IDBM ADVANCED TOPICS

Qualitative analysis in design research
- do the results "just emerge"?

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Dept. of Management Studies (IDBM)

A!
Aalto University

IDBM
Design, create, lead.

MANY PEOPLE, ESPECIALLY IN DESIGN DOMAIN, STRUGGLE WITH "ACADEMIC REQUIREMENTS" IN RESEARCH

THIS IS UNNECESSARY.

DESIGN RESEARCH CAN BE ACADEMICALLY SOUND – AND ACADEMIC RESEARCH IS NOT INCOMPATIBLE WITH DESIGN MINDSET.

Design Research

Focuses on people

Can be qualitative or quantitative

Borrows from the social and behavioral sciences

Attempts to *understand culture*. Looks at the styles, words, tools, and workarounds people use in an effort to inspire design.

***Celebrates* the unique and peculiar. The rare or obscure in observations can lead to a new or interesting design idea.**
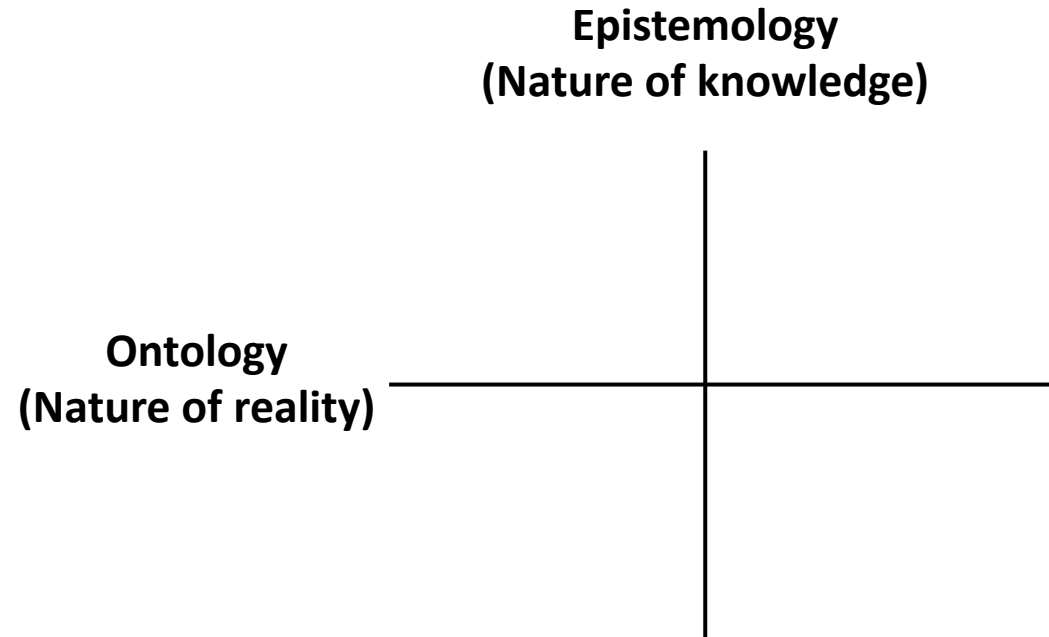
Avoiding bias is *irrelevant*. The goal is not to be objective but instead to be rigorous.

Illustration: Kolko, 2011

YOU JUST HAVE TO KNOW WHAT KIND OF RESEARCH YOU ARE DOING.

PICK YOUR VENUE: THERE IS NO SINGLE "ACADEMIC RESEARCH APPROACH"

- The key difference: how do we answer to the questions
  - "what is reality", nature of reality (ontology)
  - "what and how can we know", nature of knowledge (epistemology)

Epistemology (Nature of knowledge)

Ontology (Nature of reality)

Adapted from Mero, 2016

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Ontology (Nature of reality)
Objective

Subjective
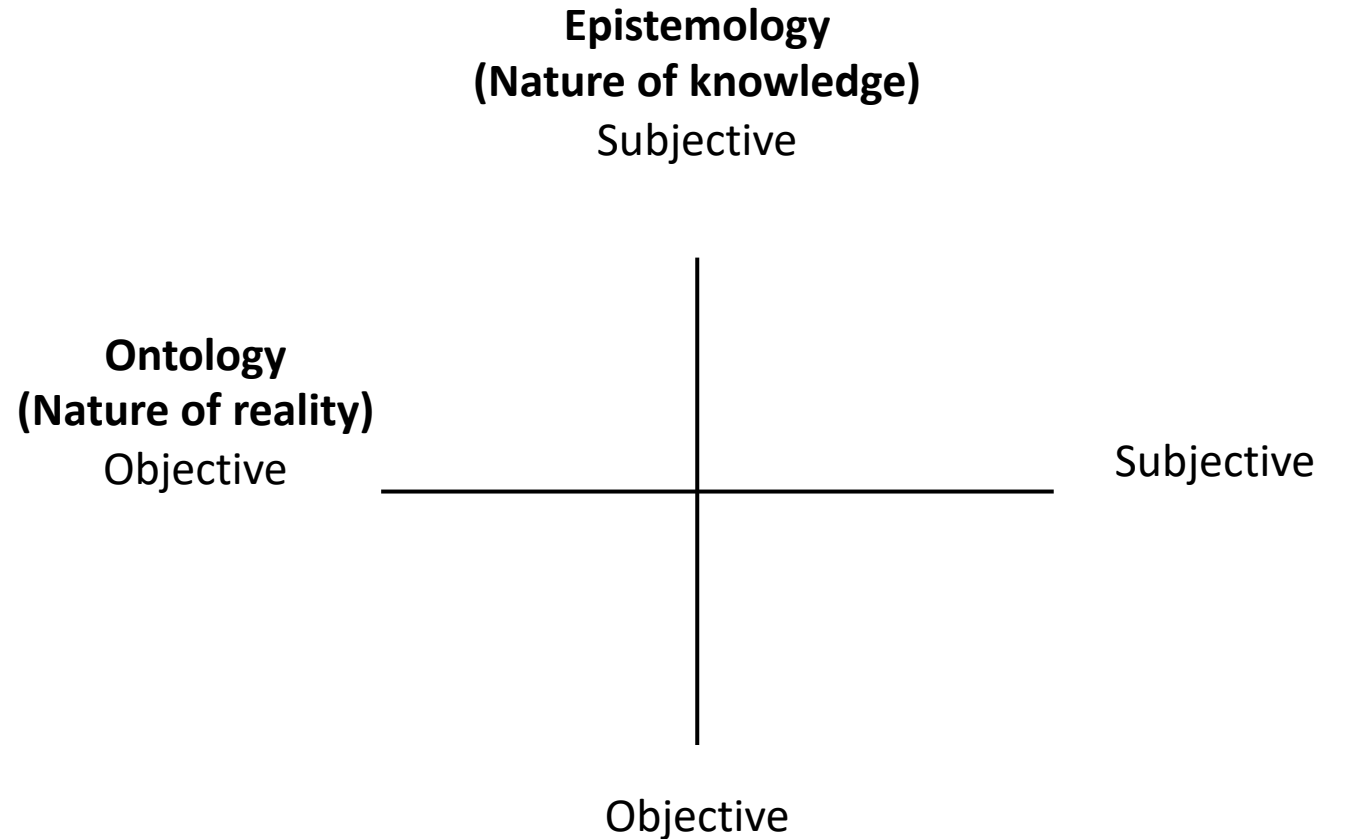
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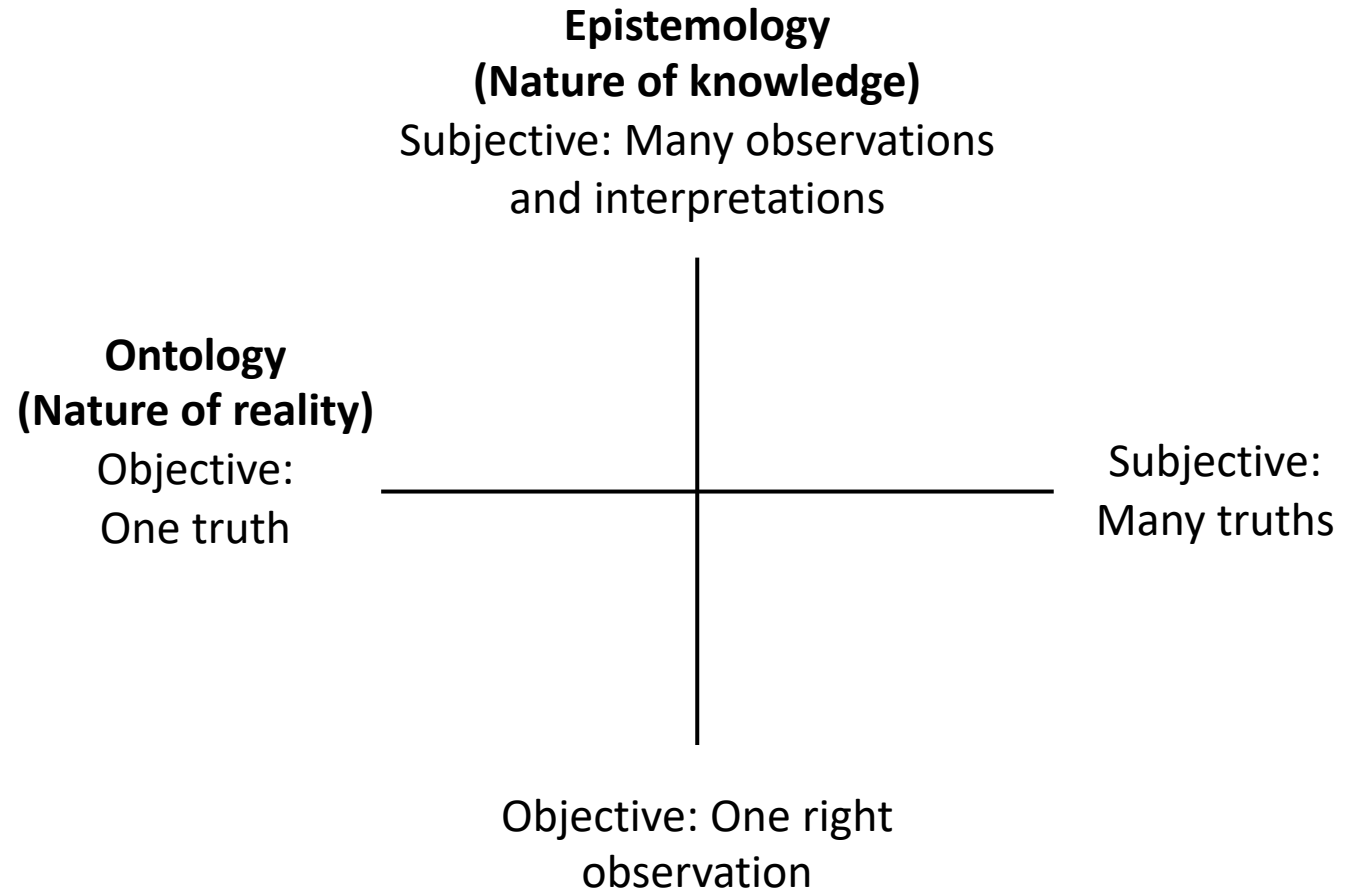
Epistemology (Nature of knowledge)
Subjective: Many observations and interpretations

Ontology (Nature of reality)
Objective: One truth

Subjective: Many truths

Objective: One right observation

Adapted from Mero, 2016

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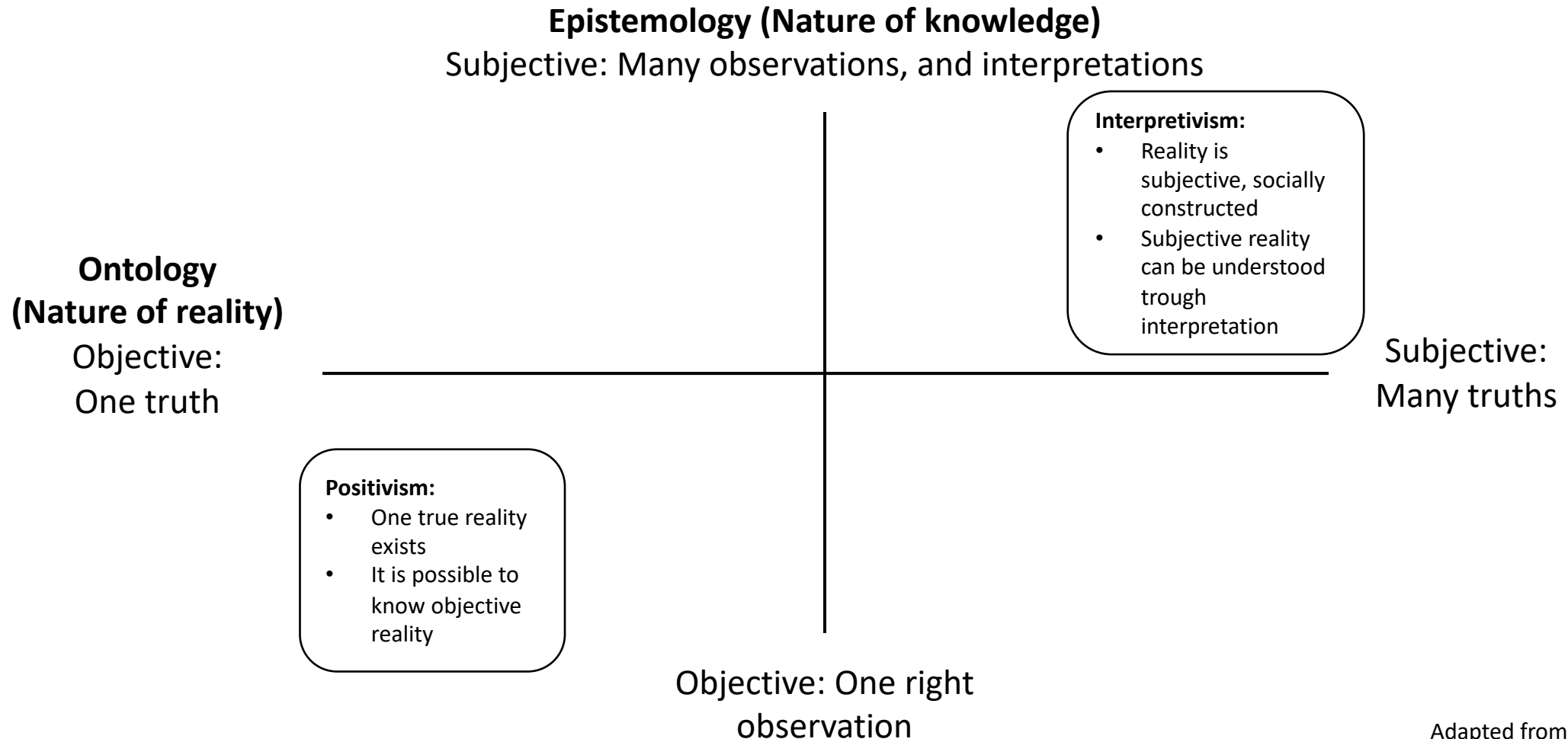One truth

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This is the area which people Usually perceive as "academic"

This is where design research falls into – and it can very academic too!

Objective: One right observation

RIGOROUSNESS MAKES YOUR RESEARCH ACADEMIC!

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THE CHALLENGE: HOW TO MAINTAIN RIGOROUSNESS WHILE STILL BEING SENSITIVE TO CREATIVITY AND NEW IDEAS

YOUR TASK

THE TASK FOR TODAY

Steps 3, 4 (and 5) of the video (2:31-5:00)

ABOUT MIRO

Miro is a 3rd party platform that is hosted outside Aalto.

If you feel that you do not want to work with Miro, you can ask a PDF copy of the board.

I am personally happily using Miro. ☺

LET'S PROCEED. YOU WILL FIND YOUR TEAM'S WORKING AREA IN THE BOARD.

WORKING, REMEMBER TO HAVE 10 MIN BREAK

LET'S TALK ABOUT THE TASK

Let's discuss

- Something confusing?

- Something surprising?

- Something that forced you to unlearn something?

NOW LET'S ADD A BIT OF THEORETICAL COMPLEXITY.

QUALITATIVE ANALYSIS THEORIZED: THE GIOIA METHOD

- Originates from the need to produce **reliable** results and to be **convincing** in the light of "**traditional**" scholars, while doing research in open-ended and creative way

- In short: How to exit the realm of "just telling beautiful stories"

Organizational Research Methods

BACKGROUND IN GROUNDED THEORY

Traditional

Read literature → Formulate hypothesis → Collect data → Test hypotheses with data →

Grounded theory

Collect data | Analyze data → Develop substantive theories → Read literature to explain findings →

Jones, 2005 in Mediani 2017
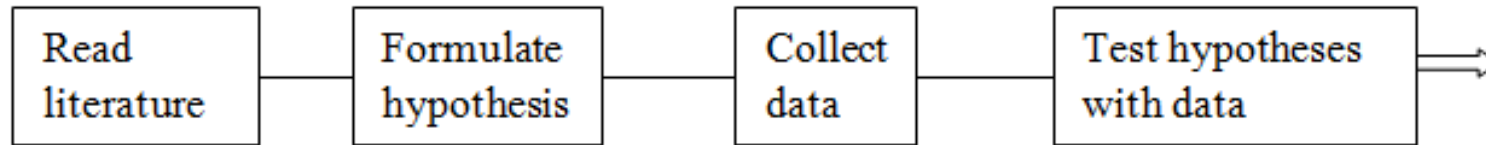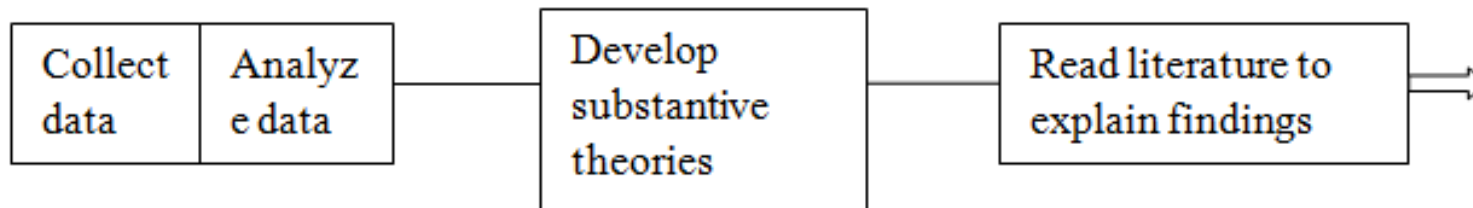
FUNDAMENTALS IN GIOIA METHOD

1. The critical role of data and informants

2. Balancing between "informant's view" and "researcher's view"

3. Maintaining the "30,000ft view" to your data with visualization

4. Delicate relationship with the literature

1. THE ROLE OF DATA, ROLE OF INFORMANTS

- Give extraordinary voice to informants, who are treated as knowledgeable agents (you, the researcher, are glorified reporter!)

- Preserve flexibility to adjust interview protocol based on informant responses

- "Backtrack" to prior informants to ask questions that arise from subsequent

Gioia et al, 2012

2. INFORMANT VIEW VS RESEARCH VIEW AND THE LINK BETWEEN THEM

When analyzing your data

1. In 1st order data coding (open coding), maintain the integrity of informant-centric language

2. Then, organize 1st-order codes into 2nd-order (researcher-language) themes (identifying topics/themes; axial coding)

3. Then, distill 2nd-order themes into overarching theoretical dimensions (selective coding)

4. Iterate

Gioia et al, 2012

LET'S LOOK AT YOUR EXAMPLES!

3. IMPORTANCE OF VISUAL DATA STRUCTURE

- Collect the results of your analysis to a visualization. It provides you the "30000ft view" to your data

First-order codes* | Second-order themes

"It's much better as a Greenfield operation ... we didn't have all that legacy"; "I noticed many of the legacy library schools drawing from their roots." → Reconciling legacy identity

"Our (promotion) criteria are so constrained by (University)" ... "The university is pushing us in one direction, but the iSchool is something a little different." → Balancing nested identity

"The original iSchool"; "Interdisciplinarity is our strength"; "We wanted to stand out in the group"; "We offer one of the only programs of its kind ... information in the context of diverse populations." → Emphasizing local optimal distinctiveness

EVENT: Launching iConference (2005); "genuine quest for common ground and identity"; "information, technology and people"; "multidisciplinary" → Seeking consensus on identity claims

"We couldn't even agree on the meaning"; "the information field does need to establish its own identity" → Seeking consensus on the meanings of identity claims

"Identity crisis of the iSchool institutions," "identity crisis facing the iMovement"; "There appears to be as much intellectual ferment, confusion and even chaos today ..." → Framing the discourse as identity crisis

"The field has continuously struggled to identify its centre"; "What's the common denominator? I think the need to have a common identity is still a concern.." → (Re)contesting the common core

"There is some intellectual struggle over the definition of nature of boundaries"; "The biggest risk for the group is we just think we are everything." → (Re)contesting field membership boundaries

"Beyond squabbles of meaning ... common mission and common objectives" "Creating the core instead of arguing what the core is"; "Work on the same things in different ways" → Changing the focus of the identity discourse

"You make a virtue out of that ambiguity" "Ambiguity was a core feature of the school" "Ambiguity was one of the things we went after" → Portraying ambiguity and crisis as normal

"Our graduate students or Ph.D. students are much more comfortable crossing the disciplinary boundary"; "They tell people that they teach at the information school ... their identities are information." → Benefitting from generational effects

Patvardhan et al, 2014

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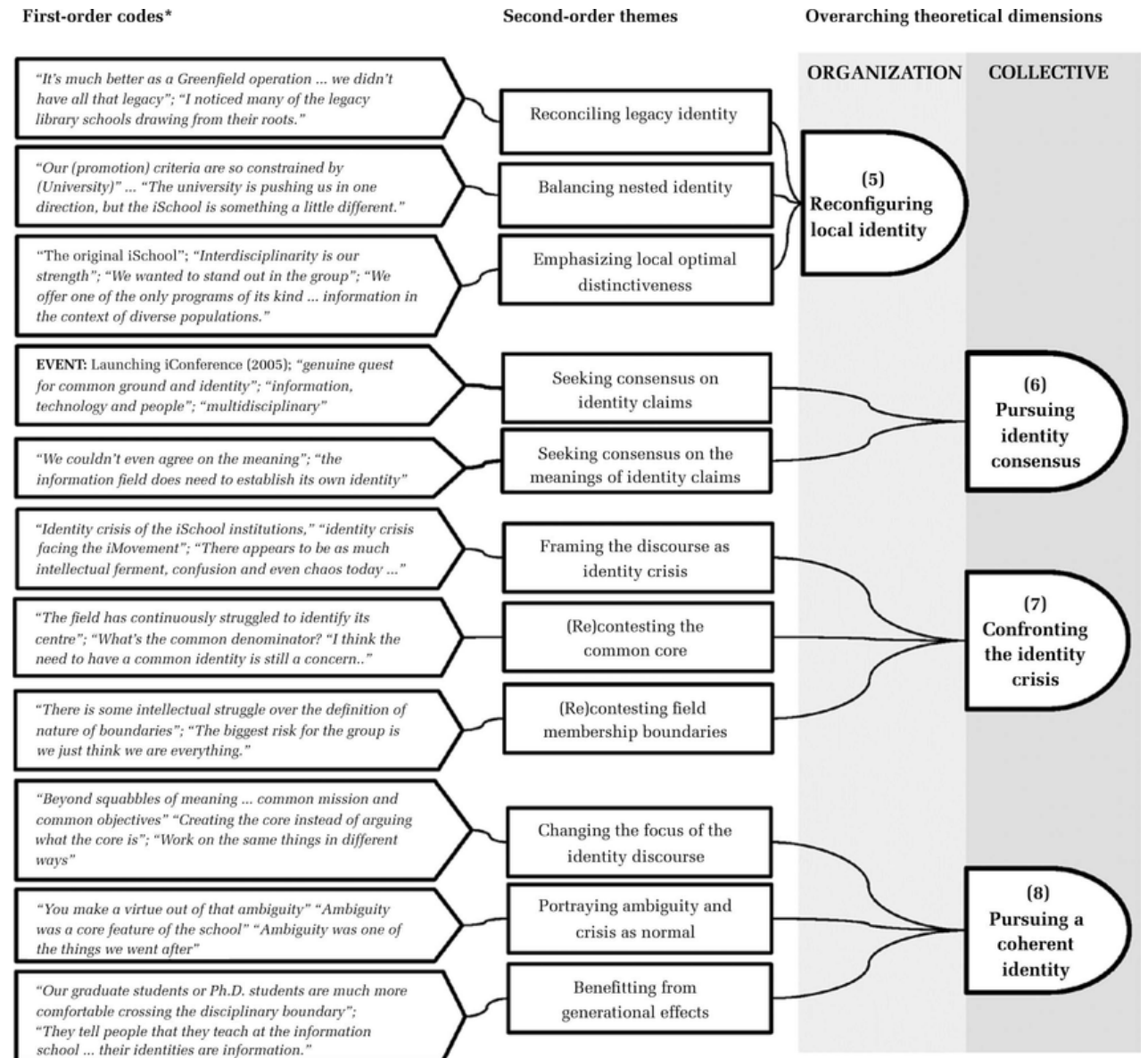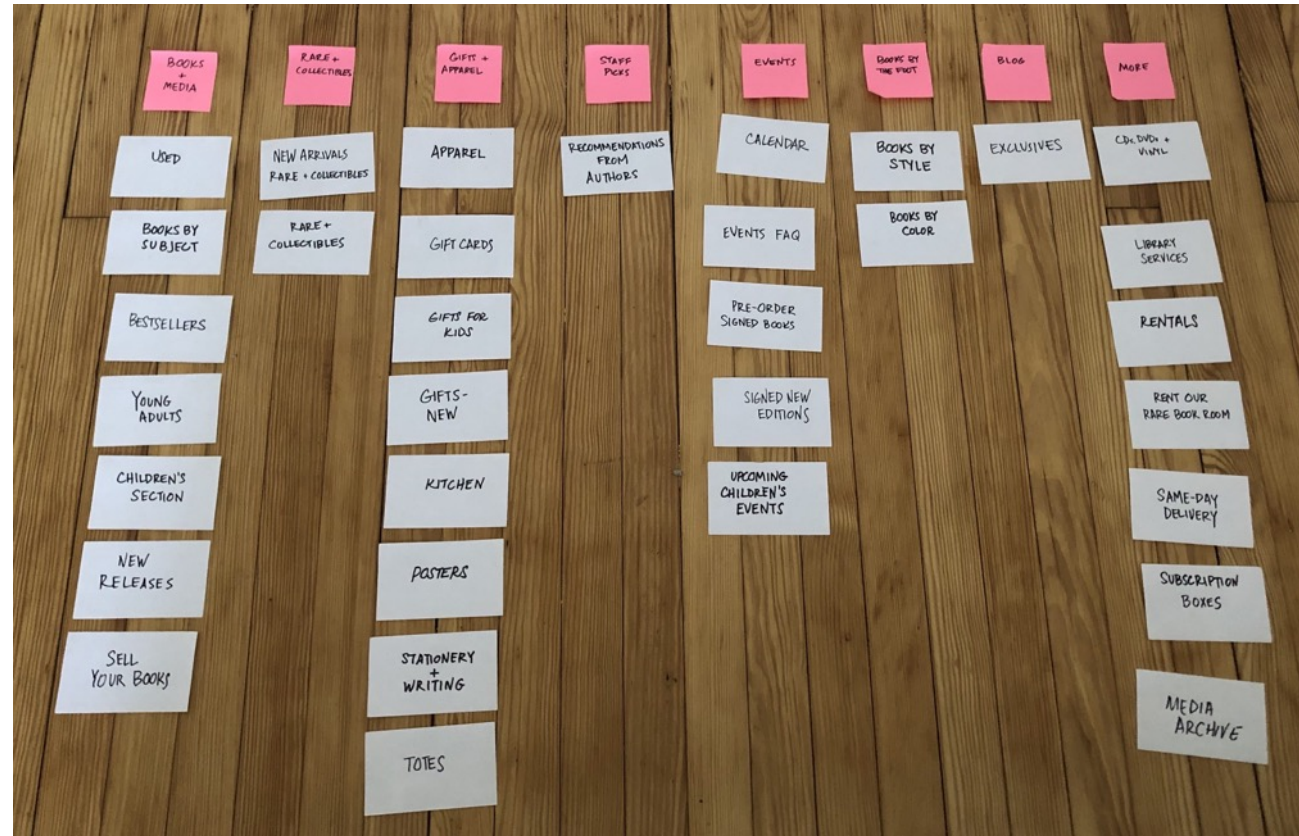- "The original iSchool"; "Interdisciplinarity is our strength"; "We wanted to stand out in the group"; "We offer one of the only programs of its kind ... information in the context of diverse populations."
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Second-order themes

- Reconciling legacy identity
- Balancing nested identity
- Emphasizing local optimal distinctiveness
- Seeking consensus on identity claims
- Seeking consensus on the meanings of identity claims
- Framing the discourse as identity crisis
- (Re)contesting the common core
- (Re)contesting field membership boundaries
- Changing the focus of the identity discourse
- Portraying ambiguity and crisis as normal
- Benefitting from generational effects

Overarching theoretical dimensions

ORGANIZATION   COLLECTIVE

(5) Reconfiguring local identity

(6) Pursuing identity consensus

(7) Confronting the identity crisis

(8) Pursuing a coherent identity

Patvardhan et al, 2014

BTW, FOR ME THIS SOUNDS LIKE SOME KIND OF CARD SORTING?

Illustration: Altman, 2019

4. DELICATE RELATIONSHIP WITH THE LITERATURE

It is a delicate balance: you must know your theory in order to focus on relevant matters, and not reinvent everything…

… but at the same time you must emphasize the informants own views and not force the data into a pre-defined structure.

"If we had designed our interview protocol around existing theory and terminology, we would have missed a key aspect of their sensemaking by imposing our preordained understandings on their experience."
(Gioia et al, 2012)

THE PROCESS, SUMMARIZED

SUMMARY

- Designer's perspective to research and academic rigorousness are not in a battle - you just have to know what you are doing

- The challenge: how to maintain rigorousness while still being sensitive to creativity and new ideas

- Gioia method offers one way to do this in practice

Q&A

MORE INFORMATION

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