WRITING ACADEMIC PAPERS ALIGNED WITH INDUCTIVE vs. ABDUCTIVE RESEARCH PROTOCOLS

David W. VERSAILLES

PSB - 05-APR-2018

Contact details

I never use my psbedu.paris eMail address
Here are my eMail address and twitter:

dwv@newpic.fr

@DwV13

- **newPIC chair**
  - eMail: newpic@newpic.fr
  - fax: +33-1-777 25 233
  - website: www.newpic.fr
  - twitter: @cnewpic

- **Paris School of Business**
  - address:
    59 rue Nationale
    F-75013, Paris
  - website: www.psbedu.paris

- **NewPIC co-directors**
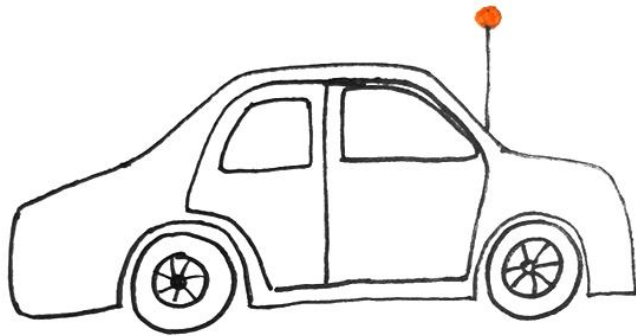 - **Dr Hab Valérie MERINDOL**
    - eMail: vm@newpic.fr
    - gsm: +33-0-617 09 06 43
    - website: www.merindol.net
    - twitter: @VMerindol
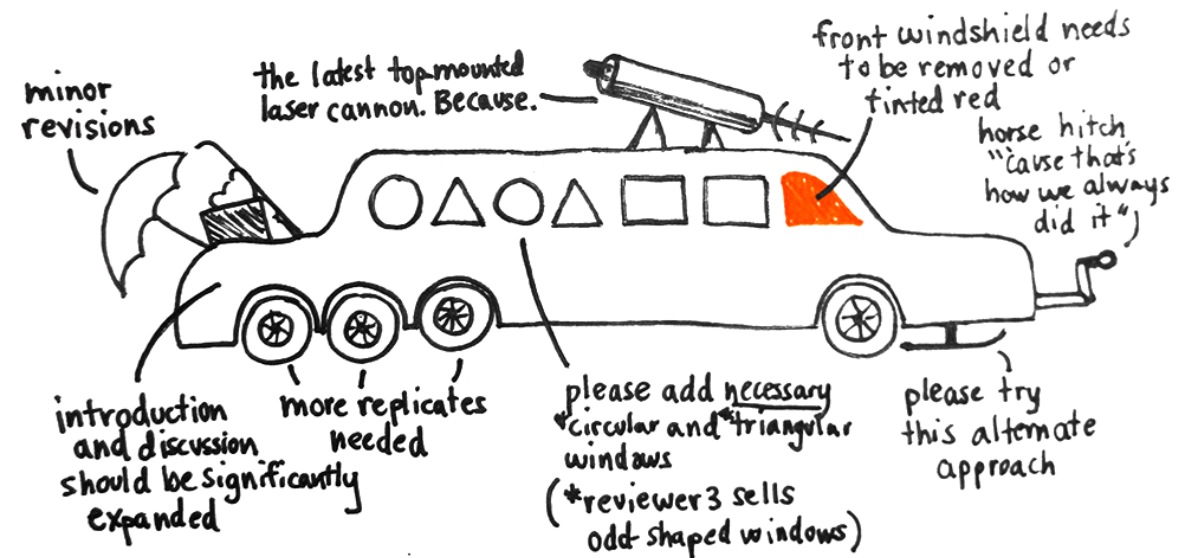 - **Dr Hab David W. VERSAILLES**
    - eMail: dwv@newpic.fr
    - gsm: +33-0-609 52 54 56
    - website: www.dwv.fr
    - twitter: @DWV13

Our papers: before and after the review process

Objectives of the seminar

- **The seminar focuses on the COOKBOOK:**
  - **"formula" (template) expected for papers submitted to academic journals, and**
  - **elements to be documented in order to please reviewers.**

- *"Higher ranked" journals require also high internal consistency and some reflexive thinking about methodology*

- *The seminar does not discuss the different methodological debates*

- COOKBOOK to please reviewers
- TRANSFERABILITY
- METHODOLOGY
- STATUS OF "LAWS"
- SCIENTIFICITY
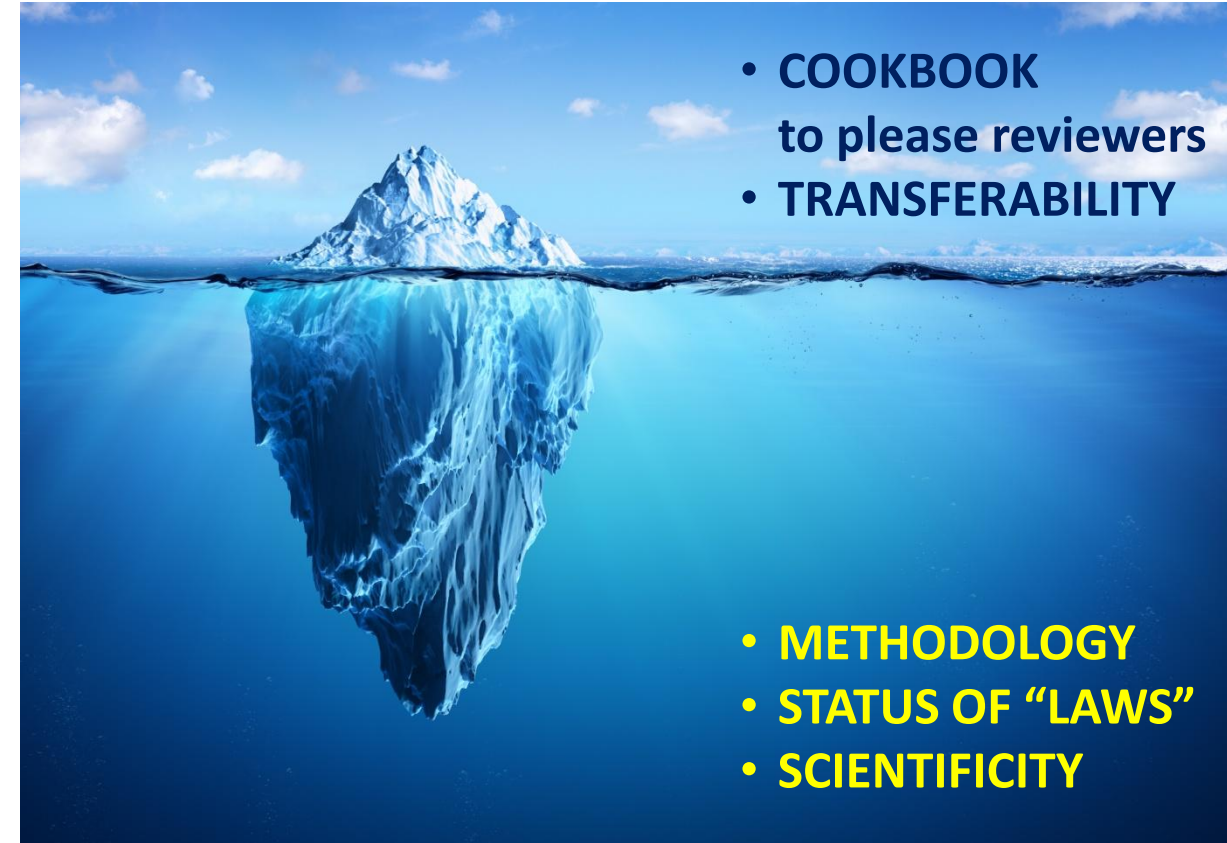
Agenda for the seminar

- **General expectations in academic articles**
- **Definitions: ABDUCTION vs. INDUCTION**
- **Synthesis on the respective cookbooks**

BACKGROUND CONCEPTS AND REFERENCES

Expectations

- **Reliability (credibility)**
- **Validity of conclusions**
- **"Objectivity" of the analysis**
- **Ability to replicate the analysis, or to obtain the same conclusions with different scholars**
- **Analysis of transferability of conclusions**

What does it mean to "explain" something?

- **People often assign the status of causal explanation to random events, because they focus on ad hoc explanations, they believe something is systematic, ordered or real just because they relate to limited direct experience, or to statistical regularities. Never forget to get an access to the data and facts existing behind what "you see"…**

- **"Facts" are already the product of many levels of interpretations.**

Main issues with research protocols

- **The separation between**
  - **data *collection*,**
  - **data *codification*,**
  - **data *reduction*,**
  - **data *analysis*, and**
  - ***discussion***

  makes it possible to generate CONTROLLABILITY and TRUST

Data

vs.

Information

vs.

Knowledge

vs.

Beliefs

Main objectives in your articles

- ## Generate TRUST

- ## Explain the ambition of your conclusions

- *How do you handle the data?*
- *Can you be trusted with the OBSERVATION of data?*
- *How is it possible to verify the CODIFICATION of your data with other scholars?*
- *Can you be trusted with the ANALYSIS of data?*

Qualitative causal analysis

- *Some scholars consider that qualitative studies are only good for exploratory investigations. In their view, only quantitative analysis would lead to some sort of generalization and to theories.*
  This view mistakenly assimilates theory-building and statistical recurrences.

- Theory-building is not a matter of qualitative or quantitative method.
  It's a matter of logic, and of sound development from premises to conclusions.

- In theory-building,
  "we emphasize the importance of taking both
  a "variable-oriented", conceptual approach, and
  a "process-oriented", story-like approach". (M&H, 1994, p 170).

Mandatory template for publications in management…

Scientific publications in management science today have to follow a <u>mandatory</u> agenda directly inherited from Miles and Huberman

The protocol has to adapt to the very nature of the research protocol, and more specifically:

- ❑ theoretical vs. empirical papers;
- ❑ inductive vs. abductive vs. N/D vs. deductive papers

1 LITERATURE REVIEW

2 METHOD

3 FIELD RESEARCH

4 DATA COLLECTION

5 DATA REDUCTION

6 DATA DISPLAY

7 DATA ANALYSIS

8 DISCUSSION & CONC

Triangulation

- **Data triangulation:** involves time, space and persons

- **Investigator triangulation:** involves multiple researchers in the study

- **Theory triangulation:** involves more than one theoretical scheme for the interpretation of phenomena/data

- **Methodological triangulation:** involves several methods in data collection

- **Your projects SHALL elaborate <u>both</u> on METHODOLOGICAL and DATA triangulations**

- **"Unit of analysis" and "Unit of data collection" <u>SHOULD NOT</u> be affected by methodological and data triangulations**

Data collection in qualitative analysis

ACTION RESEARCH

OBSERVATION

Participant   Non Participant
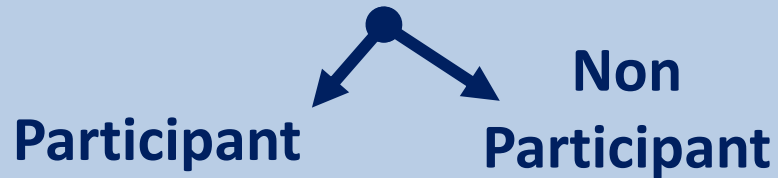
(AUTO-) ETHNOGRAPHY

PHENOMENOLOGY

INTERVIEWS

Individual vs. Group   Structured
Semi-structured
Unstructured

PRIMARY DATA
(collected by the researcher)

TRIANGULATION OF DATA COLLECTION METHODS

QUALITY TRUST

SECONDARY DATA
(NOT collected by the researcher)

Data published by other researchers
- Published articles, books under peer review process
- Un-published monographs
- Publications without peer review process

Documentation
- Internal (MoM, technical documentations, reports, quality manag, etc)
- External (press)

DEFINITIONS
INDUCTION VS. ABDUCTION

Methodological references

Main references shaping the analysis	Field research strategies

Main references shaping the analysis
- Deduction
- Nomological-deductive model
  (or hypothetico-deductive model)
- Abduction
- Induction

Field research strategies
- Grounded Theory
- Ethnography
- Social constructionism
- Critical realism
- Interpretitivism
- Micro-foundations approach

NOT DISCUSSED TODAY

PSB PARIS SCHOOL OF BUSINESS

Overview of the definitions

■ **Deduction**
 – I know the (universal) "law"
  and I follow it to check
  • either its global relevance,
  • or its applicability

■ **Hypothetico-deductive model**
 – I know "laws" with their "if-then-else"
  causal links and I check their validity
  with the experimental method

■ **Induction**
 – I don't know much/anything,
  and I look for tentative theories
 and/or tentative concepts

■ **Abduction**
 – I point out a gap in the literature,
  and I generate tentative theories
  to fill that precise gap

Overview of the main purposes of each model

- **Induction**
  - Inductive analysis serves the identification of new potential areas for explanation (concepts, theories), and suggest potential (or **probable**, as in "probability") relations between facts and "causes"
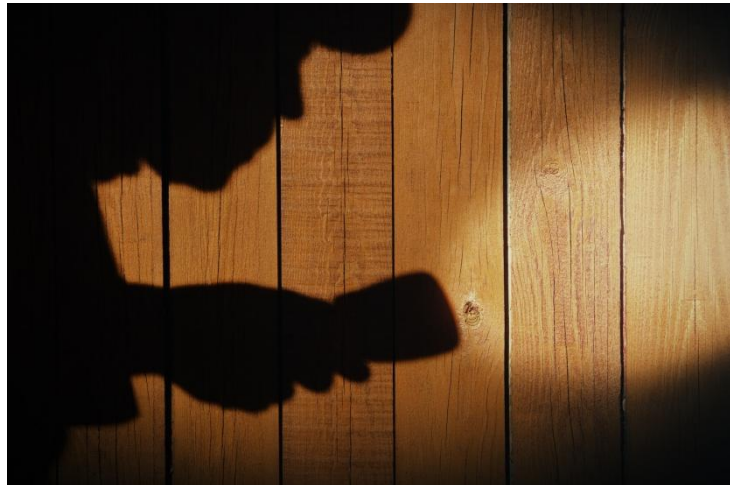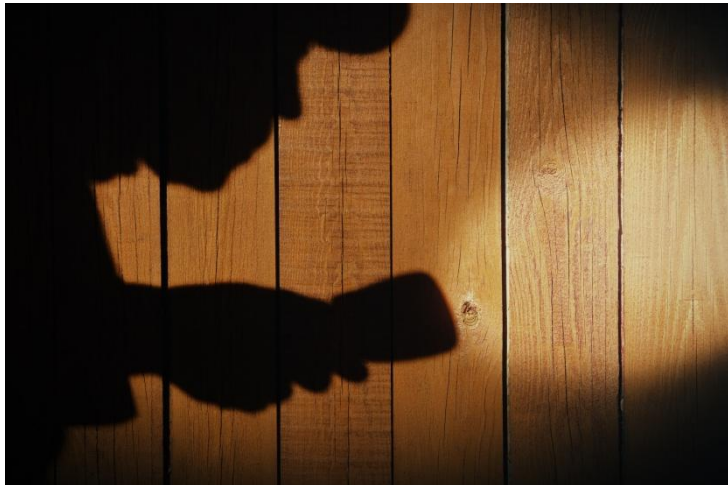
- **Abduction**
  - The abductive analysis generates relevant propositions to complement and improve an existing body of academic literature; it elaborates on the identification of "gaps"

Potential outcomes for each model

- **Induction**
  - **Definition of candidate fields and theoretical bodies for explanation**
  - **Definition of probable causal links between phenomena and "causes"**
  - **NO GENERALIZATION POSSIBLE**

- **Abduction**
  - **Definition of candidates tests for the D/N model and the experimental method**
  - **Rejection of irrelevant propositions**
  - **NO GENERALIZATION POSSIBLE (except for "counterfactuals")**

Research strategies

"Progress" in science: "we" "know" "better" and "explain" "better"…

We know "nothing"

New field No precursors
INDUCTION

Large extant acad. literature
ABDUCTION

Analysis of existing candidate theories
D or N/D models

"Provisory true" theories

"Universal" laws

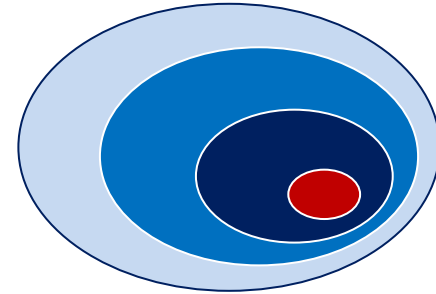Paradigms & "Normal" science

"gaps"

ABDUCTION

INDUCTION

"black swans"

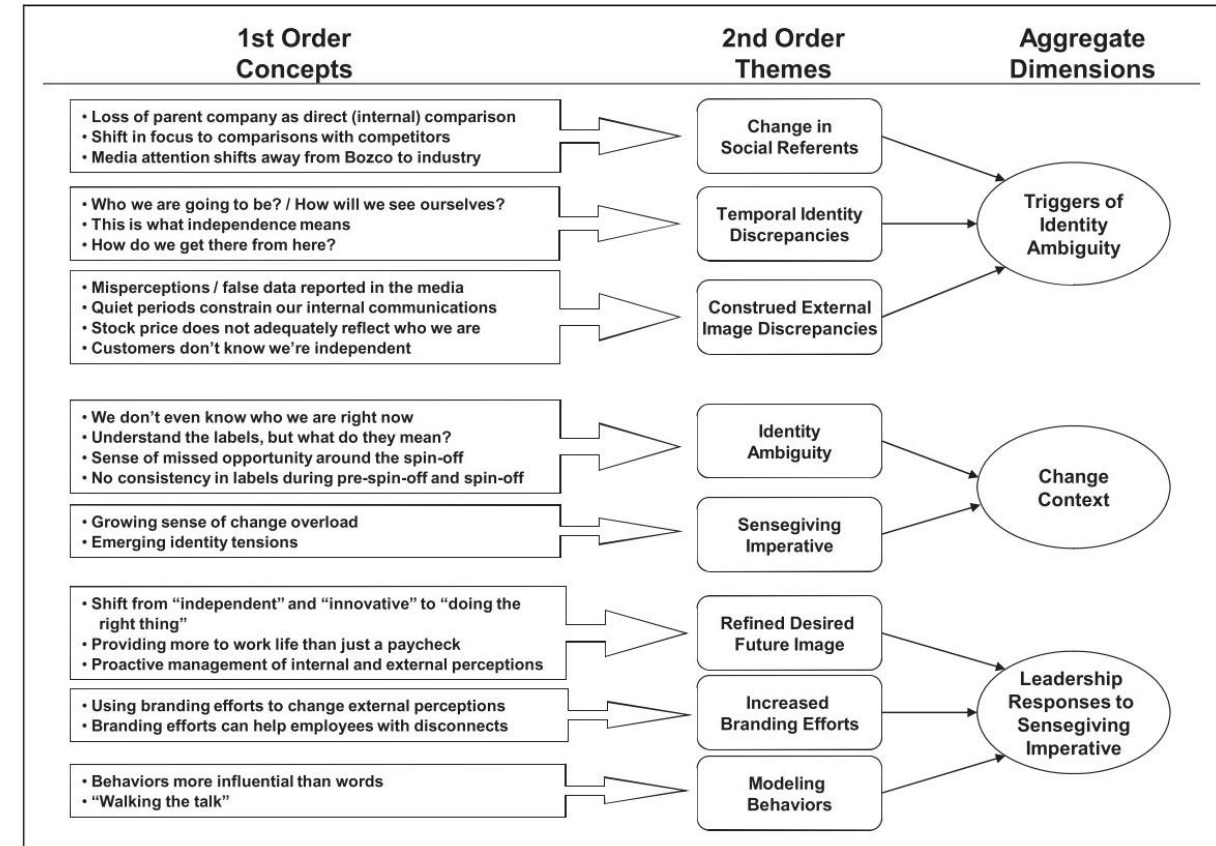theories about "truth"

WRAP UP ON THE COOKBOOKS EXPECTED FOR THE INDUCTIVE VS. ABDUCTIVE APPROACHES
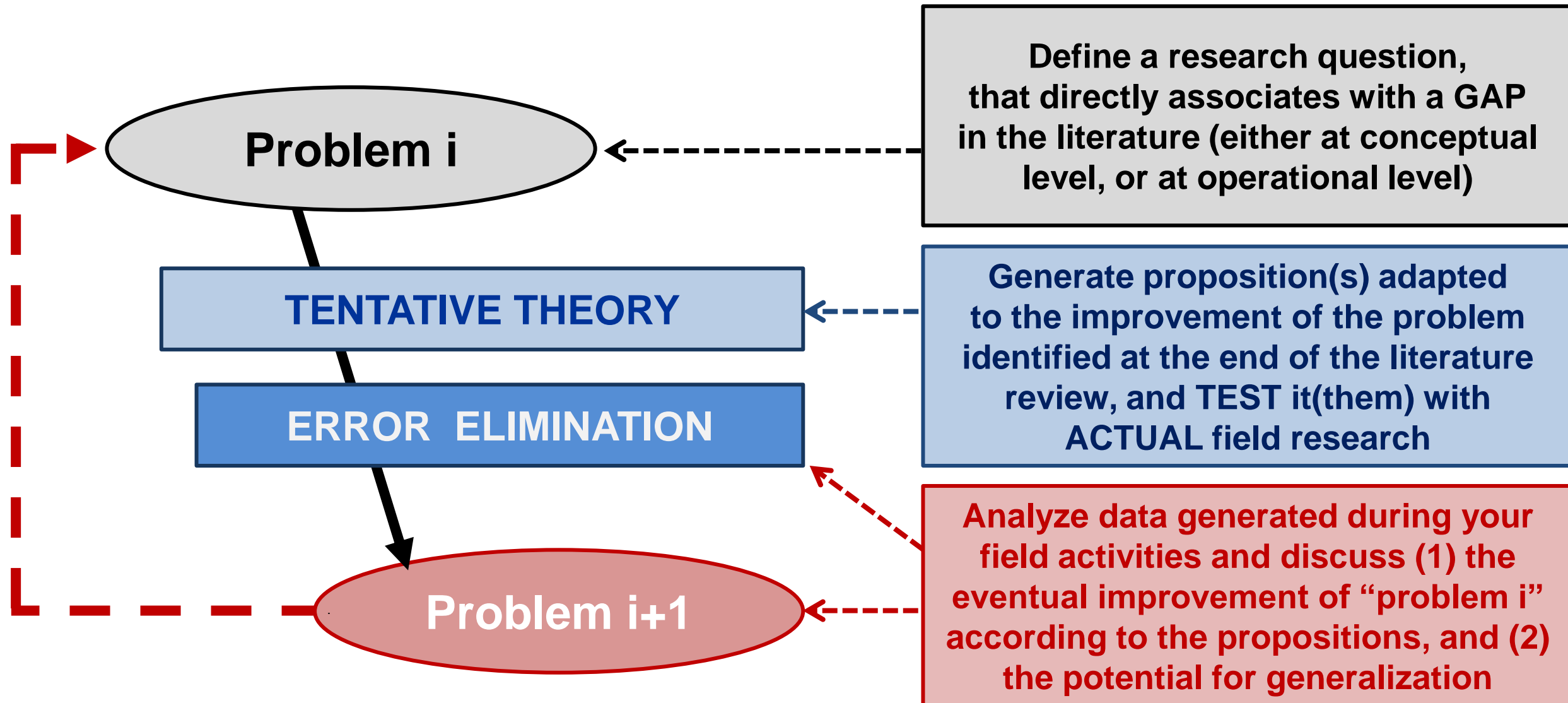
Data structure in the <u>inductive</u> protocol

- **1st order analysis:**
  systematic presentation using "informant-centric terms and codes"

- **2nd order analysis:**
 systematic presentation using "researcher-centric concepts, themes and dimensions"

1st Order Concepts	2nd Order Themes	Aggregate Dimensions
• Loss of parent company as direct (internal) comparison • Shift in focus to comparisons with competitors • Media attention shifts away from Bozco to industry	Change in Social Referents	Triggers of Identity Ambiguity
• Who we are going to be? / How will we see ourselves? • This is what independence means • How do we get there from here?	Temporal Identity Discrepancies	
• Misperceptions / false data reported in the media • Quiet periods constrain our internal communications • Stock price does not adequately reflect who we are • Customers don't know we're independent	Construed External Image Discrepancies	
• We don't even know who we are right now • Understand the labels, but what do they mean? • Sense of missed opportunity around the spin-off • No consistency in labels during pre-spin-off and spin-off	Identity Ambiguity	Change Context
• Growing sense of change overload • Emerging identity tensions	Sensegiving Imperative	
• Shift from "independent" and "innovative" to "doing the right thing" • Providing more to work life than just a paycheck • Proactive management of internal and external perceptions	Refined Desired Future Image	Leadership Responses to Sensegiving Imperative
• Using branding efforts to change external perceptions • Branding efforts can help employees with disconnects	Increased Branding Efforts	
• Behaviors more influential than words • "Walking the talk"	Modeling Behaviors	

Source: Corley and Gioia (2004); commented in Gioia, Corley, Hamilton (2012)

Expected contributions in the abductive protocol

Problem i
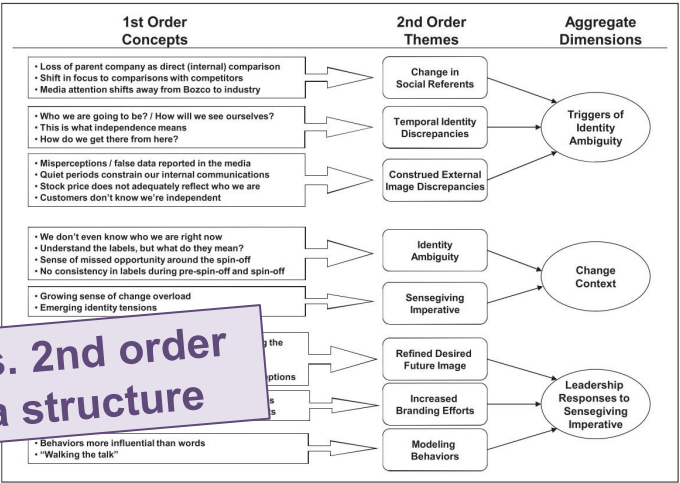
TENTATIVE THEORY

ERROR ELIMINATION

Problem i+1

Define a research question, that directly associates with a GAP in the literature (either at conceptual level, or at operational level)

Generate proposition(s) adapted to the improvement of the problem identified at the end of the literature review, and TEST it(them) with ACTUAL field research

Analyze data generated during your field activities and discuss (1) the eventual improvement of "problem i" according to the propositions, and (2) the potential for generalization

Interacting with data in the <u>abductive</u> protocol

The interaction with data does not follow a sequence of independent steps.

Data collection, display, reduction and analysis all interact with each other; **they depend on explicit interdependencies, and require ITERATIONS.**
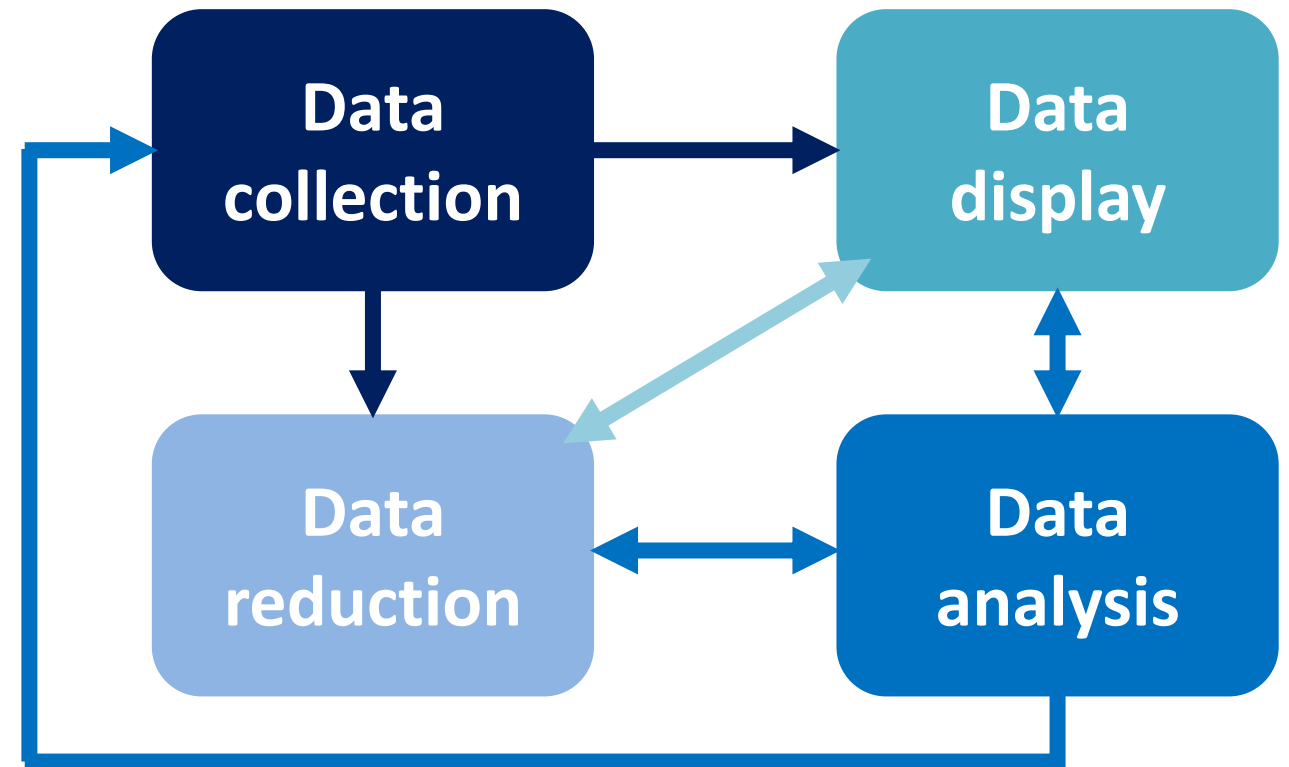
Adapted from Miles and Huberman, 1994, p. 12

Inductive (*left*) vs. abductive (*right*) presentations

1st order vs. 2nd order in the data structure

Data reduction vs. codification

Generation of a potential model

Discussion

Concepts operationalized thanks to the literature review
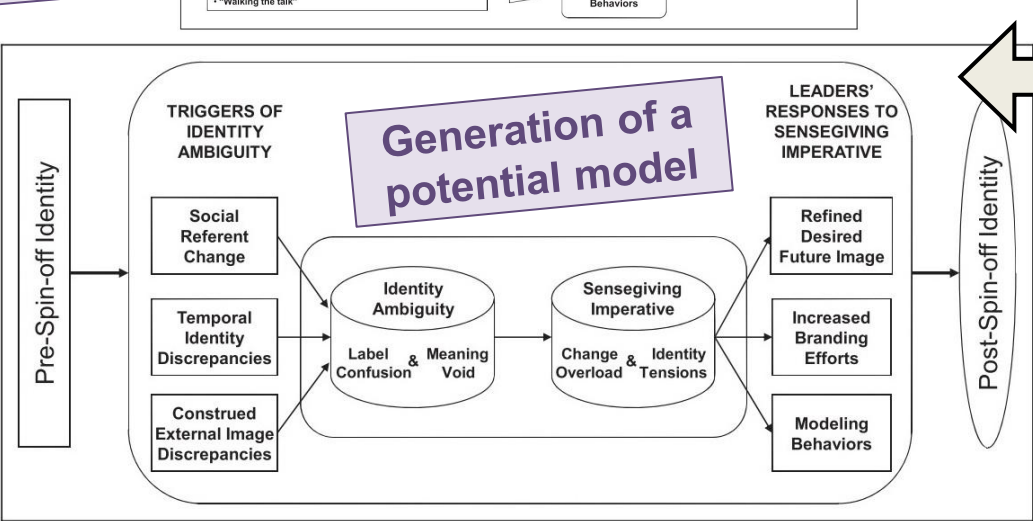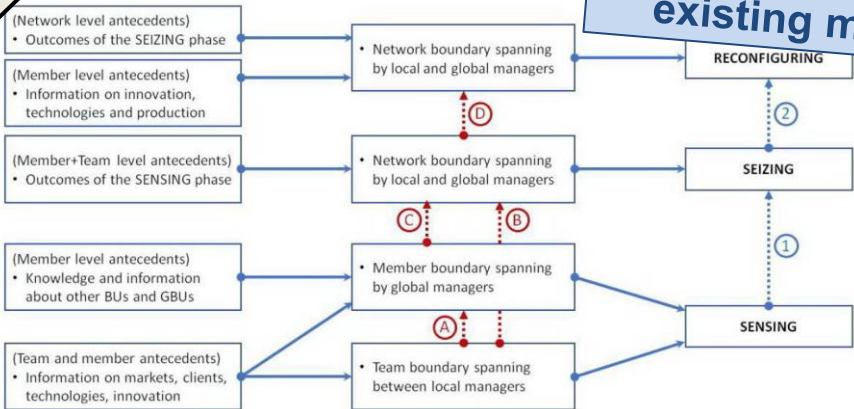
Improvement of an existing model

Zooming out on respective expectations

QUALI.	INDUCTION	ABDUCTION
Literature review	Neither extensive nor exhaustive	EXHAUSTIVE; concludes with "propositions"
Field research	Aligned with the precepts of grounded theory / ethnographic method	
Data collection strategy	"Dynamic relationships" and data-to-theory connections to generate more groundness	Reduce data as soon as possible and iterate to generate more groundness
Data codification	1st order codes emerge from field research (open coding); 2nd order codes = link w/ theory (axial coding)	Codes emerge from the literature review ("open coding" + "axial coding")
Data display	Extensive descriptions with context, stakeholders, "zoom-in"	
	VERBATIM justify the data structure (mandatory!!)	Verbatim illustrate axial coding and gaps
	"Informative story" (VERBATIM)	Structured presentation (literature review)
Data reduction Data "structure"	"No data structure, know nothing" Open discussion on interpretations	Cross validation of data coding with required levels of convergence between coders
Data analysis	Data and existing theory are considered in tandem ("zoom out")	
Discussion	Focus on nascent concepts	Focus on filling the gaps
Transferability	LIMITED to the status of the case(s) / Concepts	LIMITED

. . .

© DWV, 2018
pour PSB/newPIC