Management, Organisation and ICT.

PhD Course, 7,5hp, Spring 2022

The course is a collaboration between the Department of Business Studies, Uppsala University and Stockholm Business School, Stockholm University

The course is given within the Swedish Research School of Management and Information Technology (MIT)

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Jan Lindvall & Jan Löwstedt

Background and purpose

An important theoretical point of departure for this doctoral course is the importance of *cognition* -how we think, make sense of and act individually and collectively/"socially" (Meeting 1). We focus this analytical perspective on the ongoing practical interplay between management, organisation, and ICT. The way we make sense of the tools we are using to support our thinking is essential for perceiving, defining, analysing, and acting in many organisational situations.

From a cognitive view on management, we will discuss some central and generic organisational concepts, such as coordination (Meeting 2), decision-making (Meeting 3), search/memory, learning (Meeting 4), and power and change/transformation (Meeting 5).

Our understanding of organisations in action are closely related to the need, creation, and use of information. For example, we often assume that we need information for decision-making; we often see information as crucial for organisational coordination, and access to information is often central for individual and collective motivation.

Traditionally, our understanding of information follows Norbert Wiener (Cybernetics) and Claude Shannon's (Communication theory) tradition. Important concepts related to this view are, for example, *signal, noise, and feedback*. This well-established (syntax) tradition lacks an interest in the meaning, an *interpretation*, of information. It is also less oriented towards what action (a pragmatic view) we can get from this information. Here we stress the importance of interpretation, (shared) understanding and actionable knowledge. We expand the traditional syntax view of information to also consider a semantic and pragmatic view of information.

Course requirements

The course is divided into five subthemes (see below), all related to an essential organisational topic, and most of them connected to some critical IT tools. The course requirements are active participation during seminars and by producing "your questions" related to our readings (one to each meeting, a total of five. See below), and one final paper (five pages on a topic related to the course and your ongoing or future work).

Course language: English.

The process.

Before the seminars:

Read the course material. Be aware of the distinction between articles for close and overview reading. Generate your questions from our close reading materials! Conclude your reading **by producing (at least) three principle questions** for our meeting.

Present your questions, including a **short argument for why** you find each of these questions especially interesting/important n three PowerPoint slides:. Upload your slide at Studium lunchtime the day before each session.

During our seminars, we follow the following routine.

- 1. We/course leaders try to "set the scene" give a context for the day's topic.
- 2. We present and discuss our "close reading" articles. Together, we try to develop a deeper/shared? understanding of each article. We present your identified questions related to these articles. Be prepared to answer important questions around each article!
- 3. We comment our overview readings. Be prepared to give your view/comments on each article!

Day 1. Uppsala, April 6, 2022 at 10:15-15. K336

A cognitive view of management, organisation and information.

Close reading

- 1. Eggers, J.P & Kaplan, S., 2013, "Cognition and Capabilities: A Multi-Level Perspective", *The Academy of Management Annals*, 7:1, pp . 295-340.
- Bodrozic, Z. & Adler, P.S., 2018, "The Evolution of Management Models: A Neo-Schumpeterian Theory". *Administrative Science Quarterly*, pp. 85-129.
- 3. Boell, S. 2017, "Information: Fundamental positions and their implications for information systems research, education and practice" *Information & Organization*, 1, p.1-16.

- 4. Bailey, D.E. & Barley, S.R., 2020, "Beyond design and use: How scholars should study intelligent technologies. *Information & Organization*. In Press.
- Leonardi, P. M., & Barley, S., 2010, "What's Under Construction Here? Social Action, Materiality and Power in Constructivist Studies of Technology and Organizing", *The Academy of Management Annals*, 4:1, pp. 1-51.
- Leonardi, P. M., 2012, "Materiality, Sociomateriality, and Socio-Technical Systems: What Do These Terms Mean? How Are They Related? Do We Need Them?" In P. M. Leonardi, B. A. Nardi, & J. Kallinikos (Eds.), *Materiality and Organizing: Social Interaction in a Technological World* (pp. 25-48). Oxford: Oxford University Press.

Day 2.Uppsala, April 20, 2022 at 10.15-15. K336

Coordination and structural solutions.

Close reading

- Joseph, J. & Gaba, J., 2020, Organizational Structure, Information Processing, and Decision Making: A Retrospective and Roadmap for research". *The Academy of Management Annals. In Press.*
- 2. Kilduff, M. & Lee, J W., 2019, "The Integration of People and Networks". *Annual Review of Organizational Psychology and Organizational Behavior*. In Press.
- Bailey, D. E., Leonardi, P. M. & Chong, J., 2010, "Minding the Gaps: Understanding Technology Interdependence and Coordination in Knowledge Work", *Organization Science*, Vol. 21, No. 3, pp.713-730.

- 4. Langley, A., et al, 2019, "Boundary work among groups, occupations, and organizations: From Cartography to Process", *Academy of Management Annals*, 13, 2, pp. 704-738.
- 5. De Reuver, Sorensen, C. & Basole, R.C., 2018, "The digital platform. A research agenda". *Journal of Information Technology*.
- 6. Jesse, N., 2018, "Internet of Things and Big Data: the disruption of the value chain and the rise of new software ecosystems", *AI & Society*, in press.

Day 3. Uppsala, May 2, 2022 at 10:15-15.K336

Decision Making & Learning

Close reading

- Power, D., Heavin, C & Keenan, P., 2019, "Decision systems redux". Journal of Decision Systems, 28:1, pp.1-18.
- 2. Arnott, D. & Gao, S., 2019, "Behavioral economics for decision support systems researchers", *Decision Support Systems*.
- 3. Kellogg, K., Valentine, M. & Christin, A., 2020, "Algorithms at Work: The New Contested Terrain of Control", *Academy of Management Annals*. 14, 1. pp 366-410.

- 4. Newell, S., 2015, "Managing knowledge and managing knowledge work: what we know and what the future holds", *Journal of Information Technology*, 30, p p.1-17.
- 5. Arnott, D., Lizama, F & Song, Y., 2017, "Patterns of business intelligence systems use in organizations", 97, pp. 58-68.
- 6. March, J.C., 1991, "Exploration and Exploitation in Organizational Learning", *Organization Science*, 2, 1, pp. 71-87.

Day 4. Uppsala, May 18, 2022, 10:15-15

Organisational memory.

Close reading

- Felin, T., Foss, N.J., Heimeriks, K.H. & Madsen, T.L., 2012, "Micorfoundations of Routines and Capabilities: Individuals, Processes, and Structure", *Journal of Management Studies*, 49:8.
- Argote, L. & Ren, Y., 2012, "Transactive memory Systems: A Microfoundation of Dynamic Capabilities", *Journal of Management Studies*.
- 3. D' Adderio, L., 2011, "Artifacts at the centre of routines: performing the material turn in routines theory", *Journal of Institutional Economics*, 7, 2, pp.197-230.

- 4. Glikson, E & Wolley, A. W., 2020, "Human Trust in Artificial Intelligence: Review of Empirical Research", *Academy of Management Annals*, 14, 2, pp. 627-660.
- Fayard, A-1 & Weeks, J., 2014, "Affordance for practice", *Information and Organization*, 24, pp.236-249.

Day 5. Uppsala, June 9, 2022 at 10.15-15. K 336

Power and change.

Close reading

- 1. Fleming, P. & Spicer, A., 2014, "Power in Management and Organization Science", *The Academy of Management Annals*, 8:1, pp. 237-298.
- Bhattacherjee, A., Davis, C.J., Connolly, A.J. & Hikmet, N., 2018, "User response to mandatoryt IT use: a coping theory perspective". *European Journal of Information Systems*, 27:4.
- 3. Tsai, H., Compeau, D., & Meister, D., "Vouluntary use of information technology: an analysis and synthesis of the literature", *Journal of Information Technology*.

- 4. Bagozzi, RP., 2007, "The Legacy of the Technology Acceptance Model and a Proposal for a Paradigm Shift", *Journal of the Association for Information Systems*.
- Lapointe, L. & Rivard, S., 2007, "A Triple Take on Information System Implementation", Organization Science, 18, 1, pp.89-107.
- Volkoff, O & Strong, D.M., 2013, "Critical Realism and Affordance. Theorizing IT-Associated Organizational Change Process, *MIS Quarterly*, 37, 3, pp.819-834.