
Feminist epistemology after postmodernism: critiquing science, technology and globalisation

ROSI BRAIDOTTI

Faculty of the Humanities, Utrecht University, Munstraat 2A, 3511 NC Utrecht, The Netherlands

This article provides a reasoned overview of contemporary developments within feminist theories of the subject after the decline of postmodernist thought. It stresses the foundational importance of feminist situated epistemology, and hence of a brand of materialism that stresses embodiment and embedded perspectives. The article explores neo-materialist feminist theories in a number of areas, with special emphasis on science and technology studies and critiques of globalisation. It argues that the neo-materialist trend results in a new call for an ethics attuned to the complexity of our era.

At the end of postmodernism, in an era that experts fail to define in any meaningful manner because it swings between nostalgia and euphoria, in a political economy of fear and frenzy,¹ new master-narratives have taken over. They look rather familiar: on the one hand the inevitability of market economies as the historically dominant form of human progress,² on the other biological essentialism, under the cover of ‘the selfish gene’³ and new evolutionary biology and psychology. Franklin aptly names the latter ‘the genetic social imaginary’.⁴

The common trait of these new master-narratives is the return of different forms of determinism, be it the neo-liberal or the genetic brand: the former defends the superiority of capitalism, the latter the despotic authority of DNA. Their joint impact has caused both inflation and reification of the notion of ‘difference’. For instance, on the right of the political spectrum in Europe today, contemporary neo-liberalism is a differential ideology: it celebrates rather than denying differences. In this conservative discourse, however, differences of identity, culture, religion, ability and opportunity are defined in a heavily deterministic manner. They become attached to firm beliefs about national, regional, provincial, at times even community-based parameters of identity formation (see the French National Front, the Italian Lega Nord, the Vlaamse Blok in Belgium, and in the Netherlands the Pim Fortuijn phenomenon). Such firm beliefs about national and cultural identities are organised along a scale of cultural development which is not only deterministic, but also exclusive and xenophobic. In this context, ‘difference’ is indexed on a hierarchy of values that is governed by binary oppositions: ‘us and them’, on a micro- as well as a macro-scale. What this hierarchical differential ideology conveys is the necessity to reassert differences as markers of specific forms of cultural – even civilisational – belonging. In other words, the reassertion of difference introduces

structural patterns of mutual exclusion at the national, regional, provincial and local levels. These master narratives are not ‘new’ in any historical or theoretical sense, but they have gained a renewal of interest and a new momentum in the present context, under the combined impact of the new technologies and the triumph of the market economy.

Alain Touraine describes this phenomenon as ‘la pensée unique’, that is to say a *de facto* hegemony of a neo-liberal orthodoxy, which denies ‘the existence of autonomous social actors capable of influencing political decision-making’.⁵ Arguing that globalisation has not dissolved our collective capacity for political action, Touraine calls for renewed social activism. Cultural identities and legal citizenship constitute the ‘immaterial’ elements of global capitalism⁶ and therefore can also provide the sites for active forms of political resistance. In the same political spirit, Donna Haraway stresses the quasi-monopoly exercised upon our cultures by ‘the status of bio-technology in the transition from the economics and the biology of the Cold War era to the New World Order’s secular theology of enhanced competitiveness and ineluctable market forces’.⁷

Paradoxes multiply, however, all along the way. The very same post-industrial culture that triumphantly asserts the end of ideology, defined as the desire for social justice, simultaneously frustrates and defeats the very conservative dreams it so perversely aroused. For instance, the much celebrated phenomenon of globalisation and its technologies accomplishes a magician’s trick: it combines the euphoric celebration of *new* technologies, *new* economy, *new* lifestyles, *new* generations of both human and technological gadgets, *new* wars and *new* weapons with the utter social rejection of change and transformation. In a totally schizophrenic double pull, the consumistic and socially enhanced faith in the *new* is supposed not only to fit in with, but also actively to induce the rejection of in-depth changes. The potentially innovative, deterritorialising impact of the new technologies is hampered and turned down by the reassertion of the gravitational pull of old and established values.

The other complex feature of these new master-narratives is the ability to take ‘differences’ into a spin, making them proliferate with an aim of ensuring maximum profit.⁸ Advanced capitalism is a difference engine – a multiplier of deterritorialised differences, which are packaged and marketed under the labels of ‘new, hybrid and multiple or multicultural identities’. It is important to explore how this logic triggers a vampiric consumption of ‘others’, in contemporary social and cultural practice. From fusion cooking to ‘world music’, the consumption of ‘differences’ is a dominant cultural practice. Jackie Stacey, in her analysis of the new organic food industry,⁹ argues that we literally eat the global economy. Paul Gilroy reminds us that we also wear it, listen to it and watch it on our many screens, on a daily basis.¹⁰

Fortunately, otherness remains also as the site of production of counter-subjectivities. Feminist, postcolonial, black, youth, gay, lesbian and transgender countercultures are positive examples of these emergent subjectivities which are ‘other’ only in relation to an assumed and implicit ‘same’. How to disengage difference or otherness from the dialectics of sameness is therefore the challenge. Intersecting lines of ‘otherness’ map out the location of what used to be the boundary-markers, also known as the ‘constitutive others’ of the unitary subject of classical humanism.¹¹ They mark the sexualised bodies of women,

the racialised bodies of ethnic or native others, and the naturalised bodies of animal and Earth others. They are the interconnected facets of structural otherness defined on a hierarchical scale of pejorative differences.¹²

As such they play an important – albeit specular – role in the definition of the norm, the norm-al, the norm-ative view of the subject. More specifically, they have been instrumental to the institution of masculine self-assertion,¹³ or the ‘logic of the same’.¹⁴ To say that the structural others of the modern subject re-emerge in postmodernity amounts to making them into a paradoxical and polyvalent site. They are simultaneously the symptom of the crisis of the subject, and for conservatives even its ‘cause’, but they also express positive, i.e. non-reactive, alternatives. It is a historical fact that the great emancipatory movements of postmodernity are driven and fuelled by the resurgent ‘others’: the women’s rights movement; the anti-racism and de-colonisation movements; the anti-nuclear and pro-environment movements are the voices of the structural others of modernity. They also inevitably mark the crisis of the former ‘centre’ or dominant subject-position. In the language of philosophical nomadology, they express both the crisis of the majority and the patterns of becoming of the minorities.

The historical era of globalisation is the meeting ground on which sameness and otherness or centre and periphery confront each other and redefine their interrelation. The changing roles of the former ‘others’ of modernity, namely women, natives and natural or Earth others, have turned them into powerful sites of social and discursive transformation. Let us remember, with Foucault, that power is a multilayered concept, which covers both negative or confining methods (*potestas*) as well as empowering or affirmative technologies (*potentia*).¹⁵ This means that the paths of transformation engendered by the ‘difference engine’ of advanced capitalism are neither straight nor predictable. They rather compose a zigzagging line of internally contradictory options. Thus, human bodies caught in the spinning machine of multiple differences at the end of postmodernity become simultaneously disposable commodities to be vampirised and also decisive agents for political and ethical transformation. How to tell the difference between the two modes of ‘becoming other’, or between different flows of mutation, is the task of cultural and political theory and practice.

GLOBAL TECHNO-BODIES

The most distinctive trait of contemporary culture and society is the convergence between different and previously differentiated branches of technology. Bio-technologies and genetic engineering on the one hand and information and communication technologies on the other are equally co-present in driving home the spectacular effects of contemporary technological transformations. All technologies have a strong ‘bio-power’ effect, in that they affect bodies and immerse them in social relations of power, inclusion and exclusion.¹⁶ Thus, cyborgs, in the sense of bodies that are technologically mediated, include not only the high-tech, fit bodies of jet-fighters, or of cultural icons from Hollywood, but also the anonymous masses of underpaid and exploited bodies of mostly women and children in offshore production plants and in those increasing pockets of underpaid labour within advanced economies, who fuel the technologically driven global economy.¹⁷

Globalisation, however, encompasses many other, less glamorous aspects: the rise of religious extremism in a variety of forms, including Christian fundamentalism, entails a political regression of the rights of women, homosexuals and all sexual minorities. Significant signs of this regression are the decline in reproductive rights and the rise of sexual violence. The increase in poverty, especially among women, and the disparity in access to the new technologies are other features of the contemporary cartography. Bodily politics shifts accordingly with the simultaneous emergence of cyborgs on the one hand and renewed forms of vulnerability on the other. Thus, great epidemics have returned – Ebola, TB, HIV – so much so that health has become a public policy issue as well as a human rights concern.

The point is that the global economy does not function in a linear manner, but is rather web-like, scattered and poly-centred. It is not monolithic, but an internally contradictory process, the effects of which are differentiated geopolitically and along gender and ethnicity lines, to name only the main ones. This creates a few methodological difficulties for the feminist social critic, because it translates into a heteroglossia of data which makes both classical and modernist social theories inadequate to cope with the complexities. We need to adopt non-linearity as a major principle and to develop cartographies of power that account for the paradoxes and contradictions of the era of globalisation, and which do not take shortcuts through its complexities.

The point of feminist theory is to achieve in-depth transformations of subjectivity: we need schemes of thought and figurations that enable us to account in empowering and positive terms for the changes and transformations currently on the way. We already live in emancipated (post-feminist), multiethnic societies with high degrees of technological intervention. These are neither simple nor linear events, but rather multi-layered and internally contradictory phenomena. They combine elements of ultra-modernity with splinters of neo-archaism – high-tech advances and neo-primitivism – which defy the logic of the excluded middle. Contemporary culture and institutional philosophy are unable to represent these realities adequately. They favour instead the predictably plaintive refrains about the end of ideologies, run concurrently with the apology of the ‘new’. Nostalgia and hyper-consumerism join hands, under the expressionless gaze of neo-liberal restoration. The unitary vision of the subject cannot provide an effective antidote to the processes of fragmentation, flows and mutations, which mark our era. In ethics, as in many other fields of contemporary social endeavour, we need to learn to think differently about ourselves and our systems of values, starting with adequate cartographies of our embedded and embodied positions.

My own cartography of the globalisation process would definitely involve the following: it is one of the distinctive traits of advanced capitalism,¹⁸ which extends beyond the nation-state;¹⁹ it is head-less and centre-less, yet hegemonic;²⁰ mobile and flexible, yet fixed and very local;²¹ inherently violent and ruthless, thus prone to self-destruction;²² as a system, it is illogical and without an endpoint, aiming only at self-perpetuation;²³ it has produced the paradox of simultaneously contradictory effects, namely the homogenisation of commodity culture in terms of consumerist practices, coupled with huge disparities and structural inequalities. In the West this has resulted in a transformation of the private sphere and a feminisation of the public sphere.²⁴ Globalisation promotes multiculturalism as a marketing strategy, while reiterating racialised stereotypes.²⁵ It is embedded and

supported by a major technological revolution, in the fields of both bio-technologies and information technologies. They in turn result in the compression of the time-space continuum of modernity.²⁶

FEMINIST THEORIES STRIKE BACK

In the post-postmodern context that combines neo-liberal conservatism with paying lip-service to multiple differences, feminist scholarship has intensified its efforts to develop relevant critiques of dominant theoretical models. The premise for my argument is that feminist philosophers have invented a new brand of materialism, of the embodied and embedded kind²⁷ that moves progressively towards the posthuman. The pillar of contemporary feminist theory is a specific brand of situated epistemology – known earlier on as ‘the practice of the politics of locations’²⁸ – that attempts to account for the speed and simultaneity of transnational knowledge transfer (previously known as ‘travelling theories’). Feminist theories and practices have also emphasised the structural inequalities that emerge in the age of globalisation – also known as ‘scattered hegemonies’²⁹ – and the need to safeguard women’s interests, dignity and wellbeing amidst the dissemination of hybrid and fast-changing ethnic, racial, national and religious identities – a position known previously as ‘feminist standpoint theory’ or humanist feminism.³⁰ Feminist theory tries to do justice to both complexity and instability as operational concepts in the constitution of social subjects. It stresses the productive aspects of the dislocation and recasting of identities under advanced capitalism. Feminists have addressed conceptually and methodologically the issues related to (bio-)technological changes. Many stress the need to overcome the nature–culture binary and more specifically to undo the obsolete opposition essentialism–constructivism. The most significant new trends have been set by a new generation of scholars who are rethinking the theoretical agenda.

The first noticeable group is the so-named third-wave feminists, who have become highly articulate about their philosophical and methodological claims.³¹ Their focus is on the history of feminist ideas and on historiographical questions related to generational differences. Alongside them I would position the Deleuzian feminists who prioritise the issue of radical immanence and the brand of vital materialism of philosophers like Deleuze and Guattari³² in the rise of multiple micropolitical investigations of ‘life itself’.³³ On the epistemological side the new wave of feminist science and technology studies has questioned the legacy and the relevance of traditional social constructivism.³⁴ This trend has been pursued further by new critical work on authors like Darwin and the notion of creative evolution.³⁵

One of the points of transversal convergence among different emerging trends in feminist theory, and more specifically between philosophical anti-foundationalism and feminist science studies, results in a posthumanist wave that radicalises the premises of postmodernist feminism. Posthumanism is a fast growing new intersectional feminist alliance.³⁶ It gathers the remains of poststructuralist anti-humanism and joins them with feminist reappraisals of contemporary genetics and molecular biology in a non-deterministic frame.

Feminist cultural studies of science attempt to disengage biology from the structural functionalism of DNA-driven linearity and to veer it instead towards more creative patterns of evolutionary development.³⁷ Posthumanism has also some inhumane aspects,

thus Vandana Shiva stresses the extent to which the bodies of the empirical subjects who signify difference (woman/native/Earth or natural others) have become the disposable bodies of the global economy.³⁸ A disposable body is a set of organs disengaged from organic unity, consistency or integrity: a collection of organs that are up for grabs. Contemporary capitalism is indeed 'bio-political' in that it aims at controlling all that lives, as Foucault argues. From a feminist perspective, however, bio-power has already turned into a form of bio-piracy in that it aims at exploiting the generative powers of women, animals, plants, genes and cells. The self-replicating vitality of living matter is targeted for consumption and commercial exploitation. Haraway recognises this trend and pays tribute to the martyred body of oncomouse,³⁹ as the farming ground for the new genetic revolution and manufacturer of spare parts for other species. Looked at from the angle of the disposable bodies of 'others' of the dominant subject, the ongoing new scientific revolution is neither very new, nor particularly scientific.

The work of Franklin, Lury and Stacey is especially relevant to this discussion, as it focuses on the process of globalisation for a critique of Western science and technology. They argue that the era of the global economy can best be described as the cannibalisation of nature by a global market; they also argue that this process is being matched by an increased sense of reterritorialisation and consequently a reinvention of nature. They speak of a 'transmagnification' of nature,⁴⁰ which is being refigured and revitalised by being completely saturated with technological culture while also resisting it. Nature is more than the sum of its marketable appropriations: it is also an agent that remains beyond the reach of domestication and commodification. I refer to this surplus vitality of living matter in terms of *zoe*, as opposed to the discursive production of meanings of life as *bios*. I will expand on this below.

Franklin argues that contemporary genetic-driven societies euphorically associate the genetic code or DNA to marketable brandnames. Genetic materials (like stem cells) become data banks of potentially profitable information and are commercialised as such. The very widespread practice of patenting and enforcing intellectual property rights as a standard way of doing scientific research demonstrates the point. What this means concretely is that scientific research which is still classed and funded as 'fundamental' results in applied technological innovations. The case of genetically modified organisms in food production is a glaring example of this practice.

In a very powerful twist to her argument, however, Franklin shows that the genetic social imaginary cuts two ways, and if 'nature' has been transformed by technology, then the contamination also works in reverse. Thus, contemporary car engineering, for instance, is visually marketed in a genetic format, which stresses the industrial transmission of inherited traits through careful selection and manufacturing of strengths and weaknesses. This commercialised version of social Darwinism adds a touch of irony to the widespread idea of the 'next generation' of electronic gadgets, computers, cars or whatever. The basic equation at work in the social genetic imaginary is that the DNA results in marketable brandnames, so that your genes are, literally, your capital.

The new bio-technologies of 'Life' (as both *bios* and *zoe*) are expanding fast: they also structure the labour force and forms of production, mostly through enforced flexibility. Agriculture, grains and seeds; food production and animal breeding; the new frontiers of medicine, including genetic and foetal medical interventions; the widespread phenomenon

of the traffic in organs and body-parts; and the growing industry of genetic engineering and farming of living tissues and cells are all part of this phenomenon. The new technologies consequently have a direct impact on the most intimate aspects of existence in the so-called 'advanced world', from technologically assisted reproduction to the unsustainable levels of consumerism and the commercial exploitation of genetic data for the purposes of health and other types of insurance. Last but not least are the implications for contemporary warfare and the death machine.

The convergence of bio-technologies with the new information and communication technologies, backed by the internet, is a major factor in inducing a radical revision of body-politics. 'Bio-power' has become a mainstream form of management of genetic or molecular politics.⁴¹ The work of Foucault on the discursive production of contemporary embodied subjects is the relevant background to this discussion. Foucault demonstrates not only the construction of what we call 'human nature', but also its relatively recent appearance on the historical scene, which makes it co-extensive with forms of social control and disciplining. Haraway's work also starts from the assumption that 'life as a system to be managed, a field of operations constituted by scientists, artists, cartoonists, community activists, mothers, anthropologists, fathers, publishers, engineers, legislators, ethicists, industrialists, bankers, doctors, genetic counsellors, judges, insurers, priests, and all their relatives – has a very recent pedigree'.⁴² Haraway argues that contemporary science has moved beyond Foucault's bio-power and has already entered the age of 'the informatics of domination', which is a different regime of visualisation and control. Deleuze and Guattari analyse this notion of power over life in their seminal work on capitalism as schizophrenia. They provide the single most coherent analysis of materialist vitalism, or 'Life' in a post-anthropocentric vein.

Vandana Shiva's plea for biodiversity in global culture focuses on a different facet of the same problem and criticises the practice of patenting bio-technological products, which she labels 'biopiracy'.⁴³ Shiva connects this practice to European empire-building over the last five hundred years, and sees a continuum here with the policies of the World Trade Organization and the World Bank. Moreover, in a very interesting Foucauldian shift, Shiva links biopiracy to the individualistic philosophies of Locke, Hume and other 'fathers' of liberalism. Shiva argues that their theoretical works both reflect and legitimate capitalist appropriation of the world's resources and the eviction of others, and that these theories are still operational in contemporary practices such as intellectual property rights and the policies of the World Trade Organization. What marks specifically the present historical era, argues Shiva, is the fact that the target of capitalist looting has shifted from the former colonies to the 'new frontiers', or the 'natural resources' represented by human genetics in general, and women's reproductive powers in particular. Capital is the generative power of living matter and the resilient vitality of 'Life'. The self-generative power of living matter is both denied and enhanced by patenting and branding for the sake of corporate profit. *Bios/zoe*, as actualised in seeds and cells, is cash.

In Shiva's assessment, 'biopiracy', as the ultimate colonisation of the interior of living organisms, not only destroys biodiversity, endangering the many species that used to live on this planet. It also threatens cultural diversity by depleting the capital of human knowledge through the devalorisation of local knowledge systems and worldviews. On top of legitimating theft, these practices also devalue indigenous forms of knowledge, cultural and

legal systems. Eurocentric models of scientific rationality and technological development damage human diversity. The patent system legalises biopiracy, spreads monocultures and homogenisation in both nature and social systems. The strategy of resistance proposed by Shiva is vintage eco-feminism.

In a significant divergence of opinion with Vandana Shiva, Franklin *et al.* analyse the 'seed' not as the site of resistance, but rather as one of the agents of the global economy.⁴⁴ As a privatised icon for commercialised biodiversity the seed connects the old universalist idea of 'nature' to the financial reality of global culture. Just as the Humans have their Genome project, plants have their Heritage Seed catalogue, which patents numbers of seeds. They are advertised as organic, homegrown, but also ancient, and as such the repository of old lore and cultural authenticity. This holistic ethos guarantees both the perpetuation of the species and the preservation of culture. The female body as a whole is the seed which corporate capitalism wants to patent and eventually clone, according to the paradox of a new global compound of nature/culture that is naturalised and commercialised simultaneously. Practising the feminist politics of location, Franklin *et al.* differentiate this financial and cultural mystique of seeds from their political usage in the work of Shiva as a form of resistance to appropriation by industry. In both cases, however, the seed conveys the notion of the purity of the lineage and of direct genetic inheritance. It is therefore the opposite of the discourse and practice of hybridity and mixity in genetic engineering and more especially in transgenic species experiments.

Franklin, Stacey and Lury are on the side of postmodernism and hence of philosophical posthumanism when they point out the ambiguity of the notion of cultural diversity in the era of globalisation. Diversity, even in the form of indigenous or local knowledge systems, has become a highly valuable and marketable commodity. In its commercialised form it has increased the uniformity of consumers' habits, while sponsoring the proliferation of 'local' differences or micro-diversities. The global market is fuelled by 'differences' because the 'local' is a political space constructed by global flows of capital.⁴⁵ Because the proliferation of local differences for the sake of marketability is one of the features of the global economy, globalisation functions through the incorporation of otherness. Therefore, one must beware of taking any claim to cultural identity and difference at face value. All identities are in process and consequently are inherently contradictory.

Last, but certainly not least, the call is emerging for a post-secular approach to feminism, in keeping with or as an answer to the return of the different facets of a monotheistic God as a major political player in contemporary world affairs. While it forces a revision of the historical agnosticism of European feminism, this post-secular approach to activism remains distanced from both new-age spirituality and the specular forms of fundamentalisms which dominate our public space.

As a variation on this theme, feminist thought has opted for a sort of optimism of the will and has taken a stand against both nostalgia and melancholia. It stresses instead the need for a positive ethics, both in the dominant Kantian mode⁴⁶ and in the alternative neo-Spinozist form.⁴⁷ It is an ethics based on the necessity of meeting the challenges of the contemporary transformations with creativity and courage. At the start of the third millennium, feminist intellectual and political energies are converging on the ethical project of contributing to the construction of social horizons of hope. The challenge is how to put the 'active' back into activism. In so far as this position entails accountability for one's

historical situation, it expresses not only a sense of social responsibility but also an affect. Hannah Arendt used to call it: love for the world.

NOTES

1. B. Massumi: 'Everywhere you want to be: introduction to fear', in *The Politics of Everyday Fear*, 3–38; 1993, Minneapolis, MN, University of Minnesota Press.
2. F. Fukuyama: *Our Posthuman Future: Consequences of the Biotechnological Revolution*; 2002, London, Profile Books.
3. R. Dawkins: *The Selfish Gene*; 1976, Oxford, Oxford University Press.
4. S. Franklin, C. Lury and J. Stacey: *Global Nature, Global Culture*; 2000, London, Sage.
5. A. Touraine: *Beyond Neo-liberalism*, 1; 2001, Cambridge, Polity.
6. M. Hardt and A. Negri: *Empire*; 2000, Cambridge, MA, Harvard University Press.
7. D. Haraway: *Modest_Witness@Second_Millennium: FemaleMan©_Meets_Oncomouse™*, 90; 1997 London/New York, NY, Routledge.
8. M. Hardt and A. Negri: *Empire* (see Note 6).
9. S. Franklin *et al.*: *Global Nature* (see Note 4).
10. P. Gilroy: *Against Race: Imagining Political Culture Beyond the Color Line*; 2000, Cambridge, MA, Belknap Press.
11. G. Lloyd: *The Man of Reason*; 1985, London, Methuen.
12. S. de Beauvoir: *Le deuxième sexe*, 1949, Paris, Gallimard; L. Irigaray: *Speculum of the Other Woman*; 1985, Ithaca, NY, Cornell University Press (first published in French as *Spéculum: De l'autre femme*, 1974, Paris, Minuit); G. Deleuze and F. Guattari: *Mille plateaux: Capitalisme et Schizophrénie. II*; 1980, Paris, Minuit.
13. V. Woolf: *Three Guineas*; 1939, London, Penguin.
14. L. Irigaray: *Spéculum* (see Note 12).
15. M. Foucault: *Discipline and Punish*; 1977, New York, NY, Pantheon Books (first published in French as *Surveiller et punir*, 1975, Paris, Gallimard).
16. N. Bryld and N. Lykke: *Cosmodolphins: Feminist Cultural Studies of Technologies, Animals and the Sacred*; 1999, London, Zed Books.
17. R. Braidotti: *Metamorphoses: Towards a Materialist Theory of Becoming*; 2002, Cambridge, Polity Press.
18. U. Beck: *Risk Society: Towards a New Modernity*, (trans. M. Ritter); 1992, London, Sage, and *World Risk Society*; 1999, Cambridge, Polity.
19. A. Giddens: *Beyond Left and Right: The Future of Radical Politics*; 1994, Cambridge, Polity; R. Dahrendorf: *Reflections on the Revolution in Europe in a letter intended to have been sent to a gentleman in Warsaw*; 1990, London, Chatto & Windus; A. Appadurai: 'Disjuncture and difference in the global cultural economy', in *Colonial Discourse/Post-Colonial Theory: A Reader*, (ed. P. Williams and L. Chrisman), 324–339; 1994, New York, NY, Columbia University Press.
20. I. Grewal and C. Kaplan: *Scattered Hegemonies: Postmodernity and Transnational Feminist Practices*; 1994, Minneapolis, MN, University of Minnesota Press.
21. S. Sassen: *Cities in a World Economy*; 1994, Thousand Oaks, CA/London, Pine Forge Press/Sage.
22. R. Dahrendorf: *Reflections* (see Note 19).
23. A. Negri: *The Savage Anomaly: The Power of Spinoza's Metaphysics and Politics*, (trans. M. Hardt); 1981, Minneapolis, MN, University of Minnesota Press.
24. A. Giddens: *Beyond Left and Right* (see Note 19).
25. P. Gilroy: *Against Race* (see Note 10).
26. M. Castells: *The Rise of the Network Society*; 1996, Oxford, Blackwell.
27. R. Braidotti: *Metamorphoses* (see Note 17), and *Transpositions: On Nomadic Ethics*; 2006, Cambridge, Polity.
28. A. Rich: *Blood, Bread and Poetry*; 1985, New York, NY, W. W. Norton.
29. I. Grewal and C. Kaplan: *Scattered Hegemonies* (see Note 20).
30. S. Harding: *Whose Science? Whose Knowledge?*; 1991, London, Open University Press.
31. A. Henry: *Not My Mother's Sister: Generational Conflict and Third-Wave Feminism*; 2004, Bloomington, IN, Indiana University Press.
32. I. Buchanan and C. Colebrook (ed.): *Deleuze and Feminist Theory*; 2000, Edinburgh, Edinburgh University Press.

33. L. Parisi: *Abstract Sex: Philosophy, Biotechnology, and the Mutation of Desire*, 2004, London, Continuum.
34. E. A. Wilson: *Neural Geographies: Feminism and the Microstructure of Cognition*, 1998, New York, NY/London, Routledge; N. Bryld and N. Lykke: *Cosmodolphins* (see Note 16); S. Franklin *et al.*: *Global Nature* (see Note 4).
35. E. Grosz: 'Darwin and feminism: preliminary investigations for a possible alliance', *Australian Feminist Studies*, 1999, **14**, (29), 31–45.
36. D. Haraway: *Modest_Witness* (see Note 7), and *The Companion Species Manifesto: Dogs, People and Significant Otherness*, 2003, Chicago, IL, Prickly Paradigm Press; K. Hayles: *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*, 1999, Chicago, IL, University of Chicago Press.
37. J. Halberstam and I. Livingston: *Posthuman Bodies*, 1995, Bloomington, IN, Indiana University Press.
38. V. Shiva: *Biopiracy: The Plunder of Nature and Knowledge*, 1997, Boston, MA, South End Press.
39. D. Haraway: *Modest_Witness* (see Note 7).
40. S. Franklin *et al.*: *Global Nature*, p. 19 (see Note 4).
41. N. Rose: 'Biopolitics in the twenty-first century – notes for a research agenda', *Distinktion*, 2001, (3), 25–44.
42. D. Haraway: *Modest_Witness*, p. 174 (see Note 7).
43. V. Shiva: *Biopiracy* (see Note 38).
44. S. Franklin *et al.*: *Global Nature* (see Note 4).
45. M. Hardt and A. Negri: *Empire* (see Note 6).
46. S. Benhabib: 'Sexual difference and collective identities: the new global constellation', *Signs*, 1999, **24**, 335–362; M. C. Nussbaum: *Cultivating Humanity: a Classical Defence of Reform in Liberal Education*, 1999, Cambridge, MA, Harvard University Press.
47. M. Gatens and G. Lloyd: *Collective Imaginings*, 1999, London/New York, NY, Routledge.

Rosi Braidotti (rosi.braidotti@let.uu.nl) is Distinguished Professor in the Humanities at Utrecht University. She has published extensively on feminist philosophy, epistemology, poststructuralism, especially the work of Luce Irigaray and Gilles Deleuze, and psychoanalysis. She serves as an adviser to the journals *Signs*, *Differences* and the *European Journal of Women's Studies*. Her publications include *Patterns of Dissonance* (1991), *Nomadic Subjects* (1994), *Metamorphoses: Towards a Materialist Theory of Becoming* (2002), *Transpositions: On Nomadic Ethics* (2006) and *Baby Boomers: Vite parallele dagli anni Cinquanta ai cinquant'anni* (2003). She is currently working on the notion of nomadic citizenship and on the concept of pothuman ethics.

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