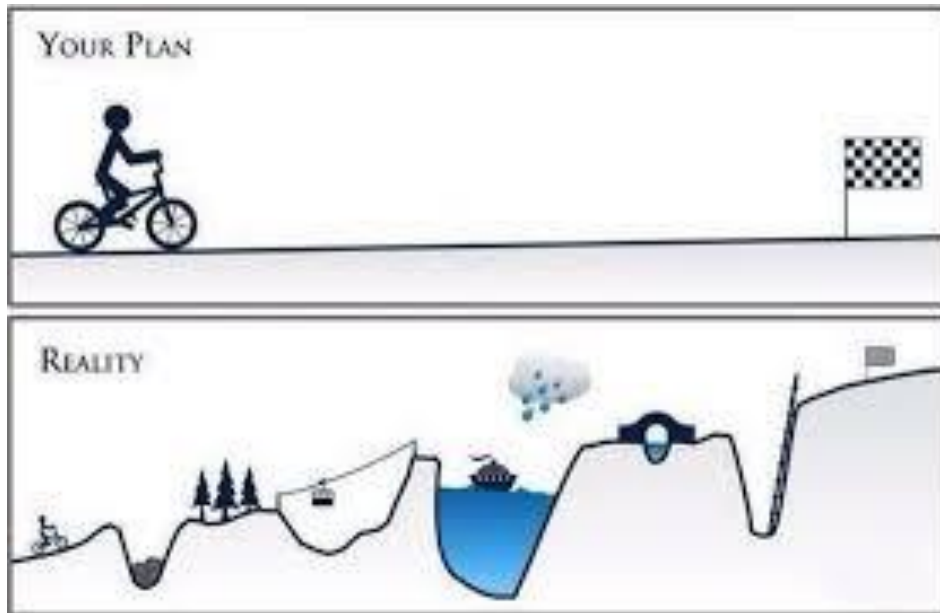# IS and practice

Lecture IN5210

Monday 24.09.2018

today

- Why practices?

- Technologies-in-practice
- Practice lens

- How to study practice: zooming-in and zooming-out

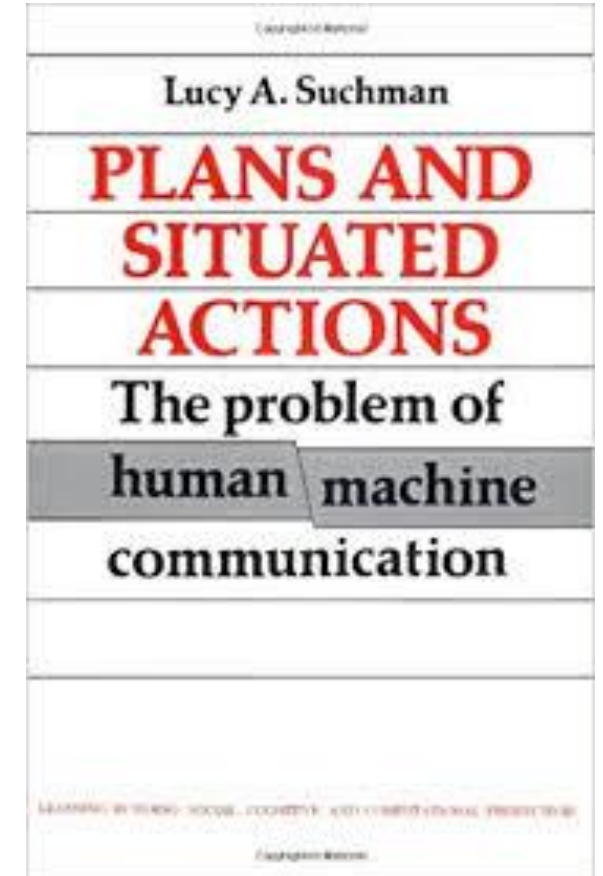- Case study on remote care.

In theory...and in practice

- Things in real life do not always work out the way they do in abstraction (theory).

- When we try to put the theory into practice and take real life human variability into account, then the outcomes are always different then what theory would predict.

Plans and situated action

- 'Expert photocopier' machine supposed to be very easy to use - but people found it complicated, confusing and difficult.

- the machine was built with a planning model of human action: the steps that a person needs to go through when they make a photocopy.

- The model treats a plan as something that is located in the actor's head which directs his or her behavior.

https://www.youtube.com/watch?v=DUwXN01ARYg

"Unload top paper tray."
"We didn't do that."

"Place all the originals against the left wall."

Plans and situated action (cont.)

- Try to make as detailed a plan as you can to describe how someone would go about printing.

- If you think about how you use a printer is it really like the way your plan is constructed?

- What happens when something goes wrong? Do you plan how to deal with it ahead of time, or as things occur?

Plans and situated actions (cont.)

- Suchman argues that plans are a **resource** that is used by actors in a particular situation.

- Plans, plans serve (before action takes place) only for predictive or organizational purpose, and (after that action) plans serve to justify the actions undertaken.

- **Situated action**: the actual sense that specific users make out of certain event in the machine.

- Situated: action takes place in interactions with others, including situated communication, the construction of situations, the relationship with the physical environment and the objects in it, and the idea that these elements are 'held together' by and express a situational rationality.

- Focus on 'what people "actually" do rather than on what they ought to be doing.'
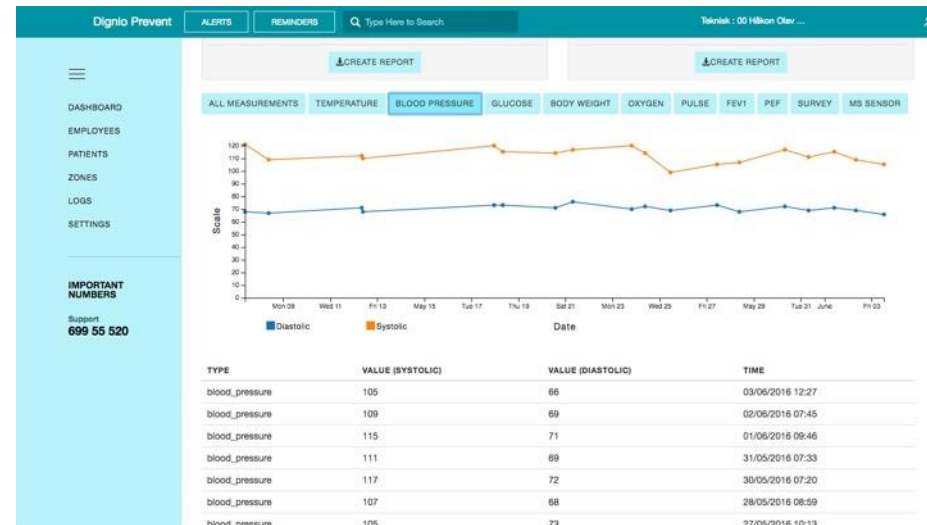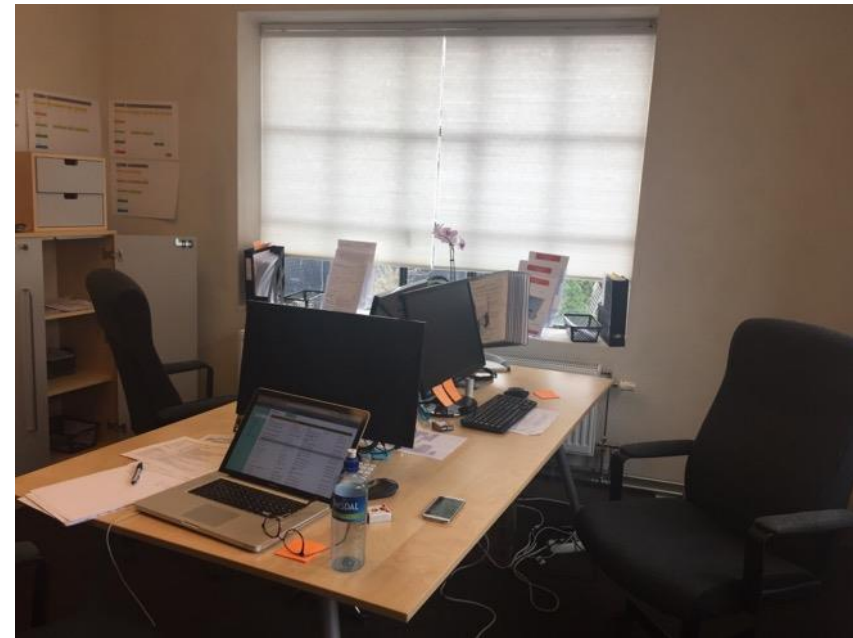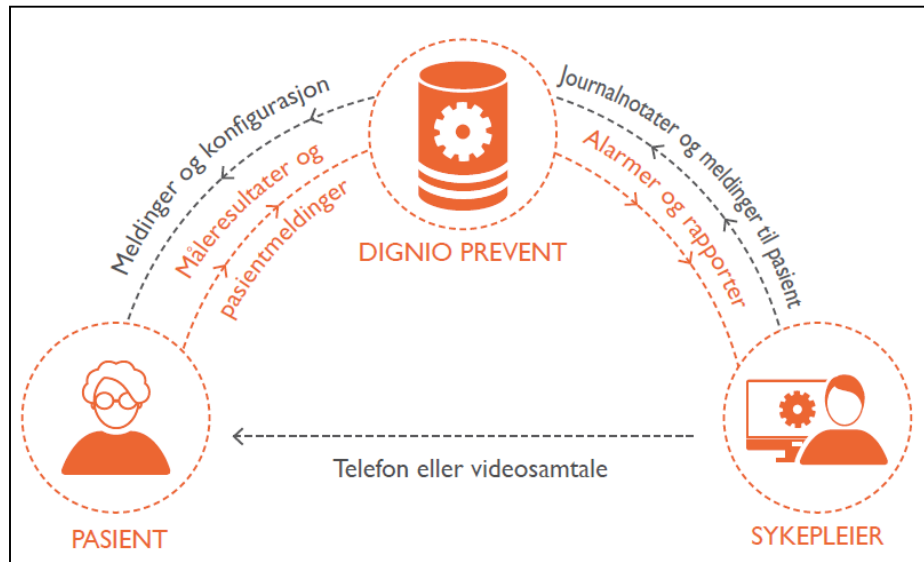
What is practice?

Practice-based Studies: heterogeneous ensemble of empirical studies with no common definition of the term 'practice' and no unified theory of practice.

Common core ideas:

- **Processual view**: always ongoing work – practices are not objects, they only exist if they are enacted and re-enacted.

- **Recursive view**: our social world is *made and remade* in practice.

- Behind what seems 'stable' in the social world there is always **someone's work.**

- Practices **knot** together human bodies, minds, objects, texts in *durable* ways.

- Critical role of **bodies** and **material things**: one cannot conceive of a practice without bodies or material resources.

- There is space for **individual agency**: initiative, creativity – not mindless repetition.

- Becoming part of a practice requires **learning** (how to act, how to behave, how to think, what to expect, what is right, what is wrong etc.)

The 'effects' of practicing

- **Not** just 'what people do.'

- People's doing is meaning-making, identify forming, order-producing – it has **effects** beyond the 'doing' of the actions in a specific delimited situation.

- What people produce in their situated practices is not only work, but also the (re)production of society. In this sense, practice is an **analytic concept** that enables interpretation of how people achieve active being-in-the-world.

- What makes possible the competent reproduction of a practice over and over again and its refinement while being practised (or its abandonment) is the constant negotiation of what is thought to be a **correct or incorrect** way of practising within the community of its practitioners.

Remote care as practice

- **Processual view**: always ongoing work – practices are not objects, they only exist if they are enacted and re-enacted.

- **Recursive view**: our social world is *made and remade* in practice.

- Behind what seems 'stable' in the social world there is always **someone's work.**

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Practice	Case example
Processual view	Daily practices of remote care: both nurses and patients enact remote care
Recursive view	Remote care is 'practiced' and 'reproduced' – it does not happen just once.
Always someone's work	Remote care requires work: e.g. organizing the schedules of patients for the day.
knot together human bodies, minds, objects, texts in durable ways	Nurses, patients, devices, tablet, software, office, homes ...
one cannot conceive of a practice without bodies or material resources	Without bodies and materials there is no 'remote care'
individual agency	Nurses and patients constantly adjust their practices.
Becoming part of a practice requires learning	The case of the new nurse

Theorizing Practice and Practicing Theory

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This paper describes the emerging field of practice theory as it is practiced in relation to organizational phenomena. We identify three approaches—empirical, theoretical, and philosophical—that relate to the what, the how, and the why of using a practice lens. We discuss three principles of the theoretical approach to practice and offer examples of how practice theory has been used in the organizational literature and in our own research. We end with a discussion of the challenges and opportunities that practice theory affords organizational scholarship.

Key words: practice; practice theory; genres; resourcing; routines; technology in practice; sociomateriality
History: Published online in *Articles in Advance* February 23, 2011.

Introduction

In this paper we discuss the value of practice theory for issues of concern to organization theorists. We are motivated to write this by our own experiences, primarily our experiences as researchers and teachers but also our experiences as editors and reviewers of papers that investigate practices empirically and use practice ideas theoretically. Central to a practice lens is the notion that social life is an ongoing production and thus emerges through people's recurrent actions. We have become intrigued by the capacity that such a lens affords for analyzing social, technological, and organizational phenomena, and we write this piece with the intent of sharing our understanding and interest in that capacity.

We believe that a practice lens has much to offer scholars of organization. And we believe this is especially the case today. Contemporary organizing is

practice scholars, as well as the value that can be derived from engaging in practice scholarship.

Positioning a Practice Lens

In our consideration of practice theory, we situate it in relation to three ways of studying practice (Orlikowski 2010): an empirical focus on how people act in organizational contexts, a theoretical focus on understanding relations between the actions people take and the structures of organizational life, and a philosophical focus on the constitutive role of practices in producing organizational reality. All three of these foci are salient for organizational scholars using a practice lens, though in any particular piece of scholarship researchers may emphasize one focus over another.

The first *empirical* approach to practice recognizes the centrality of people's actions to organizational outcomes

Three approaches to practice

- **Practice lens:** the main idea is that social life is an ongoing production and emerges through people's recurrent actions.

Three approaches to the study of practice:

- **Empirical**: a focus on how people act in an organizational and social context. The focus is on people's action and the importance of human agency.

- **Theoretical**: a focus on understanding the relation between the actions people take and the structures of organizational and social life. There are many different practice theories that explain this: how are practices produced, reinforced, changed.

- **Philosophical**: the focus on the constitutive role of practice in producing social and organizational reality. In this view, social reality is made up of practices. The social world is brought into being through activities.

Structural model - Orlikowski

Structural model of technology use:

- "people actively select how technology structures are used.'

- examine what people do with technologies in use: an **appropriation** of the "structures" inscribed in the technologies.

- the structures presumed to be embedded within technology.

- and then analyze how those structures are used, misused, or not used by people in various contexts.

THE DUALITY OF TECHNOLOGY: RETHINKING THE CONCEPT OF TECHNOLOGY IN ORGANIZATIONS*

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This paper develops a new theoretical model with which to examine the interaction between technology and organizations. Early research studies assumed technology to be an objective, external force that would have deterministic impacts on organizational properties such as structure. Later researchers focused on the human aspect of technology, seeing it as the outcome of strategic choice and social action. This paper suggests that either view is incomplete, and proposes a reconceptualization of technology that takes both perspectives into account. A theoretical model—the structurational model of technology—is built on the basis of this new conceptualization, and its workings explored through discussion of a field study of information technology. The paper suggests that the reformulation of the technology concept and the structurational model of technology allow a deeper and more dialectical understanding of the interaction between technology and organizations. This understanding provides insight into the limits and opportunities of human choice, technology development and use, and organizational design. Implications for future research of the new concept of technology and the structurational model of technology are discussed.
(ORGANIZATIONS; STRUCTURATION THEORY; STRUCTURATIONAL MODEL OF TECHNOLOGY; TECHNOLOGY)

Technology has always been a central variable in organizational theory, informing research and practice. Despite years of investigative effort there is little agreement on the definition and measurement of technology, and no compelling evidence on the precise role of technology in organizational affairs. I will argue that the divergent definitions and opposing perspectives associated with technological research have limited our understanding of how technology interacts with organizations, and that these incompatibilities cannot be resolved by mutual concession. What is needed is a

Critiques to structural model

- that technologies become "stabilized" after development; the proposition of stabilization admits social construction only during development;

- that technologies "embody" structures which (re)present various social rules and political interests.

Practice Lens - Orlikowski

- organizational subjects *activate* structures pertaining to technology-in-use.
- structures 'are not fixed or given, but constituted and reconstituted through the everyday, situated practice of particular users using particular technologies in particular circumstances'
- From appropriation to **enactment**
- Focus on what structures *emerge* as people interact recurrently with whatever properties of the technology are at hand, whether these were built in, added on, modified, or invented on the fly.

Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations

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This essay advances the view that structures are not located in organizations or in technology, but are enacted by users. It offers a fluid view of structure that builds on and extends earlier work on structuration.

M. Scott Poole

Abstract
As both technologies and organizations undergo dramatic changes in form and function, organizational researchers are increasingly turning to concepts of innovation, emergence, and improvisation to help explain the new ways of organizing and using technology evident in practice. With a similar intent, I propose an extension to the structurational perspective on technology that develops a practice lens to examine how people, as they interact with a technology in their ongoing practices, enact structures which shape their emergent and situated use of that technology. Viewing the use of technology as a process of enactment enables a deeper understanding of the constitutive role of social practices in the ongoing use and change of technologies in the workplace. After developing this lens, I offer an

(Braverman 1974, Edwards 1979, Shaiken 1985, Perrolle 1986), symbolic interactionist approaches (Kling 1991, Prasad 1993), transaction-cost economics (Malone et al. 1987, Ciborra 1993); network analyses (Barley 1990, Burkhardt and Brass 1990, Rice and Aydin 1991), practice theories (Suchman 1987, Button 1993, Hutchins 1995, Orr 1996), and structurational models (Barley 1986, Orlikowski 1992, DeSanctis and Poole 1994).[1]

Today, both technologies and organizations are undergoing dramatic changes in form and function, and new and unprecedented forms and functions are becoming evident. In response, organizational researchers have applied notions of innovation, learning, and improvisation to ac-

Figure 2   Enactment of Technologies-in-Practice

Structure

Technologies-in-Practice
(rules and resources instantiated in use of technology)

Other structures enacted in the use of technology

Agency

Facilities

e.g.,
hardware
software

Norms

e.g.,
protocols
etiquette

Interpretive Schemes

e.g.,
assumptions
knowledge

Ongoing, Situated Use of Technology
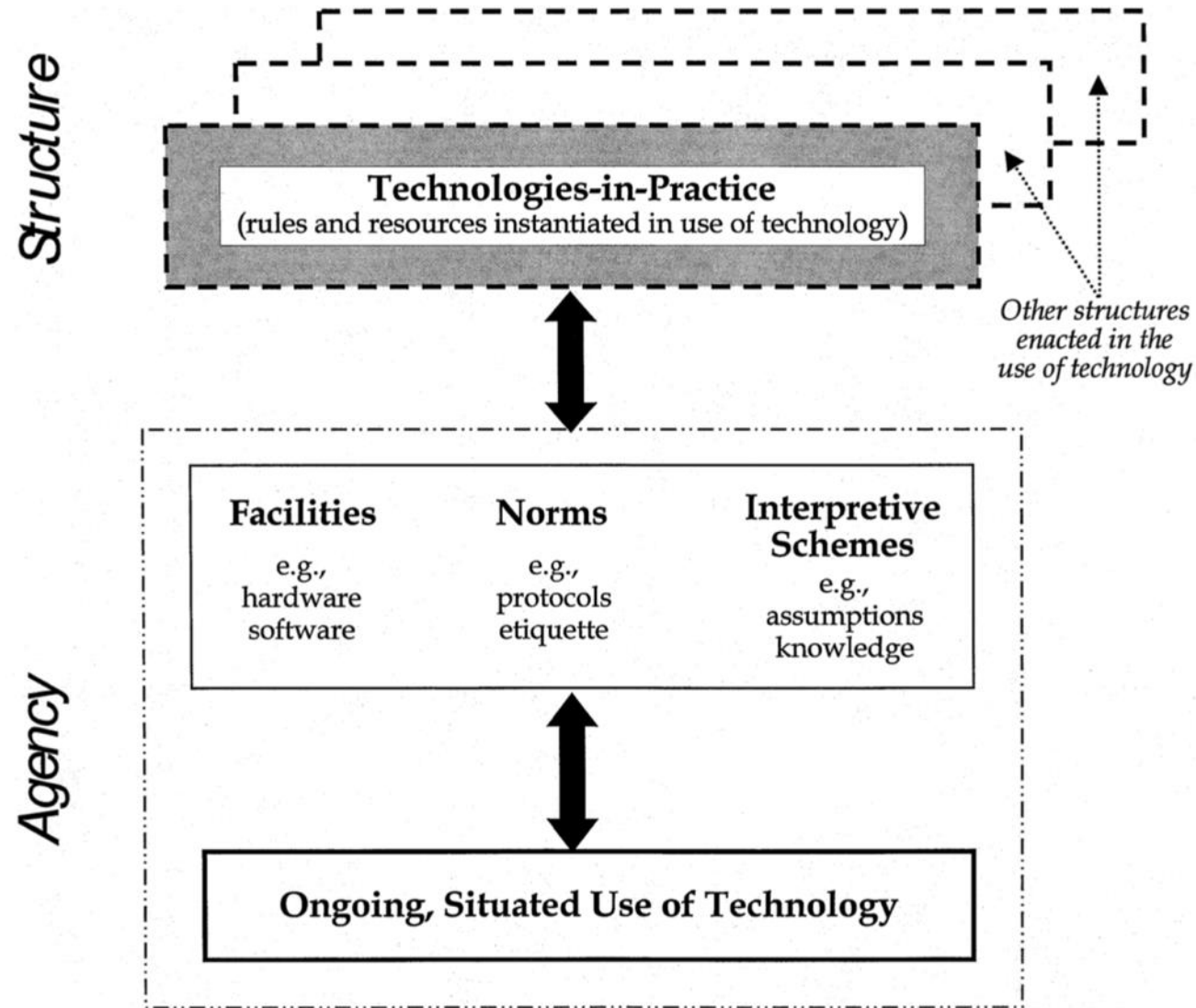
Technology enactment in remote care

- Enactment of a structure of intercation between nurses and patients.

A structure of collaborative care

- Data driven interactions between nurses and patients – key passages:

1. Nurses help patients to become **aware** *of how they can take control over their disease.*
2. Nurses guide patients into an **understanding** (of causal effects), which in turn *improves the nurse ability to care*.
3. The nurses guide patients to ***produce the data*** the nurses need.

- **Iterative process**: nurses and patients constantly go through this process of interaction (by using the system) – adjusting and improving the interaction as well as the care.
- This is crucial because there is no quick fix in the sense of a ready cure, the road to better health is long and requires many small steps.

Methodological reflections on how to study practices

- Zooming-in and zooming-out

- Zooming in:
  - Practices happen in a specific place and time, and for a specific reason: we need to pay attention to the details of accomplishment of a practice;

- Zooming out:
  - Practices never happen in isolation and cannot be carried out independently of other practices: they should always be studied in relation to other practices.

DAVIDE NICOLINI

Practice Theory, Work, & Organization

An Introduction

OXFORD
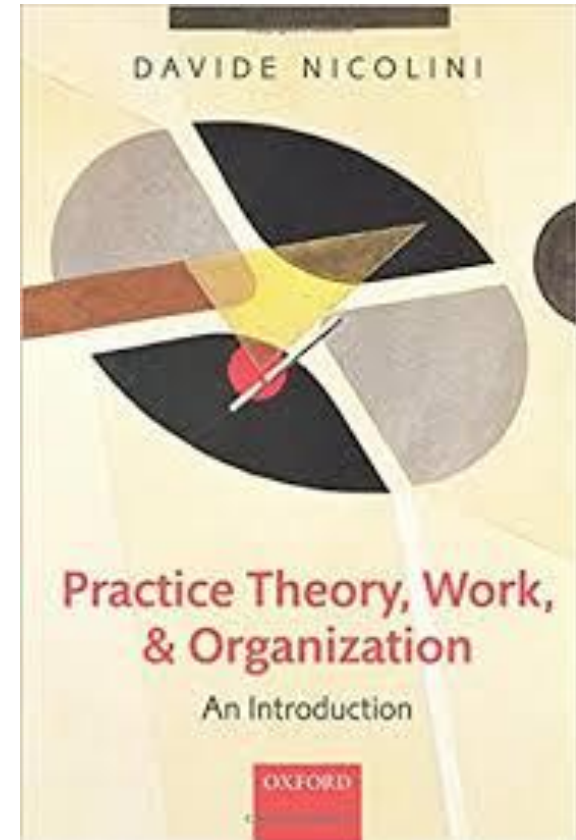
Zooming in: the details

- **Sayings and doings**: what are the people doing and saying? What are they trying to do as they speak? What are the effects of their saying and doing?

- **Interactional order**: what type of order is performed in this practice? How is this different from similar practices?

- **Timing and tempo**: how are saying and doing temporally organized? What is the temporal sequence? What are the effects?

- **Bodily choreography**: what is the landscape in which the practice is carried out? How are bodies moving in this space?

- **Tools artefact and mediation work**: what artefacts are used in this practice? How are artefacts used? In which way to they give sense to the practice?
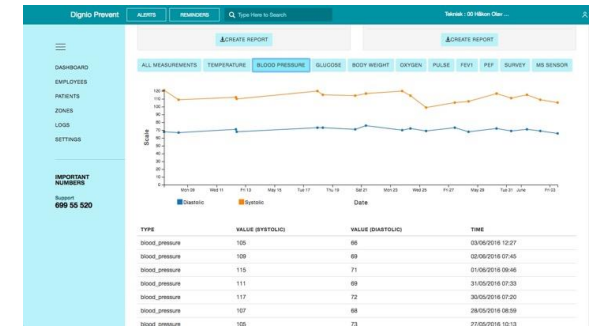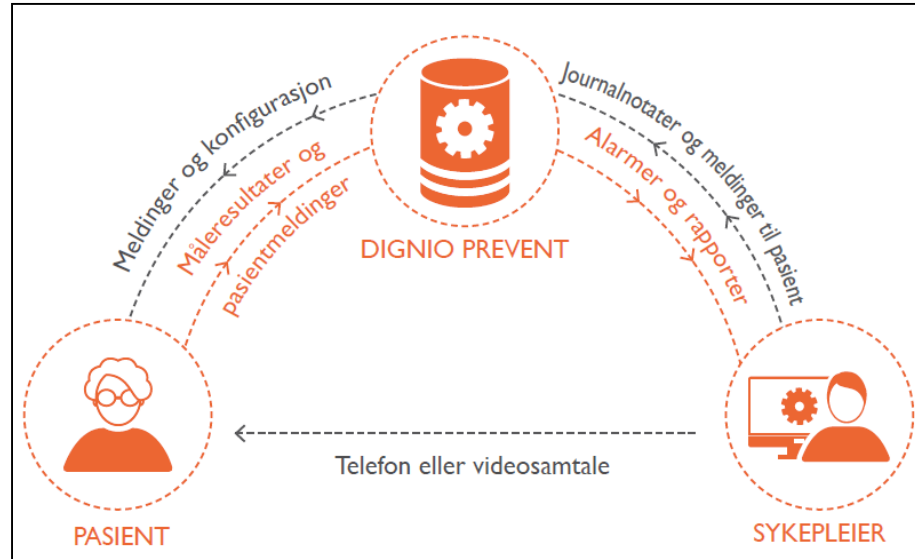
Zooming out: practice is a 'node'

One should strive to understand:
- How the local activity is affected by other practices;
- How other practices are affected or constrained or enabled by the practice under consideration;
- What are the material consequences of such relationships;

One should ask:

- What are the connections between 'here and now' of the practicing and 'then and there' of other practices? Which other practices affect, enable, constrain, conflict, interfere etc with the practice under consideration?

- How does the practice under consideration contribute to the wider picture? In which ways it reproduces existing social arrangements or generates tensions and conflict?

- How did we get to where we are? How has the practice under consideration developed over time? What are the interests, projects, hopes that led to the current practice? How could it be otherwise?

Kristiania University College

DIGNIO PREVENT

PASIENT

SYKEPLEIER

Meldinger og konfigurasjon

Journalnotater og meldinger til pasient

Måleresultater og pasientmeldinger

Alarmer og rapporter

Telefon eller videosamtale

Zooming in - example

Interview, nurse #1: "some of [the COPD patients] start to cough, but one of our patient said, no, the first thing I notice is that my breathing gets heavier, then I start coughing, and then comes the fever. Then one should know that the most important thing with this patient is not temperature but to capture when he starts to feel his breathing is getting heavier, and then you should formulate a question 'do you feel that you are breathing heavy today?".
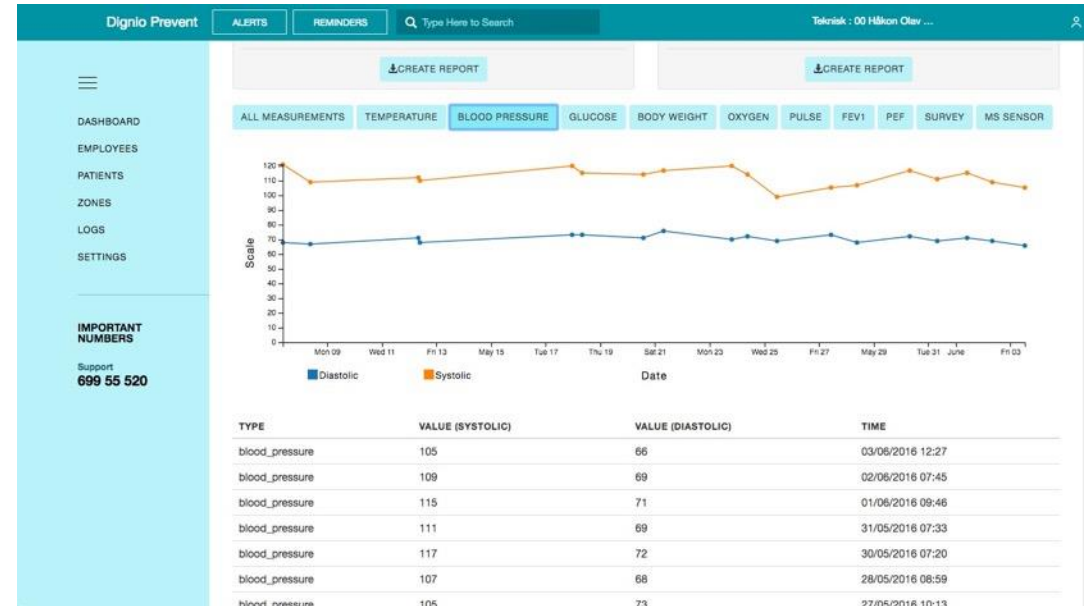
Zooming out: comparing two pilots

Pilot 1

- Other actors have access to patient data
- Work to enroll and coordinate actors
- E.g. GPs:
  - "They are a bit sceptical, they fear having to do more work, and they ask who will pay for this"
  - "it is the GP that decides" (about thresholds)
  - "...will you steal my patients?"

Pilot 2

- Coordination with municipality mainly in recruitment phase
- Self-contained service
- Nurses are 'in control'
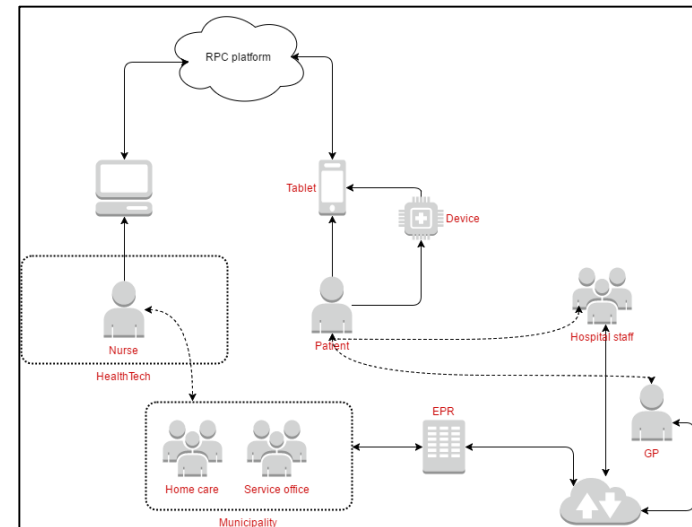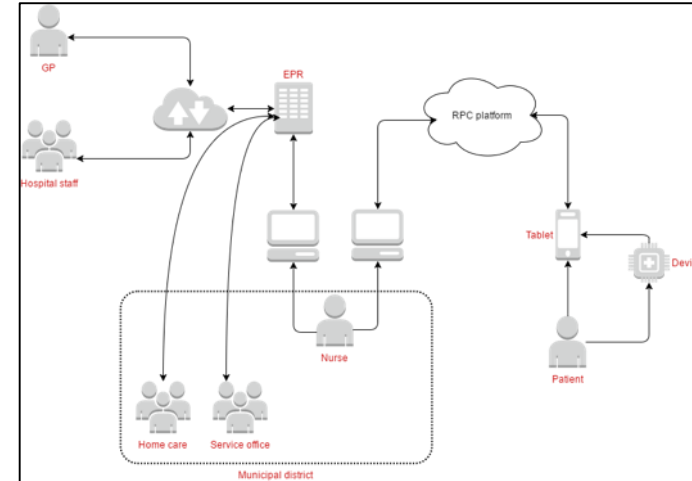
Practice-based - Gherardi

Through the practice lens: Where is the bandwagon of practice-based studies heading?

Gessica Corradi and Silvia Gherardi
University of Trento, Italy

Luca Verzelloni
University of Bologna, Italy

Abstract

In the last 20 years we have witnessed a return of the practice concept in studies of organizing, learning and knowing. Practice has been used as a lens for the reinterpretation of many organizational phenomena, and it seems that a bandwagon of practice-based studies has been set in motion by the coining of labels, which comprise the term 'practice'. A bandwagon can serve to institutionalize a field of studies by progressive labelling and a collective appropriation of the general label. We wonder if this has been the case for practice-based studies? The article presents seven labels and discusses their similarities and differences in order to demonstrate that, while the institutionalization of practice-based studies may be considered an achieved goal, the collective appropriation of the label has not been achieved, and therefore, the bandwagon is heading for a partition.
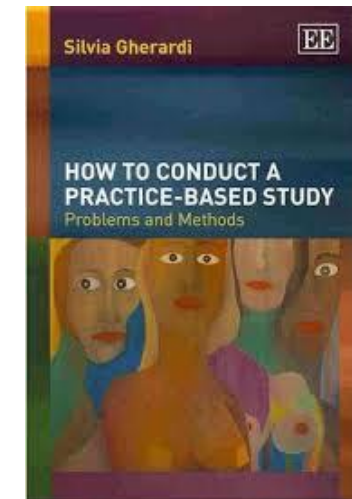
Practice theory

- Larger discussion within organization studies than in Information Systems.

- Information systems research draws on organization studies.

- Silvia Gherardi

Summing up

- Practice lens:
  - attention to details – ethnographic approach
  - Time consuming!
  - 'what people are doing'
  - But also: the effects of the practices

- Zooming in – zooming out: when to stop?

- How to draw analytical 'boundaries'?

- Practice lens: no common definition of the term 'practice' and no unified theory of practice – careful how you are positioning your study.