A Manifesto for Cyborg Pedagogy?

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This paper seeks to give an impression of what can happen if teachers encourage their students to take personally the issues they study, and to think and to write about how their identities and everyday lives are inseparable from the kinds of issues studied in the geography classroom. It discusses three principles – situated knowledge, cyborg ontologies and border pedagogy – which have guided the organisation of an undergraduate course on the geographies of material culture. This attempts to get students to think through their connections with the lives of distant others through simple acts of consumption, and the responsibilities which they might therefore have. This paper illustrates the kinds of student writing that can come out of such a course and the ways in which this issue of responsibility should be, and is, talked about.



I AM A CYBERNETIC ORGANISM

It's just a cuppa!

Geoff was making a point when he included this annotated Polaroid in his journal for our Geographies of Material Culture course. He was stirring together some instant coffee granules from that Nescafé jar, with water from a nearby tap connected to a reservoir by miles of piping and who knows what else, which he had poured into that plastic kettle to boil with the help of a heating element which was connected to the national grid, its wires, pylons, transformers, power stations and their fuels, via that plastic covered wire, plug, fuse and socket, attached by screws and maybe rawplugs to a brick wall through those delightfully patterned ceramic tiles, with some milk from that plastic container, in that white ceramic 'Match of the Day' mug, resting on that beige formica kitchen top,

1038-2046/01/02 0195-07 \$20.00/0 International Research in Geographical and Environmental Education © 2001 T. Angus *et al*. Vol. 10, No. 2, 2001 using that stainless steel spoon with the blue plastic handle held in that hand, attached to that arm, which will lift the cup to pour its contents into a mouth which had recently been the site of important dental work, into a body which needed a hot caffeine hit to keep awake in order to finish that journal entry, and kept warm by that sweat shirt, and that central heating, in that kitchen, in that house, in that part of Birmingham, that day.

Everything had to be working properly for him to perform such a simple everyday task. A lot of connections had to be made: between heres and theres, between humans, between humans and non-humans, between non-humans and non-humans (plants, animals, chemicals, metals, plastics, ceramics, much more besides, combined and connected in specific ways). Coffee plants had to have been planted in soil, fertilised, kept free of pests, tended, picked, dried, processed, bought, traded, packed in jars, labelled, advertised, transported, shelved, purchased, scanned, paid for, brought home, shelved, opened, scooped with a spoon, placed in the right receptacle at the right time with the correct co-ingredients in the right proportion at the right temperature. That hot water had come through that tap cold, through those pipes, via that purification plant, where fluoride had perhaps been added, from that reservoir, collecting water from the catchment area of that river, which had been rained on from those clouds, which had arrived as part of that weather system, which picked up water on its way there from who knows where. The right cows had also had to be bred and reared in the right way, to be fed the right food and kept healthy with the right medicines, to be 'encouraged' to keep producing that much milk, to be hooked up to those milking machines via their udders. The milk they produced had to be loaded into those tankers, driven to wherever it was processed and put into those plastic cartons with those black plastic screw-tops and those labels made from that paper, from those trees and printed with that ink, before being transported along that cool-chain to the chill cabinet in the shop where his flat-mate bought it and took it home to put in their fridge, plugged into another socket in that kitchen, kept cool with the help of the electricity supply which would be costed on the same household bill as that for the kettle. He doesn't take sugar, by the way.

It could all so easily have gone wrong if one connection had not been properly made, if the order had broken down; if there had been a power cut; if the milk had gone off; if a plumber hadn't soldered that joint properly causing a water leak; if milk-tanker drivers had been part of the recent fuel protest; if his house had been flooded by the unseasonally high rainfall we have been having lately; if some crop disease had ruined a coffee harvest in Latin America; if the productivity of dairy cows in the UK declined, if his local shopkeeper had to close early that day due to ill health; if the kettle element overheated and melted the plastic; if he'd tripped over his flatmate's shoes and spilled his coffee on the hall carpet, if he had chosen not to buy that brand of coffee the last time he went to the shops, the list could go on and on. And that's the point: he's a 'cybernetic organism', a cyborg, a node in a network. He's writing a journal about the connections you have to make when you wear your 'cyborg spectacles'. These are thoroughly grounded, fleshy connections; connections which illustrate the kinds of things that have to continually happen for him to be who he is today (even if he can only talk about a tiny part of that!); connections which blur boundaries between internal bodily

networks (organs, tracts, vessels, veins, synapses, etc) and external bodily networks which reach into fields, factories, tankers, commodity trading floors, mines, oil wells, bodies etc all over the place.² Together, these networks constitute his material-semiotic self. It is hard to locate the boundary between the inside and the outside, between self and other, or between the opposites in any of those binaries that often structure the way he thinks. And, so the argument goes, once he starts to look for and to make such connections and blur such boundaries in the process, this should bring new responsibilities: towards the people, animals, environment, machines, etc. who are intimately woven into his life, his body, his self: as he is woven into theirs. None of us works alone. Being ourselves is a huge collaborative effort. But that collaboration by no means takes place on an even playing field. You probably wouldn't say that slaughterhouse workers 'collaborate' with cows to produce cuts of beef, or that multinational companies make clothing 'in collaboration with' sweatshop workers.³ So, we're talking about connections, relations, *power* relations and responsibilities for them happening.

It's Cyborg Pedagogy

Our Geographies of Material Culture course attempts to encourage students to sink their teeth into these thorny but fundamental issues through insisting that (1) they adopt a cyborg ontology when considering their relations with commodities;⁴ (2) they think through their connections with others in terms of 'commodity chains', 'circuits of culture' and/or 'actor networks';⁵ (3) they develop these understandings through reading and discussing in class detailed empirical studies of consumption, production, and flows,⁶ (4) they work on group presentations which further develop key issues arising from these discussions, $\frac{7}{5}$ (5) they continually situate this knowledge in the mundane circumstances of their everyday lives; and (6) they keep a journal which represents how this understanding can be grounded in these circumstances and how it develops throughout the course. We do not teach this course. It is not didactic. We deliver only one lecture, right at the start. After that, we orchestrate the course: prepare detailed handouts, make sure the right readings are easily available, orchestrate the class discussions, arrange extra course office hours for smaller discussions; assess the journals according to clearly set out criteria; and decentre ourselves as much as possible.⁸ We had 64 students in 1999, and 30 in 2000. We have not been setting out or wanting back the 'right' answers from them. We have been looking for convincing, thoughtful, imaginative and knowledgeable answers situated in the concrete circumstances of their own lives, the readings discussed and the issues raised, in class. But, you may be asking, why exactly might this be considered a radical pedagogical approach?

To answer this question, we need to outline very briefly the cornerstones of this cyborg pedagogy: 'situated knowledge', 'cyborg ontology' and 'border pedagogy'. Donna Haraway is best known for her work on the first and second of these, and the third has drawn heavily on her work. They are based on fundamental critiques of traditional ways of knowing, being and teaching. Her paper on 'situated knowledge' (1996) is a critique of both totalising knowledge of scientific objectivity *and* the relativising knowledge of social constructionism. She

slams researchers who work in these ways for 'promising vision from everywhere and nowhere equally and fully', and for making knowledge claims which, as a result of this positioning, are 'unlocatable, and so irresponsible ... [i.e.] unable to be called into account' (p. 117). She argues that a 'responsible' and more 'objective' scientific knowledge of the world is one which is grounded, embodied and locatable in a 'knowing self (which) is partial in all its guises, never finished, whole, simply there and original; it is always constructed and stitched together imperfectly, and *therefore* able to joining with another, to see together without claiming to be another' (p. 119).

None of us conforms to the traditional 'figure of the Cartesian individual as an atomistic, presocial vessel of abstract reason' (Whatmore, 1997: 38). And this is where the second cornerstone fits in: it is not far to move from the epistemology of situated knowledge to the ontology of the cyborg. In her 'Cyborg Manifesto', Haraway (1991) argues that developments in information technology, medical procedures, genetic engineering and other areas of technoscientific endeavour have made the world a more mixed up place. She argues that now 'we are all chimeras, theorised and fabricated hybrids of machine and organism' (p. 150). As a result of this, the binary oppositions and rigid categorisations of Enlightenment thought - 'self/other, mind/body, culture/nature, male/female, civilised/primitive, reality/appearance, whole/part, agent/resource, maker/made, active/passive, right/wrong, truth/illusion, total/partial, God/man' (p. 177) cannot help but be broken down in the way that people live their lives (see Latour, 1993): e.g. IT has contributed to the process of time-space compression where heres and theres, selves and others have become even more mixed up than before; and medical procedures have further blurred boundaries between men and women, between humans and animals, between humans and machines; between nature and culture. Because these binary oppositions and rigid categorisations 'have all been systematic to the logics of domination of women, people of colour, nature, workers, animals - in short, domination of all constituted as others, whose task is to mirror the self' (Haraway, 1991: 177) – Haraway argues that 'progressive people' should embrace and explore these 'transgressed boundaries, potent fusions and dangerous possibilities' (1991: 154) if they want 'a more adequate, richer, better account of a world, in order to live in it well and in critical, reflexive relation to our own as well as others' practices of domination and the unequal parts of privilege and oppression that make up all positions' (Haraway, 1996: 113). As she put it to Hari Kunzru (1991): 'We're living in a world of connections - and it matters which ones get made'.

Finally, we have 'border pedagogy': an approach to teaching and learning which takes as its nemesis the 'banking system of education' where, to summarise it crudely, students are encouraged to learn dominant understandings of the world and to repeat those dominant understandings back in assessments which determine their academic progress (Giroux & McLaren, 1994;hooks, 1994). These understandings are, not surprisingly, structured through the binary oppositions that Haraway sees as fundamental to such exclusions. Critics have argued that it is this combination which excludes many students from their own education because they do not want to, or simply cannot, take part in this hegemonic project. Border pedagogy, in contrast, assumes that students come into class with

important social, cultural, economic knowledge and concerns and works to critique and build upon that *situated* knowledge. Its advocates have

put forward pedagogical alternatives which encourage students to (a) identify and be critical of these binary logics in action ..., and (b) undercut and/or find spaces between them in order to undermine the forms of domination which result from their taken-for-granted use. (Cook, 1996, 2000)

Getting students to write journals using a situated knowledge epistemology and a cyborg ontology is one of these alternatives. It should allow these connections to be seen, made, thought through and expressed, messing with those logics and boundaries in the process. But it cannot divide the world neatly into the right or wrong, the good or bad, the ethical or unethical, the responsible or irresponsible. Things are not black and white here. They are shades of grey at best. In principle this is a radical pedagogical project. But (how) might it work if no clear answers can come from it?⁹ What kind of radicalism is that? What effects might it have? And where has it got Geoff?

Well, he has been pulled all over the place, to slaughterhouses, coffee farms, teenagers in Southall, TV soaps, water, milk, spoon; and he has found pieces of himself in each, and pieces of them in him. The course has helped him ground Phil (philosophical Geoff) in Matt (material Geoff). It reminded him how much easier it is to understand things if you relate them to personal experience. But the course has made Geoff's brain ache. As a cyborg it is clear that he would be nothing if he were not connected; it is impossible to be unconnected, but his situated knowledge prevents him from being able to see around the corners of the network to fully interpret his actions. The irony of the network is that a good action does not necessarily cause a positive effect at every part of the network. Buying Fairtrade coffee may harm the incomes of Third World farmers working for commercial companies. Furthermore, what good can he do as such a small actor in such enormous networks? Is he more responsible for his actions now? Or less? In fact, don't others have a responsibility to him as a material semiotic being? Cyborg ontology has screwed with his understanding! He spent time debating what type of coffee we should drink and what type of trainers we should wear and the effects our choices have on people all over the world, but these are people he has never met and is unlikely to ever meet. How can he really know what is going on? Is he responsible for something he does not know about? These questions complicated Geoff's life. At first it was a pain wearing cyborg spectacles, but now he has got cyborg eyes. He questions his own individuality, responsibility and networks - there are links everywhere, and he feels like he has got complete understanding, on the one hand, and complete perplexity, on the other. He took a conscious decision to overlook the plight of coffee plantation workers in the first few weeks of the course, but still finds himself lingering around the coffee aisle in the supermarket for longer than usual. In fact shopping takes ages. In some ways the course took over his life because it forced him to figure things out for himself. One of the consequences of this process of reconfiguration has been the disintegration of his analytical writing style, which we should not forget has been cultivated for some years. Geoff's found this loosening of the style quite liberating - being able to put what he wants and what he feels in his journal entries. And although he knows this course is just working to a

different set of rules to normal, he is concerned at having to go back to what he sees now as blind education. Even if in his more honest moments, Geoff knows he cannot live without most of the products he uses, and is often happy to be kept in ignorance about some of the networks he is part of, he says it will be one of the few courses he remembers anything of for more than five minutes after it has ended. Indeed this course is not really over at all, because now Geoff is a messy cyborg, still figuring things out, loving and hating it all at once.

Notes

- 1. The *et al.* is intended to imply a long list of co-authors who have all played an important role in shaping this paper: these comprise the 90-odd people who were students in our 'Geographies of Material Culture' course in 1999 and 2000. We thank them for their input and hope they feel properly acknowledged here.
- 2. See Collier (1991) and Haraway (1991: 178; 2000).
- 3. See Vialles (1994), Ross (1997).
- 4. Haraway has recently argued that people often use her myth more widely than she intended. As she has put this, 'I am adamant that the cyborg, as I use that term, does not refer to *all* kinds of artifactual, machinic relationships with human beings. ... I am very concerned that the term 'cyborg' be used specifically to refer to those kinds of entities that became historically possible around World War II and just after' (Haraway, 2000: 128). For us, however, these sociotechnical relations can involve 'machines' as simple as a spoon or a box of matches. Although we don't keep to the letter of Haraway's work (2000), then, we fully embrace its politics.
- 5. See Leslie and Reimer (1999) for an excellent review of these three approaches.
- 6. For example, among others, we have found Reiter (1996) excellent on 'production'; Malbon (1999) excellent on 'consumption'; Kaufman (1998) excellent to confuse 'production' and 'consumption'; and Cohen (1997) excellent for flows.
- 7. This year, these topics have ranged from a 'Question Time' spoof tackling the issue of student protests over fees in which the commodities were the students themselves (designer label = The University of Birmingham); to a spoof TV travel show with tourists desperately failing to have an 'authentic' holiday in Indonesia; to a courtroom drama in which a liver, a friend, alcohol, the brewing industry and the state's licensing laws were all charged with the responsibility for a person's death by liver failure.
- 8. The reading/class discussion/journal writing has been detailed elsewhere for another course (see Cook, 1996, 2000).
- 9. This is the question that Leslie and Reimer (1999) ask of approaches to framing the geographies of commodities which do not have a more or less straightforward political agenda (i.e. circuits of culture and, in particular, actor networks).

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