



WORKSHOP ON TECHNOLOGY MATTERS AND MATTERS OF TECHNOLOGY:

EXPLORING THEORIES OF “MATERIALITY” FOR TECHNOLOGY RESEARCH

When: June 25, 2018

What: A workshop to explore theories of matter and materiality for technology research.

Why: Provides an opportunity to explore new ideas, get feedback for ongoing research, and engage in lively and critical debate around the ‘materiality turn’ and its usefulness for studying technology-related phenomena.

Organizers/Committee:

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BACKGROUND

Technologies have profoundly reconfigured the material fabric of our lives (Zammuto et al., 2007). Our lives both in and out of work have increasingly become entangled with technologies that are now broadly recognized as not merely mediators but performative (Jonsson et al., 2009) of various forms of activities and walks of life. We no longer refer to the metaphor of technology as a ‘tool’ but rather discuss of infrastructures, platforms, and fabric when describing our relationship with these technologies. Several commentators have argued that the technologies are so foundational to our contemporary lives that we need philosophical and theoretical insights that no longer treat the social and the material as separate concerns but view them entangled as sociomaterial (Suchman, 2007; Orlikowski & Scott, 2008). Simultaneously, we seem to lack the necessary boilerplate to describe the sociomaterial phenomena and many have felt contempt to resort to various neologisms resulting in “jargon monoxide” (Kautz & Jensen, 2013). Others have proposed using more familiar concepts such as assemblages (Sesay et al., 2016), cyborgs (Cecez-Kecmanovic et al., 2014) and even monsters (Aanestad et al., 2017) to describe the reconfigurings we experience and see around us. We need both new theoretical and philosophical

insights and conceptual tools to describe the reconfigurings of the material fabric brought about by technologies.

A key to explaining these changes lies in our understanding of the *materiality of technologies*. Indeed, following Orlikowski's (Orlikowski & Iacono, 2001; Orlikowski, 2007; Orlikowski & Scott, 2008) initial contributions, scholars have shown phenomenal interest toward the topic (Jones, 2014). So far, two philosophical perspectives, critical realism (e.g., Bhaskar, 2008) and agential realism (Barad, 2007), have provided the main the sources of inspiration for information systems (IS) scholars to describe the materiality of a broad range of technology-related phenomena (Cecez-Kecmanovic et al., 2014). Opposition between these two "camps" have occasionally been intense and heated (Mutch, 2013; Leonardi, 2013; Scott & Orlikowski, 2013; Hassan, 2016). Their conceptions even on the most fundamental concepts of matter and materiality have been found ambiguous, broadly different, and incommensurable (Kautz & Jensen, 2013; Jones, 2014). However, if we accept that the aim of our theorizing "is not to finally, once and for all, catch reality as it really is...Instead it is to shift our understanding and to attune to reality differently" (Mol, 2010, p. 255), we begin to see that we need more, not less, theories of materiality. Different perspectives on materiality may help us to orient ourselves differently in order to develop explanations and theories of the complex technological changes happening around us.

IS scholars have not been alone in their interest to materiality. What has already become coined as "materialist turn" has swept across most of social sciences (Pels et al., 2002; van der Tuin & Dolphijn, 2010; Dolphijn & van der Tuin, 2012). These scholars have (re)turned to (re)read "old" materialist and structuralist thinkers like Karl Marx, Friedrich Nietzsche, Maurice Godelier, Gilles Deleuze, and Michel Foucault. Even "those pre-modern philosophers such as Duns Scotus, Lucretius and the whole Stoic tradition, whose work is not (that) effected by dualist thought, are being read like never before" (Van der Tuin & Dolphijn, 2010, p. 167). But these discussions have not merely recycled old ideas but developed (sometimes even radical) views on matter and materiality. For these "new materialist" thinkers, matter is no longer a passive substrate "out there", but an active and dynamic agent that is processual, becoming, generative, resisting, lively, vital, yearning, and suffering (e.g., DeLanda 2016, Braidotti, 2002; Barad, 2007; Bennett, 2009; Coole & Frost, 2010; Pickering, 1995). These developments, have not gone without criticism. As Ingold (2007) criticizes: "What academic perversion leads us to speak not of *materials and their properties* but of *the materiality of objects*? It seemed to me that the concept of materiality, whatever it might mean, has become a real obstacle to sensible enquiry into materials, their transformations and affordances." (p. 3) Materiality has largely remained ambiguous and insufficiently theorized (Jones, 2013).

CALL FOR CONTRIBUTIONS

In this workshop, we encourage scholars to take stock and explore different theories of materiality. Given that these theories originate from fields other than IS, they need further articulation and development if they are to support IS scholars to theorize about technologies and technology-related phenomena. We are interested in both conceptual and empirical contributions that show how different theories of materiality may influence the way in which we understand and describe technologies and study technology-related phenomena. We also welcome studies that are critical of materiality and that show how materiality may actually become an obstacle to understanding technologies. We encourage scholars to take broadly use of philosophical and theoretical ideas on materiality and matter across disciplines.

Possible topics include but are not limited to the theoretical foundations for the materiality of:

- Wearable computing (e.g., Kuchler, 2008; Sesay et al., 2016; Prasopoulou, 2017)
- Healthcare systems (e.g., Jones, 2014)
- Identity (e.g., Schultze, 2014; Nyberg, 2009)

- Information security and security technologies (e.g., Aradau, 2010; Coles-Kemp, 2010; Vuorinen & Tetri, 2012; Niemimaa & Laaksonen, 2015; Harnesk & Thapa, 2016)
- Algorithms (e.g., Scott & Orlikowski, 2015; Introna & Hayes, 2011)
- (Cyber)Space (e.g., de Vaujany & Vaast, 2014; Rodrigues et al., 2017)
- Infrastructures (e.g., Henningsson & Hanseth, 2011; Østerlie et al., 2012; Parmiggiani & Monteiro, 2015; Niemimaa, 2016)

The workshop does not publish proceedings or provide fast-track to journals. It provides a scholarly space for open discussion and debate in order to explore new and fresh ideas and to develop further more mature ideas.

We ask authors to submit their extended abstract (1500 words) or a short paper (five (5) pages) to marilmni@jyu.fi. The workshop committee will process the submissions and select papers based on the quality and fit to workshop's theme.

Submission Deadline: April 13, 2018

Notification to Authors: May 11, 2018

Deadline for Final Papers: June 1, 2018

WORKSHOP FORMAT AND SCHEDULE

The proposed workshop will include paper presentations and keynotes. The keynote speakers have not yet been decided.

Preliminary schedule:

- 9:00 – 10:00 Opening & Keynote 1
- 10:00 – 12:00 Paper presentations, session 1
- 12:00 – 13:00 Lunch & Networking
- 13:00 – 14:00 Paper presentations, session 2
- 14:00 – 14:30 Coffee break
- 14:30 – 15:30 Keynote 2
- 15:30 – 17:00 Paper presentations, session 3

The schedule is dependent on the number of submissions received.

BIOGRAPHIES

Dr. Marko Niemimaa is a postdoc researcher at the University of Jyväskylä, Faculty of Information Technology. His main research interests lie in the fields of IS security management, IS continuity and sociomateriality. He has published research in the leading IS journals including the *European Journal of Information Systems*, *Communications of the Association for Information Systems*, and *DATA BASE*, and in top conferences of the field.

Dr. Ulrike Schultze is an associate professor in information technology and operations management (ITOM) at the Southern Methodist University (SMU) Cox School of Business. She also has a visiting appointment at Lund University, Sweden. Her research explores the impact of information technology on work practices. She has studied the work practice implications of knowledge management technology and of Internet-based self-service technology. Most recently, she has been focusing on the implications of social media technologies, specifically the virtual world Second Life, for identity work. Her research has been published in leading information systems journals, including *Information Systems Research*, *Management Information Systems Quarterly*, *European Journal of Information Systems*, *Journal of Information Technology*, and *Information and*

Organization. She has served on the editorial boards of those journals, and is currently a senior editor at *Journal of the Association of Information Systems*.

Gijs van den Heuvel is a PhD researcher at Tilburg University and the Netherlands Defence Academy. His research focuses on information sharing in military organizations and balances on the intersection of organization studies and information systems. He is particularly interested in the sociomateriality of information sharing.

Dr. Helena Karsten is an associate professor in Information Systems at the Åbo Akademi University in Finland. She holds permanent visiting positions at the University of Jyväskylä and at the Aalto School of Economics and Business Administration. Her research interests include change processes, the interweaving of work and computers, the use of IT to support collaboration, and social theories informing theorizing in IS. She has published, among others, in *MIS Quarterly*, *Information Systems Journal*, and *European Journal in Information Systems*. She is the vice-chair of IFIP WG8.2 ICT and Organizational Change. She is a member of AIS, a member of AIS SIGGreen, and of several other scientific societies. She is a Senior Editor with the *Information Technology & People* and an Associate Editor for *The Information Society*.

Dr. Mads Bødker is an associate professor at the Department of Digitalization at Copenhagen Business School. His research lies in the intersection of interaction design, HCI/User Experience, tourism and mobilities research. Major topics in his research include how to represent users in design work and the what role the body and its affective capacities might play in IS research. Building on field studies and visual ethnographies of tourism he has developed mobile applications and 'alternative' approaches that aim to inspire researchers to engage in more sensory acute forms of field work. His work appears in leading IS journals such as *European Journal of Information Systems* and *Information Systems Journal* as well as leading design journals such as *International Journal of Design and Co-Design*.

Dr. Ole Hanseth is Professor in the Department of Informatics, University of Oslo. His research focuses mainly on the interplay between social and technical issues in the development and use of large-scale networking applications and infrastructures.

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