### Per Hetland

# T. Fenwick and R. Edwards: Actor-Network Theory in Education

What is actor-network theory (ANT), and what use does it offer to educational research? Tara Fenwick, Professor of Professional Education, and Richard Edwards, Professor of Education, both at the University of Stirling, aimed to shed light on this question and provide a basis for a sustained engagement with the actor-network theory. They are well aware that their attempt to bring order to the field might domesticate it; however, their attempt is to explore what has and can be done in education. Fenwick and Edwards claim that pedagogy centres around, and is constantly mediated by, material things. This is also a central claim made by Latour who states that 'Without the nonhuman, humans would not last a minute' (Latour, 2004, p. 91). The myriad of elements that constitute teaching and learning are important to the authors. They called the first chapter a way to intervene, not a theory of what to think. This is important since ANT focuses not on what text and other things mean, but on what they do. They explore important concepts in ANT like translation, networks and agency. The translation model explains innovations as temporary interpretations of nature, of technological potentials, of the strategies of competitors in the market and different interests. While the diffusion of innovation model focuses on the transmission of the same artefact, the translation model reveals a continuous transformation of the artefact. The strength of the translation model is that it can encompass still undecided controversies, while the diffusion of innovation model refers to established facts and machines. The authors claim that translation provides a new language and a richly materialised conception to intervene more precisely and more honestly, within the messiness and multiplicity that make up those processes that we refer to as learning and teaching, curriculum and pedagogy, educational implementation, reform and evaluation.

The first to provide a concept of network graphic meaning was the anthropologist John Barnes in his study of 'Class and Committees in a Norwegian Island Parish'.

"The image I have is of a set of points some of which are joined by lines. The points of the image are people, or sometimes groups, and the lines indicate which people interact with each other. We can, of course, think of the whole of social life as generating a network of this kind." (Barnes, 1954, p. 43).

The concept, so defined, has been used by a whole generation of social scientists to describe the systematic ordering of social relations by acts of choice and decision. According to the translation model, the structure and operation of an actor-network involves an interrelated set of entities that have been successfully translated or enrolled by an actor. He or she is thereby able to deploy their strength and speak or act on behalf of, or with the support of, the actor-network. Enrolment is the definition and distribution of roles. However, roles are not fixed and pre-established, nor are they necessarily successfully imposed. The authors state that in ANT, a network is an assemblage of materials brought together and linked through processes of translation that perform a particular



Denne artikkelen er lastet ned fra www.idunn.no. Reproduksjon eller annen videreformidling av artikkelen er ikke tillatt uten avtale med rettighetsforvalter.

© Universitetsforlaget, Nordic Journal of Digital Literacy, Vol 7, 2012, Nr 01, 70-72

#### BOOK REVIEW

function. The social actors and the non-human devices are enrolled in the network. Fenwick and Edwards find this network ontology particularly useful in educational studies of learning, pedagogy and curriculum. For many reasons, including the fact that a diverse user group understands the concept so differently, Fenwick and Edwards discuss alternative concepts. They claim, however, that 'we wish to retain, and perhaps even reclaim, the term network in exploring the socio-material complexities of educational life' (p. 16).

The rest of the book devotes specific chapters to themes such as knowledge practices, teaching and learning, curriculum-making, technologized learning, standards in education, educational reforms, accounting for education, and educational policy, before concluding with messy research and ANT in education.

Referring to Latour they explore the fact that much knowledge production is grounded in mundane practical activity, although studying mundane things is not necessarily easy. Using interesting examples they are able to unpack apparently boring activities, and make an interesting observation.

'How often, in the study of education, do we detail the mundane things and practices that govern our day-to-day interventions in the world? Education tends to be studied as an exotic practice; its enlightenment translations result in it being enacted as exotic rather than mundane' (p. 29).

The chapter elaborates on objects and subjects of knowledge with an interesting discussion of enactment of knowledge in pedagogy and curriculum. Teaching and learning are inseparable from the networks through which they are enacted. They elaborate on the importance of boundary objects in teaching and learning. They also have an interesting discussion about teaching and learning contexts as a network effect. Contextualising rather than context are important in ANT studies.

In an insightful chapter about curriculum-making, the ANT concept of translation becomes especially helpful. In ANT, ambiguity is part of translation and translation is never a straightforward process. This is illustrated with several examples of curriculum-making practices in education. In the chapter about technologized learning they pinpoint the contrast between the mundane usage and the exotic discourses of ICT. The chapter presents several examples of studies of technologized learning; however, the chapter would have been more explorative if the authors had chosen more illustrative examples. The chapter primarily illustrates the conclusion that many of the issues identified have yet to be adequately researched in education. The authors claim that the purpose of standards is to achieve orderings of practice at a distance. For educational researchers interested in standards and the processes of standardisation, the authors urge them to focus on the 'mess' that is characteristic of standardisation, 'on the interplays that occur at the most local level of practice, in ways that resist the urge to clarify, unify, order and distinguish' (p. 98).

The last three chapters explore three interwoven themes: educational reform, accounting and policy. The authors distance themselves from the traditional diffusion-of-innovation model. An important reading of ANT suggests that one shall not only trace the most visible movements of educational change, but also the elusive, more messy, more promising otherness of new possibilities. Accounting and evaluation is an important counterpart to all reforms, and ANT returns the focus to the relations between things, not the things themselves. Finally they underline the importance of both studying policy implementation and how effects emerge from the networks of interests and actions that are brought into play in the making of policy and by the policies themselves.

#### BOOK REVIEW

The authors conclude the book with two very well written chapters guiding the prospective student or researcher to the field of ANT and its possibilities for educational questions and inquiry. They also state that the text may even become an obligatory passage point for those who are seeking - or are prepared to be enrolled in - the network of those taking up ANT in education. I agree with them. This book is an obligatory passage point for students that will take up ANT in education. However, the best parts of the book are the introductory chapter and the two final ones. The other chapters in which the authors survey the existing terrain are more varied; sometimes one must ask if the authors limited their corpus of explored text too narrowly, and if a broader textual corpus also would have provided more illustrating examples.

## References

Barnes, J. A. (1954). Class and Committees in a Norwegian Island Parish. *Human Relations*, 7(1), 39-58.

Fenwick, T., & Edwards, R. (2010). Actor-Network Theory in Education. London: Routledge.

Latour, B. (2004). *Politics of Nature: How to Bring the Sciences into Democracy*. Cambridge, MA: Harvard University Press.