Review essay

If agency is the answer, kindly repeat the question

Willem Halffman

Inside the Politics of Technology: Agency and Normativity in the Co-Production of Knowledge and Society edited by Hans Barbers Amsterdam University Press, 2005, 304 pages, US\$69.95, ISBN 90-5356-756-9

In the morning, I wake to my alarm; I usually give it a whack and aim for the snooze button. I am not a morning person. Obviously, my alarm clock has some effect. Its effect is not quite the same every morning, but if this clock's buzzer were not to wake me more or less on time, I would get another one. The clock performs a task for me, a task that I set it, but that is part of a much wider context of labour regimes, disciplined bodies, and collective, coordinated social life.

To be able to wake me in time, the alarm clock as a material object is also part of a much wider regime of clock production, batteries and the calibration of time. I used to have an alarm clock of a particularly sturdy German make that even checked its time via a regular radio pulse from Frankfurt, connected to the Cesium atomic clock at the Federal Physical Technology Institute in Braunschweig. (Now how is that for German *Grundlichkeit* (thoroughness)?)

Alarm clocks are deceptively simple little devices that are connected to many other objects and people and texts and organisations. Yet does my alarm clock, or in fact that entire regime geared at waking me, 'act'? Surely, that depends on how you define the term 'to act'. My alarm clock 'does' something. If I express that in a sentence, I write that 'my alarm clock wakes me'. 'Alarm clock' is the active subject of this sentence.

Willem Halffman is in the Department of Science, Technology, Health, and Policy Studies (STeHPS), School of Business, Public Administration and Technology, Twente University, PO Box 217, 7500 AE Enschede, The Netherlands; Email: W.Halffman@utwente.nl; Tel: +31 53 489 5397; Fax: +31 53 489 4734

In addition, it is more or less autonomous: most of the time, it 'acts' on its own. I just have to replace the batteries occasionally, and every so often check its time, unlike my old sturdy German device. It has moral qualities, as it is part of the work ethic I am subjected to. My friend G, who has not performed paid labour in the last two decades, rarely uses his alarm clock. In my case, I have to allow the horrible little thing to discipline me.

Inside the Politics of Technology brings together a variety of perspectives on technology and a central question in the book is whether technology has agency. The listed properties of my alarm clock form criteria for some of the contributors to claim that technology 'acts': my alarm clock has effect, it 'does' things, performs a task, is the active part in relation to me while I am in dreamland, it disciplines, has a moral load and so on.

What is so remarkable about the debate over whether technology has 'agency', is that the various sides in the debate use different notions of 'action'. There is much debate and argument, but there is no consistent definition of agency. Some participants will claim my alarm clock acts (because it 'does things'), while others will claim that it does not (because it does not 'reflect' upon what it does).

Agency seems to have become a cluster term, a series of properties that more or less belong together in a contended family resemblance. In this volume, as in science and technology studies (STS) in general, there is absolutely no agreement on what is required to call something 'action'.

As Nil Disco points out in his contribution, sociologists did more or less agree on a definition of action revolving around reflexivity. Action was specifically reserved for people (perhaps groups and organisations at most) because only people were seen to have the ability to reflect on themselves, on others, and on their behaviour. However, even the different schools in sociology have tended to disagree on what the salient aspects of this reflexivity are (compare with Lynch, 2000): the ability of people to observe themselves and reinterpret their (inter)actions

and situations, as in symbolic interactionism; or the ability to identify goals and find instruments to achieve these in the context of constraining institutions, as in Parsons' functionalism.

Nil Disco suggests that we should recover the constitutive sociological tension of structure and action, albeit in new ways. He argues that technology should be allowed to sit on the action side too. Perhaps this could be a building block for a theory that at least defines 'action', as a pole of something else, so that we have a better sense of what it is that we disagree on.

The problem is quite similar to the question of whether artefacts have politics, or normativity. Evidently, some artefacts have consequences that are politically or normatively relevant, but this requires some criterion to define what is 'political' or 'normative', at least implicitly. Therefore the dictum that 'there is politics in technology' is at its most bewildering when it comes from those who claim that a distinction between politics and technology should not be made, least of all by the analyst.

I am not suggesting that books like these should only be written if all the contributors agree on a definition of action. I fear very few collected volumes of work would ever again be possible in STS. However, I do think it is fair to require that researchers who point at empirical evidence to claim agency for people, animals, things, networks, or whatever, should at least specify what they mean by the term. Otherwise the verificationist fallacy that Popper could get so riled up about looms in every vignette, in any case description. We could point out agency everywhere, and therefore nowhere.

Similarly, following Nil Disco's suggestion, would it not make sense to complement every story of agency with a story of non-agency, pointing out where agency is not? I actually think that a term such as agency only makes sense in the context of a wider theory, such as is the case in the various schools of sociology, but I fear that might be pushing the current empiricist tendencies of STS a bit far. If anything, current STS is liberal on the issue of theory and empiricist in its quest for solutions to conceptual problems. In any case, as consistent constructivists, we have to admit that the presence or absence of agency is not something that is simply resolved by pointing at my alarm clock and saying "look, it acts".

Back to waking up in the morning. The task of waking me is also frequently performed by my partner, who tends to get up earlier than I do. She sometimes brings me coffee, which our alarm clock never does, and sometimes makes a judgement call and lets me sleep in a bit. It is much nicer to be woken by her.

On the other hand, my partner does not need batteries and does not receive radio pulses from Frankfurt. She does not have a snooze button and I most certainly would not dare to whack her, like I whack the poor clock when I do not want to get up

just yet. In fact, all such comparisons would be most offending and would probably lead to a long-term withdrawal of coffee in bed in the morning.

The argument is an old one in STS and is not settled in this volume either. On the one hand, there are those that will stress the moral imperative of making a distinction between girl friends and clocks, between people and things. In this book, several contributors refuse the most radical consequences of post-humanist constructivism and reserve the right of moral judgement to people and the right to critique power imbalances for themselves.

On the other hand, there is the camp that claims that such distinctions are false and misleading, reproducing the "horrors of modernity" (Law, 1994), the determinism and fatalism that are said to flow from essentialist subject/object schemes. There are even some ambidextrous people that claim we can do both, for example, by pointing to the mutual construction of objectivity and subjectivity, or even by flip-flopping between both perspectives.

The book at hand contains a decent overview by Philip Brey, ready made for teaching, as well as several proposals from each of the camps, often based on daring modifications of "The Approach Formerly Known as Actor Network Theory". Some of the contributions claim that Latour is too symmetrical in his dealings between people and things, others claim that he is not symmetrical enough.

In this book, there are some elegant examples of this 'ambidextrous' research, showing the contingent construction of subject and object. Stemerding and Nelis show the construction of a particular kind of human agency in genetic screening, operating on the assumption of free rational choice of the individual patient, but in an arena heavily structured by new technologies.

Petran Kockelkoren presents a wonderful piece on the role of technological devices in the construction of autonomy, one of the often-mentioned ingredients of agency. He follows the development of perspective, from Renaissance painting to exotic viewing devices of the 19th century, such as panoramas, kaleidoscopes or train-ride illusions at country fairs. He shows how notions of autonomy are mediated and stabilised by technological devices, in stories starkly reminiscent of Foucault.

Nevertheless, as editor Hans Harbers points out in the conclusion, as soon as normative and political issues appear, most contributors return to some ultimate primacy of people over things. It is ultimately people that are held responsible, even if it is to take responsibility for the technology (Stemerding and Nelis), or even to bring about technological regime change (Boelie Elzen on electric vehicles), or change inequalities caused by biased designs (Oudshoorn, Brouns and van Oost). Yet, at the same time, virtually all the contributors claim some sort of modified agency for technology, which must therefore mean a reduced kind of agency, devoid of notions such as responsibility or morality. What is going on?

It seems to me that one more step needs to be taken. To talk of agency, we need not only to define it, give it a place in a theory, but also question why we would want to extend agency to technology. What would we, as academics and researchers, gain if we describe technology as bestowed with agency? The price is obvious: our academic colleagues at least raise their eyebrows and the theoretical conundrums of politics and normativity are considerable. Is this worth it?

Over the last decade, STS and technology studies in particular have gone through a phase that could be compared to the founding of sociology. To create space for sociology in the university, Emile Durkheim claimed the existence of social facts. Such facts, he argued, could not be reduced to economic rationality or individual psychology or law, and therefore warranted proper study in their own right by the new science of sociology. His masterpiece was to show how suicide was such a social fact.

Similarly, STS wants to tell stories about technology, stories that cannot be reduced to the purely functionalised rationality of engineering, nor to cultural history, nor to cultural studies. Depending on local contexts, the academic niche may have to be conquered upon other competing turfs. (Apparently, some of our colleagues need to fight such battles with sociology, going so far as declaring that the entire sociological tradition is irrelevant for the age of technology.)

In any case, just as Durkheim claimed the existence of social facts for sociology, STS now claims a particular status for technology. Technology requires space to deploy, as a fully valid phenomenon in its own right, not as a derivative of social action, culture, economics, engineering or anything else, but irreducible, like STS itself. Since STS wants to tell stories in which technologies are the protagonists, 'following the object around', the new ontologies of the field have put technologies on the subject side of its sentences: 'the alarm clock wakes me'. It is but one solution. In other contexts, STS has stressed the importance of studying the flexibility of technology or the variety of artefacts' meanings to people, mostly versus technological determinist engineering.

What I am suggesting is that the extension of agency to technology is not just a matter of observable qualities, definitions, and theoretical frameworks, but also of the politics of our own knowledge — in the university, towards the state, towards educated culture in general, and a few more specific forums where some of us want our stories to perform. We want to tell stories that show how technologies and technological regimes are important, require attention, do wonderful and not-so-wonderful things, have effect.

Even without the theoretical debates over agency, technologies end up on the subject side of the sentences in our stories. At the same time, we are profoundly aware of the dangers of technological determinism, where there is no room for change and reflection. In fact, if our stories distribute too much agency to things, then we reduce our own role to that of Cassandra — to predict inescapable futures.

It is rather peculiar that so much of the agency debate is cast in a-historic, ontological terms, where we talk about artefacts in general. As if the swords of the Greeks, the voting machines of Italian city states, the genetic screening technologies of the West, or the bicycles of the Dutch all require the same agency status of things. The position is strangely universalist: all technology has agency, has politics. Some of it is even eerily rationalistic, with its idolisation of 'symmetry' and talk of 'geometry' that is reminiscent of the severe purity of a Euclidean space.

Might we not ask what is opportune, rather than what things are really like? What kind of stories about technology help us along, in one way or another? What can we contribute by telling stories with technologies as protagonists? If we write tragedies, as Gerard de Vries has suggested in the past (de Vries, 1999), will our stories provide consolation for the tensions of our age that we cannot resolve, as the Greek tragedies did? (Is it an inescapable tragedy that I will have to be awakened by my alarm clock?)

If we write stories of powerful technologies that oppress, will we be able to dislodge or modify them through our public accusations? (Should the disgrace of the inhuman rhythm of my alarm clock finally stop?) If we write stories of the co-construction of agents and non-agents, will we be able to argue for a redistribution of agency? (Could there be an alarm clock that knows when I need some clemency?) Are different types of story required when we talk to governments, citizens, designers, companies, or patients? Are different kinds of story needed for different projects?

The question then is to what degree do we want to portray technologies as the heroes of our stories and, inversely, how do we portray people in contrast? Ultimately, this is not simply a matter of observable degrees of the capacity to 'act'. It is equally a matter of how we think it opportune to portray protagonist and antagonist, victim and hero. If we want to get 'inside' the politics of technology, we may have to keep a much sharper eye on the politics of STS.

This volume edited by Hans Harbers has brought together an interesting overview of positions on agency, politics and the normativity of technology for post-Actor Network Theory approaches. For my taste, there are three issues not yet sufficiently addressed in this volume: First, what is meant by 'agency' and what is not-agency? Second, what is the theoretical context that provides meaning to the term agency? Third, what do we gain by handing out agency freely and, inversely, why would we want to restrict it? What kind of stories can we tell if we

shift the role of protagonist around among people, things, or regimes, and what do such stories do in the world?

Hopefully, these themes will become more explicit as the debate develops further. Meanwhile, I'll make do with my opportunistic mix of alarm clock, and girl friend and coffee in the morning.

References

de Vries, G 1999. Zeppelins: Over filosofie, technologie en cultuur. Amsterdam: Van Gennep.

Law, J 1994. Organising Modernity. Oxford: Blackwell.

Lynch, M 2000. Against reflexivity as an academic virtue and source of privileged knowledge. *Theory, Culture and Society*, **17**(3), 26–54.