

Cultural limits to technological innovation

The effort to comprehend innovation across cultures and times highlights the importance of explicating factors external to technology. Therefore it is relevant to nuance or differentiate the understanding of cultural responses to adopted technologies by recognizing that technology shapes culture, and that culture shapes technology (Rammert 2002).

By looking at the transfer of the South Korean robot Silbot to Danish and Finnish nursery homes in 2011 I will elaborate how 'new' technology is adopted into existing praxes meeting and challenging traditions, understood as institutionalized action (Shils 1981), should be viewed as cultural interchange(s). Interviews with the agents involved as well as close readings of different sources reveal that the Danes experienced difficulties in adapting the robot to Danish culture, thus the "cultural dimension" was seen as a "serious challenge". The Finns found that they had a different notion of technological innovation compared to the South Koreans', complained about the lack of flexibility towards the use of the robot and ultimately discontinued the implementation of Silbot in Finnish elderly care. By recognizing these technology transfers as reciprocal exchanges I want to emphasize the cultural or contextual limits to interpretative flexibility (Pinch & Bijker 1984) and thus point out cultural constraints to innovation.

This is done by revisiting Hughes' concept of technological style (Hughes 1983) questioning whether it pays due attention to non-technical factors as Hecht (1996) does. In order to account for these contextual and idiosyncratic patterns of practice with technology I introduce the concept of *socio-technological style*. A reconceptualization of Hughes' concept yet more in tune with the notions of the seamless web and the socio-technical ensemble (Bijker 1995), but also closer to Lewis Mumford's understanding of technological style as a "*reasoned expression, in some particular work, of complex social and technological experience that grows out of a community's life.*" (Mumford 1921: 264).

- Bijker, Wiebe E. (1995): *Of Bicycles, Bakelites, and Bulbs – Toward a Theory of Sociotechnical Change*. Cambridge, Massachusetts: *The MIT Press*.
- Hecht, Gabrielle (1996): *Rebels and Pioneers: Technocratic Ideologies and Social Identities in the French Nuclear Workplace, 1955-69*. *Social Studies of Science*, Vol. 26, No. 3 (Aug., 1996). p. 483-530.
- Hughes, Thomas P. (1983): *Networks of Power – Electrification in Western Society, 1880-1930*. Baltimore and London: *The Johns Hopkins University Press*.
- Mumford, Lewis (1921): *Machinery and the Modern Style*. *The New Republic*, August 2, 1921. pp. 263-264.
- Pinch, Trevor J. & Bijker, Wiebe E. (1984): "The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other." *Social Studies of Science*, Vol. 14. No. 3 (Aug., 1984). pp. 339-441.
- Rammert, Werner (2002): "The Cultural Shaping of Technologies and The Politics of Technodiversity" in Sørensen, Knut H. & Williams, Robin (eds.): *Shaping Technology, Guiding Policy*. Cheltenham, UK and Northampton, MA.: Edward Elgar. pp. 173-197.
- Shils, Edward (1981): *Tradition*. London & Boston: Faber and Faber.

Curriculum Vitae – Lasse Blond

2015-

PhD Fellow,

Information Studies, School of Communication and Culture. Aarhus University.

Project title: Travelling Technologies and Their Cultural Luggage.

A study of the integration of social robots in healthcare with a focus on how this involves embedded cultural values characteristic of technology transfer.

2012-2014

Master of Science, MSc in Information Technology,

Information Studies, Department of Aesthetics and Communication.

Project title: The Social Construction of “The Valet”

A critical evaluation of the SCOT-approach in a contemporary technological context.

2006-2010

Master of Arts in Journalism, MA

Centre for Journalism, Department of Political Science and Public Management.
University of Southern Denmark.

Project title: Bloody Competition or Peaceful Co-existence?

An investigation into the effects of the Internet in relation to the form of newspapers.

2004-2006

Student in History, BA

Department of History. University of Southern Denmark.

Bibliography:

Blond, Lasse & Schiølin, Kasper (2016): “Lost in Translation? Getting to Grips With Multistable Technology in an Apparently Stable World” in Hasse, Cathrine and Friis, Jan Kyrre Berg (eds.): *Postphenomenological Methodologies – New Ways in Mediating Techno-Human Relationships*. Lanham, MD: Lexington Books. (Accepted/In press)