'eco-fascist'.

In a later interview Bookchin would, quite typically, feign surprise that anyone could possibly have been upset by the 'tone' of his argument, while simultaneously claiming that he had known that deep ecology was reactionary 'from the beginning'. And indeed the biological reductionism and espousal of lifeboat 'ethics' by *some* individuals associated with deep ecology certainly justified a forthright response. But Bookchin explicitly helped polarize the debate into two supposedly 'incommensurable' parties – a 'rational humanism' *versus* an 'irrational anti-humanism' – just as he would later polarize debates with other anarchists, and on very similar grounds, in his *Social Anarchism or Lifestyle Anarchism: An Unbridgeable Chasm* (1995). Perhaps these 'deviant' anarchists' fault was to take Bookchin's own accounts of an idealized primitive past in *The Ecology of Freedom* (1982) too seriously. Certainly the anti-civilization rhetoric that characterizes some of his targets is crass (if taken too literally), but then the simplistic binary, either 'for or against' social anarchism/ecology distinction, espoused by Bookchin can seem closer to George Bush than Bakunin. Even if *some* of these anarchists do appear 'mystical and irrationalist' from a scientific perspective, it is not clear why their beliefs are inherently any more mystical, irrational or politically dangerous than Bookchin's notion of an 'immanent world-reason ... the latent subjectivity in the inorganic and organic levels of reality that reveals an inherent

striving towards consciousness' finally revealing itself in human self-awareness. This quasi-Hegelian, totalizing and teleological, understanding, which regards nature as already saturated with (an ill-defined) 'rationality' is, apparently, the inner truth of social ecology, but the idea that it is supported by contemporary scientific understandings of evolution or ecology is, as White notes, wide of the mark.

All this makes White's task of providing a balanced critique of Bookchin's works extraordinarily daunting; all the more so because his key frame of reference is not environmentalism or anarchism per se, or the writings of Bakunin or Proudhon (who are not even referenced, let alone discussed), or even Kropotkin, but *Marx*, as read through geographers like David Harvey, Noel Castree and Neil Smith. How can this be reasonable? Well, White claims that 'few of Bookchin's key writings draw from or engage to any great degree with the classical anarchist thinkers'; that it would be oversimplistic to trace Bookchin's intellectual evolution as one from 'orthodox Marxism to Trotskyism, and then to anarchism'; and (citing Clark) that 'the specific lineage of Bookchin's social theory is found less in anarchism ... than in critical theory, defined in the broadest sense and ranging from Hegel and Marx to ... the first generation of the Frankfurt School'. But this radically underestimates the influence of anarchism on Bookchin's thought and, in part at least, excises him from the ecological and anarchist milieu that gave his work much of its originality and vitality. Of course it may facilitate a comparison of Bookchin with more mainstream academic currents but the danger is that his work comes to be evaluated as being a more (or less) adequate socio-theoretical precursor to recent forms of neo-Marxist discourse in their engagements with ecology.

This is not by any means to say that White presents a Marxist reading of Bookchin. In fact Bookchin is later praised for his 'welcome' turn to 'liberal constitutionalism' and described as advocating a 'Dionysian Republicanism'! Hardly terms I think Bookchin would be happy with. Nor, for that matter, is it to say that White's analysis lacks political/intellectual breadth, or that the insights he generates are misplaced. Far from it; this is a sophisticated and considered work that exhibits a genuinely rare critical engagement with the intricacies of Bookchin's thought. But Bookchin's, explicitly anarchist, works are also *extremely* critical of both Marx and Marxism. Of course, like many other anarchists, he borrowed from Marx's analysis of capital, but he despised the tendency of Marxist exegesis to judge everything in relation to the Master's

work or to reduce politics (which he understood in quite Arendtian terms) to 'bourgeois social theory' – *his* description of Marxism. Indeed, he claimed that 'the development of a revolutionary project must *begin* by shedding the Marxian categories from the very beginning.... It is no longer simply capitalism we wish to demolish.' And yet Bookchin's critique of centralized industrial societies is often glossed by White in terms of a necessary but, for Bookchin, hardly sufficient critique of capitalism. (A critique that White suggests, in any case, is partly undermined by recent developments of 'green capitalism'.) For example, when discussing Bookchin's comments on André Gorz, White argues, quite rightly, that he was sceptical of the 'Neo-Malthusian' aspects of Gorz's work. However, this is hardly 'the central point' of Bookchin's critique, which was precisely that Gorz was too indebted to a 'sectarian Marxist orthodoxy'. 'What makes Gorz's book particularly distasteful', says Bookchin, 'is that it attempts to refurbish an orthodox economic materialism with a new ecological anarchism' without even giving that anarchism any intellectual credit. (I'm reminded of Woody Allen's joke about the two residents of the Catskill retirement home – 'the food here is dreadful' says one. 'Yes and the portions are so small.')

While White remarks that 'it is striking how much of Bookchin's central critical claim [that a 'grow or die' capitalism must devour the natural world] draws support from Marx', Bookchin's actual argument is that Marx (and, by implication, Gorz) fails to recognize the full (ecological) implications of this situation. Bookchin, as usual, is hardly trying to build bridges with a 'Marxian corpus' that he says 'lies in an uncovered grave, distended by gases and festering with molds and worms'. But, more importantly, it is Gorz's Marxist-inspired reduction of ecology to 'environmentalism', his failure to recognize any difference between the two 'ecologies' that Bookchin had noted back in 1973, which is absolutely central to their disagreement.

Again, the point here is not to posit an 'unbridgeable chasm' between Marx and Bookchin's anarchistic social ecology, still less to deny the relevance of Bookchin's thought to contemporary debates. White does an excellent job of bringing aspects of Bookchin's work into dialogue with, for example, 'ecological modernization' and 'new urbanism', revealing in the process the coherence, contradictions and contemporary relevance of his thought. But from Bookchin's perspective such debates are limited precisely to the extent that they fail to give due recognition to the creativity and diversity that characterize the 'natural' (more-than-human) world

– in Bookchin’s terms, the ‘first nature’ that industrial societies reduce and consume. And this due recognition is, as Bookchin always insists, *ethical* as well as political. It does not simply treat first nature as a resource to be distributed according to the dictates of new hegemonic discourses, even those revelling in the name of ‘*environmental justice*’.

In this context, White needs to do more to maintain a separation between Bookchin’s thought and the various forms of ‘pragmatic’ humanism that try to paint all radical ecologists as a-theoretical, neo-Malthusian wilderness freaks uninterested in urban issues. Bookchin’s critique of asocial and ecologically reductivist strands of ‘ecologism’ was timely and important but also has to be understood in the particularly North American context of a ‘wilderness’ debate that has only ever constituted one strand of an extremely diverse ‘environmental/ecological’ movement. This movement has been infused with a radical ecology that engages in very fundamental ways with almost every aspect of social life, from public transport to recycling, from power production to pollution and political decentralization. Radical ecologists have been campaigning on urban and human health issues for generations, constantly arguing that the ‘social’ and the ‘natural’ are inseparable *and* concerning themselves with issues like species conservation and biodiversity. To paraphrase Bookchin, one might say there is nothing new about ‘environmental justice’ except the way it is being used to ‘refurbish’ neo-Marxist and left-liberal politics. An unfortunate consequence of this refurbishing is that radical ecology is all too frequently tarred with a Malthusian brush and their espousal of ethical concerns for ‘first nature’ invokes charges of implicit anti-humanism.

Again, I don’t think this is White’s intention (although I could be wrong), but it is a consequence of reading Bookchin’s work through the socio-theoretical lens he has chosen. And, of course, Bookchin, too, must bear some of the responsibility for facilitating such a reading because of his own divisive polemics. Perhaps the omission of the term ‘natural crisis’, noted above, was also, unfortunately, eerily prescient? Certainly one doesn’t get much of a sense of *ecological* urgency from those we might dub the new productivists, who sometimes seem to think they have resolved any ‘natural crisis’ by the judicious application of social theory. Maybe this is all just a matter of emphasis, but emphasis *matters*. Early on, White notes, for example, Bookchin’s claim that, in defining people as ‘what they produce and how they produce’, Marx and Marxists effectively posit a ‘stunningly

impoverished view of humanity’. He also identifies this same economic productivism as being at the root of Marx(ism)’s focus on the expansion of productive forces necessary to overcome material scarcity – with all the ecological problems that this invariably brings in its wake. It also underlies the resourcism of Gorz’s political ecology. But then surely White’s own attempt to change the focus of analysis from Bookchin’s concerns about the ideological ‘domination of nature’ to questions concerning the ‘production of nature’ risks reinscribing yet another form of this same (albeit now extraordinarily attenuated) social productivism. Perhaps, after all, we all still have something to learn from Bookchin.

Mick Smith

The elevator effect

George Yancy, *Black Bodies, White Gazes: The Continuing Significance of Race*, Rowman & Littlefield, New York, 2008. 265 pp., \$29.95 pb., 978 0 7425 5298 2.

‘We average Americans’, observed Eric Holder in February 2009, ‘simply do not talk enough with each other about race.’ The Attorney General’s diagnosis of this deficit was a national failure of nerve: ‘We always have been and continue to be, in too many ways, essentially a nation of cowards.’ Seeking to overcome such cowardice in his new book *Black Bodies, White Gazes: The Continuing Significance of Race*, George Yancy’s tools are as varied as his subject: phenomenology and existentialism, literature and current events, calm analysis and charged classroom illustrations. The result is a blueprint of racism’s mechanisms that Cornel West has pronounced ‘the most philosophically sophisticated treatment we have of the most visceral issue in America and modernity.’ Bringing together the insights of numerous thinkers – Douglass and DuBois, Husserl and Sartre, Toni Morrison and Frantz Fanon – Yancy attempts to unpack, in turn, the white gaze and how it denigrates the black body; how this denigration threatens to violate its victims’ subjectivities, and how such violations can be resisted; and, finally, how whites evade responsibility for the wreckage their gaze still wreaks, but can yet recognize, and resist, its ‘ambushes’.

Even ‘unthinking’ actions can reflect sophisticated expectations. I place my notebook on the table; I expect the table to withstand the notebook’s weight. Yet, if

Hume was right about induction, then my present expectation(s) outrun any evidence I could muster (viz, concerning my *past* commerce with the table). If Berkeley (*sans* Deity) was right, my expectation that the table will even exist after I leave the room, too, outruns the sum of my observations. In numerous such ways, my habitual dropping of the notebook on the table reveals expectations that, in turn, presume table-properties which aren't found by 'just looking'. Rather, my mind projects these features upon (my thoughts of) the table whenever I encounter one. As Husserl noted, the discovery of my nuanced expectations and projections takes a special act of reflection; in ordinary life, the Natural Attitude spares me from dwelling on (or even noticing) these details. And when the topic is notebooks and tables, my blinkered Natural Attitude is, probably, all to the good. But, as Yancy argues, the same dynamic is at work in racist encounters – with profoundly demoralizing results. Take what Yancy dubs the 'Elevator Effect': a black man enters an elevator; the white woman inside 'sees' him and clutches her purse. Expectations, on the white woman's part, have been uncovered. But, as with our table encounter, none of these expectations – that the man is criminal, violent, and so on – justified by the man's phenotypic blackness. Rather, in the act of 'seeing' him, the woman's furtive mind has projected unfounded properties upon (her idea of) him. Strictly, the woman seizes in response to fear of not the *man*, but a 'ghost ... of [her] own creation'.

Like a funhouse mirror, then, this white gaze exaggerates (or invents) certain features, which renders the black body 'hypervisible'. The white gaze, also like the trick-mirror, diminishes other features. More specifically, what the woman sees by 'just looking' triggers an anxiety-inducing false caricature, a *phantom*: 'she "sees" a criminal ... a threat ... a peripherally glimpsed vague presence of something dark, forbidden, and dreadful.' This hypervisibility, in turn, crowds out other things she *ought* to see. 'She does not see a dynamic subjectivity', Yancy observes, 'but a *sort*, something eviscerated of individuality, flattened, and rendered vacuous of genuine human feelings'. This treatment goes a long way to illuminate, among other literary examples, Ralph Ellison's pivotal notion of 'visible invisibility'.

Matters grow more complex, however, once witnesses enter the situation. This is easy to see with regard to our table example: when I'm alone, my actions manifest unspoken expectations and beliefs concerning the table. But now add witnesses; in such a case, not only do I exemplify my expectations,

but these actions become important *performances*. In short, my behaviour vis-à-vis the table reinforces like expectations in those witnessing this performance. So, too, when we add witnesses to Yancy's elevator. Suppose a white male bystander sees our woman grab her purse; her actions then become a performance for the bystander. The woman's performance reinforces the bystander's own distorted expectations of, and projections upon, the black man in their midst, if he shares them; conversely, if he doesn't share the woman's prejudices, he may nonetheless reinforce those prejudices if (as often happens) he remains silent in the face of the woman's performance. Such performances – which range from gasping purse-grasps in elevators, to Malcolm X's maths teacher 'counselling' him to 'be realistic' and abandon his ambition to become a lawyer, to 'praising' an African-American scholar at an APA conference for 'speaking English well' – fall under the rubric of '(performances of) whiteness'.

Sartre notoriously defined hell as other people, and the gaze is a pivotal reason why. Others inspect my behaviour, but, since they're unable to introspect my subjectivity, their judgements of me are bound to be starker, harsher, than my self-evaluations. Sometimes, this is to the good, as when an interlocutor can confront my self-deception (*mauvaise foi*) and corner me into taking responsibility. I become aware of how my interlocutor sees and interprets my actions, and realize that her unflattering explanation should supplant my self-serving rationalization. An analogous dynamic is at work in racist encounters, but the upshot, given the wild invalidity of the projections of the white gaze, is pernicious: 'To have one's dark body penetrated by the white gaze then to have that body returned as distorted is a powerfully violating experience.' One understandable response to such violations, and the 'double consciousness' they engender (à la DuBois), is resignation; hence Pecola Breedlove's tragic trajectory in Toni Morrison's iconic novella *The Bluest Eye*. Yancy devotes a full chapter to interpreting this work, situating it in the just-sketched scaffolding of the white gaze, and, conversely, employing the work to illustrate the interlaced skeins of the white gaze, performances of whiteness, and the 'phenomenological return of the black body'. In light of how heavily the existential and socio-economic decks are stacked towards the white gaze and whiteness' performances, Breedlove's tragic resignation is understandable. For this reason, it's crucial to see how resistance is possible – and what it means. At its foundation, black resistance to the white gaze begins by manifesting the very subjectivity erased from black bodies by the white gaze. 'It is alleged',

wrote Frederick Douglass, ‘that [we] are so low in the scale of humanity ... that [we] are unconscious of [our suffered] wrongs, and do not apprehend [our] rights’. To resist, then, is already to confute the white gaze.

The specific vehicles of resistance are as diverse as intelligent imagination. At a quotidian level, the man in the elevator might resist the white woman’s oppressive gaze by ‘[n]aming her fears’ and explicitly disavowing them. At that point, the woman must now *see* that the target of her prejudices *sees* how her consciousness is turning, thus ‘effective[ly] reversing her gaze’. In the more perilous times of Jim Crow, African Americans resisted by “conform[ing]” to white myths while undermining those myths simultaneously’ through self-conscious mental reservation – that is, irony; hence the deathbed advice of an elderly black man in Ellison’s *Invisible Man*: ‘I want you to overcome ’em [whites] with yeses, undermine ’em with grins, agree ’em to death and destruction.’ Even in the most dangerous times of slavery, resistance occurred, as Yancy discusses at length, by disrupting the status quo – using such ‘guerilla tactics’ as breaking tools, poisoning food, destroying crops, and effecting slow-downs in plantation operations. In all such tactics of resistance, we find a common thread: ‘deflect[ions] of the Black imago in the white imaginary that depicted them as submissive and re-narrat[ions of] their identities as agential’. For this reason, *pace* bell hooks, resistance need not merely be negative; rather, “to take a stand” is linked, existentially, to ... [self-]affirmation.’

The issue of black resistance to the white gaze (and its performances) prompts an obvious parallel question: ‘should[n’t] *she*’, wonders Yancy, referring to the woman in the elevator, ‘be the one doing the work to challenge *her* racism?’ This obligation ought to go without saying; yet, problematically, the white gaze

‘covers its tracks’. Blacks, aware of how they are so-*seen*, suffer epistemic violence (and more) when their bodies are *returned* to them, distorted in every way – aesthetically, emotionally, intellectually, existentially. And yet whites by and large do not see their projections as caricatures, nor even as projections. Whites like our woman in the elevator don’t, as Yancy puts it, see themselves as ‘seeing as if’. They see themselves as ‘seeing as *is*’.

In fact, the white gaze not only distorts black bodies; it also, when that gaze is reflected inward, distorts *white* bodies. The white gaze, trained on the black body, renders it hypervisible by perverting it into a gross caricature. But, trained on the white body, the white gaze renders it innocently invisible. For instance, while whites *may* concede that African Americans suffer unjust disadvantages because of their darker skins, it’s a rare thing to find whites inferring the obvious corollary: we have incurred unjust advantages – *privileges*, in Peggy McIntosh’s sense of the word – from our lighter skins. The white gaze erases whites’ bodies from the factors responsible for white individuals’ affluence. Such successes, instead, end up rationalized in a manner reminiscent of Horatio Alger: affluence is the simple result of making virtuous choices. In this way, the white gaze stretches white subjectivity into hypervisibility: free will, for instance, ends up bloated into a self-serving abstract individualism, flatteringly uncomplicated by material conditions or financial factors.

For this reason whites’ self-esteem is bound up with denying racism’s privileging effects. By extension, this also prompts denial of the far-reaching role that racism’s practice (via performances of whiteness) bears in disadvantaging African Americans. Denial, as always, is a resourceful opponent, and Yancy provides

example after example of how such denial arises in the classroom: from the student who dismisses Yancy’s elevator example with a self-satisfied ‘Bullshit!’ to students who insist that the young DuBois ‘misread’ the reason for a white girl’s refusal of his visiting card (not racially motivated but just ‘how little girls generally treat little boys’), to students who jejunely insist on the validity of racial essentialism



(‘Of course race is real. Why do you think so many blacks dominate the NBA?’). And so on and on.

Despite the obstacles, Yancy holds out hope. It’s often possible – and easier – for whites to ‘double down’ in their self-deception. But another way is possible. What, for instance, should our recurring woman in the elevator do to *undo* her role in sustaining whiteness? Yancy counsels that she – we – must not underestimate the commitment involved; ‘undoing whiteness’, he writes, ‘does not presuppose an ontology of the self that is capable, through a single act of will and intention, of rising above the white discursive streams within which that self is embedded’. Instead, the *recovering* performer of whiteness (if I may make the comparison) is not unlike the recovering addict or alcoholic. Because of a lifetime of ingrained habits and attitudes involving certain substances, the addict is still vulnerable to *cravings*. The mark of the recovering addict is, then, not the extinction of cravings, but rather the ability to avoid identifying with, or indulging in, such cravings. So, too, a lifetime’s exposure to anti-black tropes and performances can’t help but

leave their own behavioural tracks. There will be, even for whites who sincerely commit to (and persist in) renouncing their performances of whiteness, the haphazard prejudiced thoughts, turns of speech – or even seizures of one’s purse (or wallet) in elevators. Yancy terms such unwelcome temptations towards relapse *ambushes*: ‘Even as one attempts to shift the white gaze, as if it were solely a question of removing tinted glasses, one continues to “see” the “violent” black body as it approaches ... and “lazy” Black bodies as they commune on street corners.’ So seen, the mission of renouncing the performance of whiteness is daunting. And yet Yancy is confident that it’s possible. After all, when ignorance is claimed, the rejoinder is obvious: ‘But he/she *ought* to have been aware!’ In this, Yancy notices the ability that such judgements presuppose; for, ‘where he/she *ought* to have been aware, he/she *can* indeed be aware’. And where one can be *aware*, we might add, one can, indeed, resist such ambushes.

Timothy Chambers

The ignorant spectator

Jacques Rancière, *Le Spectateur émancipé*, La Fabrique éditions, Paris, 2008. 150 pp., €13.00, 978 2 9133 7280 1; forthcoming in translation as *The Emancipated Spectator*, Verso, London and New York, 2009. 128 pp, £12.99 hb., 978 1 84467 343 8.

Le spectateur émancipé is Jacques Rancière’s practical appendix to his more theoretical yet lapidary draft on aesthetics, *The Politics of Aesthetics*. Unlike many other philosophers who, when invited to art events and conferences in order to ally their radicalism with contemporary art, show no actual interest in the ‘contemporary’, Rancière here shines as a curious and well-informed, albeit cautious, spectator of both new forms and newly old problems in theatre, photography, art and curatorship. What links the book’s five studies together is the argument that the politics of art today lies in its capacity for emancipation, in a way that is opposed to the critical operations by which contemporary art itself seeks political effects. Hence, this book supplements his well-known theses on the rupture of the sensible, as the politico-aesthetic form of ‘art revolution’, with a vivid and incisive analysis of specific artworks and debates.

The opening essay, written from a perspective informed by Rancière’s account of emancipation in

The Ignorant Schoolmaster (1987), makes the issue of ‘spectatorship’ the nexus of a discussion about so-called political art and critical discourse. The spectator is the one who watches the spectacle but doesn’t know the conditions of its production, and, while watching from her seat, isn’t given the power to act or intervene. The history of modern theatre, and its contemporary struggle for political revitalization, has been shaped by its struggle with spectatorship as a necessary evil. Theatre’s main concern has thus been how to turn the ignorant and passive spectators into actors. Brecht’s alienation-effect sought to activate the self-consciousness of a critical viewer; Artaud’s magic power of ceremony sought to recuperate the vital energy of an observer liberated from the constraints of reason. These are the two poles, Rancière argues, of a general effort to turn theatre into a form of community’s self-activity.

Contemporary theatre still suffers from an obsession with its true essence: theatre as the only

place where an audience confronts itself as a collective. Rancière reads this as an opposition of the self-presence of community to the distance of representation, and thereby connects this distance of representation, between gaze and knowledge, activity and passivity, with Debord's critique of the spectacle. If 'separation is the alpha and omega of the theatre', similar in form to the externality of images that dispossess subjects of their experience (Debord), then 'dramaturgy' (which for Rancière means the art of drama in theatre) specifically teaches spectators how to become performers of a collective activity that has been stolen from them. For what is expected from theatre – as avant-garde, radical, politically engaged – is to reconstitute community in the collective experience and action of an audience. The critique of representation upon which the discourse of contemporary performance relies is therefore often like a 'pedagogy' which aims to reduce the gap between ignorance and knowledge. The dramaturge (whether as theatre maker, playwright, director, actor) is a figure compared with the schoolmaster who stultifies the ignorant. His role is to ensure the efficient communication of intentions on the assumption that affecting or raising consciousness will necessarily lead to (political) action. Whereas stultification assumes the unilateral determination of cause and effect, emancipation begins with their dissociation – with the distance built into the very situation. The performance is a third term that stands between the spectator and the dramaturge, and that separates them. It also divides the audience into individual spectators (therefore the singular form of 'spectator'), where each one is active in observing, selecting, comparing and interpreting what the master-dramaturge might not know. Only when each spectator is challenged in her capacity to perceive and understand is she on the way to emancipation, to creating her own voice of subjectivation. So, 'the collective power which is common to the spectators is not the status of members of a collective body. Nor is it a peculiar kind of interactivity. It is the power of translating in their own way what they are looking at.'

Evocation of this last power makes it sound as if Rancière were advocating a relativist post-*opera aperta* openness of reading for the sake of the spectator's reappropriation of the self. He is, however, wary of such hyperactivist consumer-individualism, and the sort of emancipation he has in mind is by no means about the spectator identifying herself in her own story. It only begins when a new intellectual adventure – a stage that redistributes the visible,

sayable and thinkable – calls for competences and roles to dissociate from one another or to reinvent themselves. Theatre that plays without words, and dance that plays with words, installations and performances instead of art objects, video projections turned into cycles of frescoes, photographs turned into living pictures or history paintings, sculpture which becomes hypermediatized show – these are, in Rancière's words, the 'dissensual forms' that bring the common of the community, or the regimes of the sensible, into creative disagreement.

The next three essays revolve around image and the discourse about its critical and political operations. In 'Intolerable Image', Rancière addresses the infamous polemic about the unrepresentability of the Holocaust generated by the 2002 Paris exhibition of photography, *Mémoires des camps*. Instead of choosing to argue for the evidence of the image (insufficient and, therefore, illusory) or for the testimony of speech (incomplete but true), Rancière finds a third way in yet another 'dissensual' example. Alfredo Jaar's *Real Pictures*, about genocide in Rwanda, is an installation detaching words from the voice and isolating the gaze from the face of victim in a kind of textual image. It serves here to illustrate that the problem is not about whether to show horror or not, but about how the victim is constructed. The representation cannot be judged on its fidelity to the real, as there is no outside to art, no reality to oppose to its false and 'evil' appearance in image. The politics of art, Rancière reasserts, lies in the fiction of spatio-temporal apparatuses (*dispositifs*) and their capacity to construct other realities in other communities of words, images and things.

By contrast, Josephine Meckseper's *Untitled* (2005), showing protesters against the war in Iraq turned with their backs to a pile of consumer garbage, becomes the centrepiece of Rancière's 'critique of critique'. The image without title stages, as if it needs 'no comment', the commodity-equivalence of terrorism and consumerism. Its patronizing tone of vanity and blame epitomizes the irony and melancholy of the Left and produces the same cynical effect as the recent (hypo)critical furore of the Right over the riots and protests in France. Rancière makes Alain Finkielkraut's statement – that all that the young rebels burning schools in the suburbs of Paris want is 'money, brands and girls' – resonate with the critique of a leftist sociologist like Luc Boltanski. The perversity of the argument that 'the more you are trying to resist, the more you are contributing' is simply the denial of any possibility of emancipation.

This requires a critique of critique that will build a new trust in the political capacity of images. Images can contribute by drawing a new configuration of the sensible, but on the condition that they don't work for a political effect.

With this we arrive at the conclusion of Rancière's argument. In a chain of affirmative examples, Rancière analyses what he calls the 'pensive image' – title of the last essay. Cutting across a selection of twentieth-century photography and cinema, from Walker Evans and Lewis Payne to Abbas Kiarostami and Rineke Dijkstra, the pensive image encapsulates the principle that Rancière defends in his concept of the aesthetic regime: undecidability or indetermination due to the suspension of any attribution to the work of social or political origin, intention or destination. A pensive image hides a thought which affects the spectator without allowing her to attribute it either to the author of the image or to the subject of the portrait in the image. This is not a given condition for any artwork after 1800 – the modernist status of autonomy – but a result of sophisticated crossings between heterogeneous regimes of expression, which 'create new figures, awakening the sensible possibilities that have been exhausted'.

Although Rancière's account of contemporary medi-ality as relocation of the effect of one medium into another is strikingly acute, he doesn't theorize like a curator, who might go so far as to baptize a distinct aesthetic on the basis of a particular artistic operation. His agenda, and the performative success of these essays, is to disarm such curatorial debates. The question is who is destined for what message. *Le Spectateur émancipé* recommends that the artist 'experiment more', and the curator 'speculate less'; look into the possibilities of recasting the sensible, Rancière suggests, and you will find them abundant. But this precisely indicates the limit of Rancière's plea for emancipation. It remains bound to an analysis of representation in the form of the sensible without accounting for those registers of art's operations that concern the political economy of art production, as well as experiments with the forms of labour and sociality through which art might challenge the part in which it has been cast within society. However, this might well be to demand more than that which *Le Spectateur émancipé* actually aims for. For, in the end, what we are given is, above all, a figure of the spectator whose capacities to sense and think are greater than we have – since Lacan, Debord, Irigaray and other French 'denigrators' of the spectacle – been prepared to conceive.

Bojana Cvejic

Number theory

Alain Badiou, *Number and Numbers*, trans. Robin Mackay, Polity Press, Cambridge, 2008. 240 pp., £16.99 pb., 978 0 7456 3879 9.

One of the more astonishing aspects of Alain Badiou's philosophical position is that the key to what is most distinctive about it can be summarized in just three words: mathematics is ontology. His major work, *Being and Event*, kicks off with this stark assertion, and proceeds to derive a series of bold conclusions – the wresting of ontology from Heidegger's embrace, the construction of a rigorous and rationalist metaphysics, and a wholesale refoundation of the relationship between philosophy and science, the latter henceforth being conceived as one of philosophy's 'conditions'.

It should be noted, however, that while Badiou identifies ontology with mathematics in its most general sense, *Being and Event* by and large concerns itself with a very specific field of mathematics, namely set theory. Badiou recasts this as the theory of 'pure multiplicity', a reference to the fact that sets do nothing more than gather together their multiple elements and count them as one. There are reasons for this choice, of course, not least of which is the role that set theory plays within mathematics. Set theory acts as a kind of internal ontology of mathematics, certainly in the weak sense that any mathematical entity can be thought of as a kind of set, and arguably in the strong sense that mathematical entities actually *are* sets. For example, the mathematical concept of an ordered pair $\langle a, b \rangle$ is distinct from that of the set $\{a, b\}$. The former has an ordering that makes a its first element and b its second. The latter, in contrast, is a pure multiple without any kind of order inscribed upon it. But although ordered pairs are conceptually distinct from sets, they can be implemented as sets by defining the ordered pair $\langle a, b \rangle$ as the set $\{\{a\}, \{a, b\}\}$. The reader can check that given any set of this form, one can extract the first and second elements from it. Ordered pairs can thus be simulated through the intricate weaving together of pure multiplicities. The same, arguably, is true of any other entity used in mathematics.

But while set theory plays an important foundational role in mathematics, that is almost all it does. The concepts and techniques it deploys are of little interest to the 'working mathematician', most of whom get by with only a smattering of knowledge of the field. Only occasionally does a problem in general mathematics turn out to revolve around set-theoretic considerations – though such occasions can and do arise, which is

why set theory cannot simply be dismissed a province for pedants and philosophers.

All this opens up an intriguing problem: what is the ontological significance of the rest of mathematics, the overwhelming bulk of mathematics, once one moves beyond the limited terrain of pure set theory? Far from being the final word on the question of being, Badiou's identification of mathematics with ontology opens the door to a vast 'meta-ontological' research programme, one that scours the entirety of contemporary mathematical thought, elucidating its concepts and thinking through their metaphysical implications. Indeed, Badiou's own work occasionally hints at this larger research programme. In his essay 'Group, Category, Subject', he argues that the mathematical theory of groups can act as a grounding framework for the psychoanalytic notions of subjectivity found in Lacan and Freud. In 'One, Multiple, Multiplicities', his rejoinder to Deleuzian critics, Badiou argues that notions of the 'open' and the 'closed' should ultimately refer back to the way these concepts are deployed in topology.

The most systematic exploration of a region of mathematics outside its foundational core comes in Badiou's short book *Number and Numbers*. It was published in 1990, a couple of years after *Being and Event*, and has now been expertly translated into English by Robin Mackay. In it Badiou examines what mathematicians call the 'surreal numbers' – a class of number-like entities that incorporate familiar species of number, such as the integers, the rationals and the reals, but also encompass less familiar ones such as transfinite ordinals and infinitesimals (i.e. infinitely small quantities). The surreal numbers were introduced by the mathematician John Horton Conway as a by-product of his investigations into Go, the ancient Japanese board game. Conway simply called his creations Numbers – the term 'surreal numbers' was coined by Donald Knuth in his peculiar 1974 booklet of the same name, the text that introduced Conway's creations to the wider public. Knuth's terminology has since stuck. Significantly Badiou reverts to calling them Numbers, despite the fact that in other respects his approach is diametrically opposed to Conway's recursive and constructivist presentation.

Badiou sets out his stall in the polemical opening pages of *Number and Numbers* – a chapter numbered zero and entitled "Number must be thought". In it he notes the profusion of different types of numbers, both within mathematics and in culture at large, and contrasts this empirical extravagance with the stubborn absence of any unifying *concept* of number. It is to remedy this deficiency that Badiou turns to the surreals

and presses them into service. He notes that the class of surreals subsumes all the heterogeneous entities we ordinarily like to think of as numbers, and a whole lot more besides. Yet as a class they can be defined in a uniform and relatively straightforward manner. They are both comprehensive and simple – and for Badiou the simultaneous presence of these two virtues is the calling card of the properly ontological. The surreal numbers are thus more than a curiosity or a neat trick: they capture the essence of number itself. The Numbers tell us what number *is*.

Much attention has been paid to the political gloss Badiou puts on his project here. The book's back-cover blurb presents his attempt to construct a rigorous concept of Number as a broadside against 'the political regime of global capitalism' and its reliance on a concept-less and ramified numerosity. Despite my sympathies with Badiou's leftist politics, I find this claim overblown. While it is certainly true that capitalism presses numbers into its ideological service, it is not clear how a rigorous concept of Number would per se challenge such abuses. And surely the problem with opinion polls, stock-market prices, econometric models and so on resides not in the maths as such, but in their tenuous relationship to reality. The now-discredited formulae used to price financial derivatives are still perfectly effective and compelling when used by physicists to model Brownian motion.

These caveats aside, Badiou is right to point out that contemporary thought has a blind spot when it comes to number, and right to attempt to remedy this deficiency. The next half-dozen chapters proceed to survey earlier attempts to think number by Frege, Dedekind, Peano and Cantor in the late nineteenth and early twentieth centuries. This is the most accessible section of the book and is valuable in its own right as a thorough introduction for non-specialists to the philosophical and mathematical issues at work here.

The treatment of Frege gives an insight into Badiou's approach. We start with a firm focus on the metaphysical stakes of Frege's project – the conviction that numbers can be engendered from pure thought. We are then guided through Frege's construction of number, its demolition and partial repair at the hands of Russell and Zermelo, before coming to Badiou's materialist critique. Frege ultimately fails because one cannot derive the existence of objects from pure thought. The existence of something rather than nothing is an ontological axiom, not a logical necessity. Yet there is a twist in the tail – Frege's masterstroke of starting his consideration of number from zero rather than one turns out to lay the foundations for a materialist

ontology capable of providing a framework for the thinking of Number. All this is achieved in nineteen terse, numbered paragraphs.

Having completed his historical survey, Badiou moves on to recapitulate certain aspects of set theory and ontology – material that will be familiar to those who have read *Being and Event* and that acts as a useful companion to that work. He then proceeds to use this set-theoretic machinery to define Numbers, demonstrate that they have a natural linear order, and prove a variety of theorems about them. The book culminates in the definition of basic arithmetical operations such as addition and multiplication, and the verification that these operations obey the standard algebraic laws one would expect. As is often the case in Badiou's work, the mathematics he presents is standard, though the presentation of it is tweaked to reflect his philosophical agenda. For instance, Badiou defines a Number to be a specified subset of a specified ordinal. This is not a standard definition, though it can be shown to be equivalent to those found in mathematical literature.

The merit of Badiou's approach here is its low ontological overhead. Number is defined more or less directly in terms of the basic set-theoretical relationships of belonging and inclusion. In particular, the definition goes through without reference to any prior notion of order, seriality or counting. Number is thus sundered from any kind of intuition or empiricism and rendered purely as a 'form of Being'. It is also worth noting that Badiou's approach to Numbers makes them appear 'all at once', so to speak. The entire field of surreal numbers is defined in one fell swoop – the weirdest and wildest Numbers born simultaneously and alongside familiar entities such as 2, -17 and $\frac{1}{4}$. This is in sharp contrast to Conway's generative approach that starts from the integers and progressively creates ever more complex surreals. The contrast is even sharper with Knuth's take on Conway, which is framed in explicitly theological terms as a creation parable involving God and a pair of maths-besotted hippies.

These and other fascinating technical intricacies aside, the big question is whether any of this works. Does Badiou supply a coherent, unifying concept of number that is consistent with his wider ontological project? Does he manage to succeed where others have failed in 'thinking Number'? In my judgement the answer is a provisional and cautious 'yes'. Badiou's metaphysical take on the surreals is bold and startling, but it does provide an answer to the question 'what is number?', albeit one that is most persuasive to those already partial to Badiou's views on these matters.

Nevertheless, some warnings are in order, most of which revolve around the mathematics of surreal numbers. Despite the astonishing beauty of the surreals, attempts to make use of them in wider mathematics have so far foundered (at least so far as I am aware). For instance, while the surreals admit particularly neat definitions of addition and multiplication, exponentiation proves to be significantly more awkward. Moreover, these definitions do not easily yield a practical algorithm for calculating arithmetic sums and products, as one might have hoped. And while the surreals include all manner of infinitesimal quantities, it has proved exceptionally difficult to develop calculus using these infinitesimals. The surreals promise much, but have so far delivered little.

But is it just a coincidence that the surreal numbers, like set theory, turn out to be of little practical use for the working mathematician? Perhaps there is a necessary disjunction between ontological importance and practical utility. Perhaps the 'use' of these regions of mathematics is precisely to act as an ontological foundation for the rest of mathematics, and we shouldn't expect anything more of them. Perhaps ontology is the discourse that picks up precisely at the point where practicality has nothing left to say. This would be an surprisingly Heideggerian conclusion to draw from Badiou's austere rationalist vision, but one that would be in keeping with his distrust of the dimly empirical.

Anindya Bhattacharyya

Neither last nor least

Edward Skidelsky, *Ernst Cassirer: The Last Philosopher of Culture*, Princeton University Press, Princeton and Oxford, 2008. 288 pp, £19.95 hb., 978 0 6911 3134 4.

Following his death in 1945, Ernst Cassirer tended to be viewed in the anglophone world as a formidable and erudite intellectual historian with little of substance in terms of his own philosophical position, while in the German-speaking world he was seen as the most significant of the last generation of Marburg Neo-Kantians. Cassirer's magnum opus, the three-volume *Philosophy of Symbolic Forms* (1923–29), came to be viewed as the final defence of German idealism before Heidegger dealt it the final blow. This milestone was marked by the famous Davos encounter of March 1929, in which a young and ascendant existentialist

encountered the established idealist and, to the general consensus of those present, the former won on points. Davos famously marked a 'parting of the ways' in European philosophy, after which the continental and analytical trends finally broke apart, leaving idealism behind as a sloughed skin.

Of course such characterizations are a caricature of the real situation, for neo-Kantianism found a whole series of at least partial adherents who are of undoubted importance in the contemporary world: Mikhail Bakhtin, Michel Foucault and Jürgen Habermas to mention just three. Both Bakhtin and Habermas affirmed the undiminished value of Cassirer's work and this has encouraged renewed attention to be paid to Cassirer's work itself, with J.M. Krois's 1987 book *Cassirer: Symbolic Forms and History* marking a particularly important landmark in highlighting the original contribution Cassirer made to philosophy and challenging the notion that his work can simply be regarded as a continuation of neo-Kantianism. Edward Skidelsky has now produced another landmark with perhaps the first real intellectual biography of Cassirer in English, tracing the emergence of his thought among the Marburg School, his movement beyond its scientism into the philosophy of culture, his ongoing engagement with competing intellectual trends such as *Lebensphilosophie*, logical positivism and existentialism, and his final attempts to engage with the questions of technology and politics.

The book is structured into nine chapters dealing with different periods or points of focus throughout Cassirer's career. The main parts are the Marburg School, Goethe, Cassirer's philosophy of culture, logical positivism, *Lebensphilosophie*, Heidegger, and finally Cassirer's attempt to discuss politics in his final book *The Myth of the State*. While the main focus is on the development of Cassirer's own philosophy in relation to the theorizing going on around him, there is little attention devoted to some of Cassirer's best-known works in the anglophone world – his works on intellectual history. While this is understandable in an intellectual biography of this type, the reader may have benefited from some reflection on Cassirer's understanding of the history of philosophical thought, especially since the author is here trying to place Cassirer's ideas within the history of the philosophy of the first half of the twentieth century.

Nevertheless, Skidelsky should be congratulated for presenting us with an extremely readable and compelling account of Cassirer's work, delivering it from the stratospheric abstractness of the Marburg School and revealing a dynamic and engaging thinker who was

open to every philosophical innovation. The impression of Cassirer as a mere chronicler of intellectual trends is shown to rest on his abhorrence of confrontation and his repeated striving for conciliation, which at times masked a critical encounter no less acute and searching than those better known through their polemical force. This also contributed to the perceived defeat at Davos, as Heidegger repeatedly attempted to foreground the fundamental differences between his own and Cassirer's interpretations of Kant's legacy, while Cassirer repeatedly tried to make peace. While Heidegger insisted that it is drawing attention to the finitude of human existence that marks Kant's greatest achievement, Cassirer retorted that this is but the starting point for Kant's illustration of how humanity can transcend such limitations and aspire to universality. Skidelsky argues that while worthy of much greater scrutiny as the basis of a possible counter-strategy to Heidegger, Cassirer himself failed finally to get to grips with Heidegger's radical vision, and the history of philosophy since this time has been written accordingly. A new look at the potential implicit in Cassirer's response is due, and this also extends beyond the engagement with Heidegger as such.

Thus, in two fascinating chapters, Skidelsky examines Cassirer's engagement with logical positivism and *Lebensphilosophie*, which are viewed as two sides of a single philosophical problem, with Cassirer attempting to mediate between them. While the former strove to cleanse philosophy of everything that was not rooted in logical syntax, the latter strove to dissolve reason into the ineffable processes of life. The two trends were seen as reinforcing the excesses of each other, with the first aspiring to ever greater logicism, scientism and physicalism, and treating its adversary as irrationalist nonsense unworthy of serious engagement, while the latter presented rational arguments as divorced from the most important aspects of human existence.

While Skidelsky absolves Wittgenstein of responsibility for this, he shows that the new positivists, especially Carnap, who attended the Davos encounter, distinguished between expressive and logical meaning, relegating the former to a pre-philosophical and metaphysical status. While he never really addressed all the issues raised by Wittgenstein's *Tractatus*, and he never wrote a sustained work on logical positivism, Cassirer is shown to have engaged with the ideas at various points, seeking to uphold the Vienna Circle's advocacy of 'scientific civilization' while hoping to counter its ever-narrowing focus of concerns. Here we see a similar process at work as that which led Cassirer to move away from the 'one-sided rationalism' of

the Marburg School. For Cassirer the excesses of the Vienna Circle were akin to the 'mathematical dogmatism' of Hermann Cohen since they tended to identify the unity of culture and the unity of reason and as such abandoned all other aspects of human life to irrationalism and mysticism. While the dangers of this approach were evident already in the period before World War I, by the later 1920s the dangers were very clear to see, and were no longer mere questions of philosophical taste, but increasingly of a political nature.

Skidelsky thus presents Cassirer's emerging philosophy of culture not as something indifferent to political developments, but as something that needs to be understood in relation to those developments even if he was rarely to discuss politics itself. There is no doubt much truth in this: the Marburg School were champions of a liberal social democracy and were associated with the revisionist trend in German socialism. It is clear that Skidelsky is generally sympathetic to this trend, and he makes several comments on neo-Kantianism as a force which allowed a 'liberation' from allegedly Marxist economic determinism. Indeed, Cassirer is shown to have viewed the failure of the Weimar Republic as the result of the leaders being 'determined Marxists' who concentrated only on economic conditions and thus ignored the appeal of the Nazi myth. But there is no sense that the author has actually familiarized himself with the actual political commitments of Weimar leaders, nor with the analyses of fascism then being developed by the most sophisticated Marxists. Indeed, while Cassirer is presented as anticipating some of the ideas of the Frankfurt School, there is no attempt to discuss the role of Marxism in those ideas. Instead Cassirer's commitment to liberalism is simply upheld, though with intelligent comments on his inability to deal with political questions in anything but the most oblique way, and his failure to come to grips with the issue of technology.

Indeed, Cassirer's main motivation here appears to be the need to combat the positivist alienation of reason from other aspects of social life, and a strong case is made for this. His early writings on the natural sciences, which opposed Mach's positivism, continue through to his sporadic engagements with logical positivism, and are shown to have motivated a sustained engagement with *Lebensphilosophie*. In contradistinction to the positivists and *Lebensphilosophen*, Cassirer rooted all experience in a process of symbolization which progresses from the lowest form of myth to the higher forms of culture such as art, science and religion. Here we clearly have the influence of Hegel and Goethe on Cassirer's work,

which Skidelsky shows quite clearly. However, there is a problem here, as the narrative which underlies Cassirer's philosophy of culture is not as radically anti-positivist as Skidelsky claims, for the presentation of positivism here is limited to that of Mach's approach to natural science. The Comtean tradition is passed over with scarcely a mention, and there is curiously no mention at all of Cassirer's complex relationship to the most important positivist theorist of mythical thought, Lucien Lévy-Bruhl. This is significant, since while Cassirer clearly differed from the positivists in philosophical terms, he nevertheless adopted many of the same formulations without significantly amending them. Cassirer thus tended to transpose positivist formulations into the territory of German idealism rather than opposing positivism as such throughout his career. This idealization of the positivist narrative runs throughout his *Philosophy of Symbolic Forms*, and was to facilitate the assimilation of Cassirer's ideas about mythical thought into Soviet cultural theory of the 1930s. It is therefore arguable that Cassirer's engagement with positivism was as sustained and constructive as with *Lebensphilosophie*.

These quibbles aside, Skidelsky's book manages to highlight the fact that the history of philosophy of the period is much more complex than the caricatures of most textbook accounts, and Cassirer emerges as a figure who mediated the various trends of the time prior to the split between the analytical and 'continental' traditions. As a point of such mediation, Cassirer appears a figure worthy of renewed attention, whose works are full of features that might spur on the renewal of philosophical thought about culture. But the main relevance of Cassirer's work, according to the author, is its capacity to strengthen the philosophical and cultural bases of liberalism. According to Skidelsky, formal democracy and the 'freedoms' of the market economy are vulnerable precisely because of the lack of a firm cultural undergirding. Anglo-American liberalism appears to need some lessons from the German liberal thought of which Cassirer was a late champion. Yet it is unclear exactly what Cassirer has to offer in those very spheres where his ideas were most deficient – politics and economics. For all Cassirer's philosophical insight and erudition he has so little to say about the sources and institutions of power that it would appear that such philosophical thinking needs to be radically restructured. This is something progressive thinkers who have been influenced by Cassirer such as Habermas and Bourdieu have recognized rather better than the author of this book.

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