EDITORIAL

The current liveliness of science studies and cultural studies of science occurs at a time when disciplinary boundaries are in a state of extreme instability. While cultural theory has learned to draw on cybernetics, chaos theory and biology, biologists borrow ideas from cybernetics, genetic researchers and communication planners merge biological and information paradigms, and cybercitizens situate themselves in a reinvented evolutionary history. In this discursive melée, biology is now programmed, evolution is cybernetic, communication is evolutionary, and the economy, unlike the human body, partakes of the laws of nature. Knowledge in general seems to be growing simultaneously more technocratic and more metaphorical. Its ability to slip sideways across once impervious epistemological boundaries exceeds all the expectations of a generation of critical intellectuals who once critiqued disciplinary knowledge as a privileged mode of social control.

The writers in this issue of *New Formations* all explore this strange fluctuation of knowledge, metaphor, technoscience, and politics. Their research reminds us that the escalating slippage of discourses across the once firm modern epistemologies of science and culture needs to be viewed with rigorous suspicion, that the exuberance of sumptuous intellectual and epistemological play may create dangers of its own. Such metaphorical slippage easily serves reactionary ends. In this respect, the current proliferation of technoscientific language resembles what is happening in many universities, where the restructuring of institutional boundaries often now appropriates the eagerly sought erosion of disciplines as a means to rationalise and disempower academics, whether in or outside of the traditional disciplines.

In this world, political life is an appropriate subject for information theory, which is a sub-branch of biology, which itself is a sub-species of information. If biology - or, more particularly, a revised neo-Spencerian evolutionism - now provides the dominant metaphor for technocrats and their critics across the scientific, cultural, and public/technological domains this is not the evolutionary biology conceived by Darwin or his contemporaries. As Janine Marchessault and Tiziana Terranova both reveal, this biology is a discourse utterly penetrated by cybernetic thought. Through this interpenetration, cyber-evolutionism assumes important cognitive control functions in political, economic, cultural, biological, and technological practice. For this reason we need to understand evolutionism as one of the most important social machines of turn-of-millennium culture, performing, in the manner of one of Deleuze's collective enunciations, performative and technological as well as representational functions.[1]

Several questions lie at the heart of this technoscientific discourse. First, and most often and eagerly taken up by supporters and critics (as if we knew so

1. *Cf* Paul Patton, Media Imaginaries Conference, University of Sydney, 1996.

clearly where the distinction lies!), is the question of the relationship between organic and manufactured life. For some observers, new genetic and cybernetic techniques have transformed this relationship in fundamental ways (thus the Darwin machine and other languages of post-biological life). For others, like Kevin Kelley, the two have always been of one being and we are now simply learning to navigate better the laws of evolutionary change. At the centre of this dispute lies, of course, the human body, and the question of whether cyborgian evolution means greater or lesser control over its future, or indeed whether the human body belongs in an 'evolved' future at all.

Debates about cyber-evolution have been extremely rich in drawing our attention to the complex interactions between nature, science, technology and the human body. But the movement of coded information across disciplines, human and other bodies, genes, screens, national boundaries, and other spaces, raises important questions about colonisation and power that evolutionists have largely been reluctant to address. The body is just one of the new frontiers attended to by (post) modern technoscience, and here, as everywhere (still), this attention is indelibly shaped - as Terri Kapsalis and Rosi Braidott show - by prevalent social structures and attitudes: racism, sexism, classism, imperialism. It is sometimes tempting to think that the metaphorical drive among technoscientific enthusiasts is driven by a desire *not to know*. This will to transcend the unpleasant aspects of technological change enables cybernetic metaphors to negotiate political transformations of a fundamental and perhaps questionable nature, as Andrew Barry documents here. So questions of scarcity, inequity, or militarisation can be easily mislaid in a community anxious to imagine itself harmoniously and diversely united and integrated into a cyborgian future. The attraction to chaos as a cultural trope is arguably another manifestation of this desire to transcend politics beyond the circumference of the body/screen duet: if the universe is grasped as 'playful disorder' then political intervention appears to be an outmoded and/or irrelevant form of teleological interference.

An entirely different approach to chaos theory is explored here by Sue Owen, who maps a number of correspondences between chaos and Marxian dialectics. This exploration posits some familiar and yet provocatively reworked conceptual alternatives to genetic and cyber-evolutionism for re-examining the relationships between science, philosophy, art, and politics. Perhaps the various critical routes proposed by these authors can help restore to us some badly needed optimism about engagements between culture and technoscience, without imprisoning us yet again in a deterministic, teleological, or just plain unlikely narrative of future transformation. In this process we need not only the acuities of philosophical critique, but also the insights of art. While science, philosophy, and cybernetics busily imitate one another, while no one seems to know any more what distinguishes reality from the virtual, and while mimesis becomes thereby completely problematic, we need the critical insights of artists more than ever. For artists, no less than these other producers of knowledge (useful or otherwise), still possess the burden of help us to know.

In the spirit of this much needed optimism and in an attempt to figure

future transformations, Rosi Braidotti turns from a critique of current masculinist representations of cyberspace and cyberculture to feminist cultural and media activists such as the riot girls and other 'cyberfeminists' who are devoted to 'the politics of parody'. Through parody or what she refers to as the representational mode 'as if', and through the formation of feminist figurations Braidotti anticipates the establishment of an alternative feminist imaginary which might lead to the transformation and repossession of subjectivity for women.

Jody Berland and Sarah Kember, May 1996