

ABDUCTIVE REASONING IN ORGANIZATIONAL RESEARCH

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See also
www.ketokivi.com/seminar



Photo: Benjamin Voros

**When we
introduce an idea
or a concept
based on
empirical
material, what
kind of reasoning
is involved?**

Induction is an inference about something we
have observed which we wish to generalize
whereas abduction introduces “something of a
different kind from what we have observed”

PEIRCE (1878, p. 480)

When we engage in abduction, we

create,
select,
compare,
explain,
speculate,
hypothesize,
model,
intervene,
etc.

1st order existential abduction
2nd order existential abduction
analogical abduction
creative abduction
explanatory abduction
factual abduction
Hansonian abduction
Harmanian abduction
H-creative fact abduction
H-creative law abduction
H-creative meta-diagrammatic abduction
H-creative model abduction
H-creative type abduction
historical-fact abduction
hypothetical cause abduction
inference-to-the-best-explanation abduction
inverse abduction
law-abduction
manipulative abduction

micro-part abduction
model-based abduction
non-explanatory abduction
observable-fact abduction
P-creative fact abduction
P-creative law abduction
P-creative meta-diagrammatic abduction
P-creative model abduction
P-creative type abduction
selective fact abduction
selective law abduction
selective meta-diagrammatic abduction
selective model abduction
selective type abduction
sentential abduction
speculative abduction
theoretical-model abduction
trans-paradigmatic abduction
unobservable-fact abduction

HOFFMANN (2011) MINNAMAIER (2015) SCHURZ (2008)

Thus abduction consists in “studying facts and devising a theory to explain them” (*CP* 5.145). The general form of this “operation of adopting an explanatory hypothesis” is this:

- (7) The surprising fact *C* is observed;
But if *A* were true, *C* would be a matter of course,
Hence, there is reason to suspect that *A* is true.

NIINILUOTO (1999)

The general
logical form of
abduction

- (1) How and why are we surprised about *C*?
Who is “we”?
- (2) Where does *A* come from, and in what way
does it address or counter the surprise?
- (3) How do we justify choosing *A* instead of
something else?

CONSTRUCTING MYSTERY: EMPIRICAL MATTERS IN THEORY DEVELOPMENT

MATS ALVESSON
DAN KÄRREMAN
Lund University

How did
abduction find
its way to the
lexicon of
qualitative
research?

We outline a research methodology developed around two basic elements: the active discovery and/or creation of mysteries and the subsequent solving of the mysteries. A key element is the reflexive opening up of established theory and vocabulary through a systematic search for deviations from what would be expected, given established wisdom, in empirical contexts. “Data” are seen as an inspiration for critical dialogues between theoretical frameworks and empirical work.

abduction (Peirce, 1978). It consists of three steps: (1) the application of an established interpretive rule (theory), (2) the observation of a surprising—in light of the interpretive rule—empirical phenomenon, and (3) the imaginative articulation of a new interpretive rule (theory) that resolves the surprise. This approach in-

**“These wieners will give
me the quick energy
I need to escape!”**

**The deviation
calls into question
an established
interpretive rule**

Photo:
20th Century Fox



Challenging the
established
interpretive rule
regarding vertical
integration

Why would a
designer and
manufacturer of
bicycles expand
its business into
bicycle wholesale
and retail?

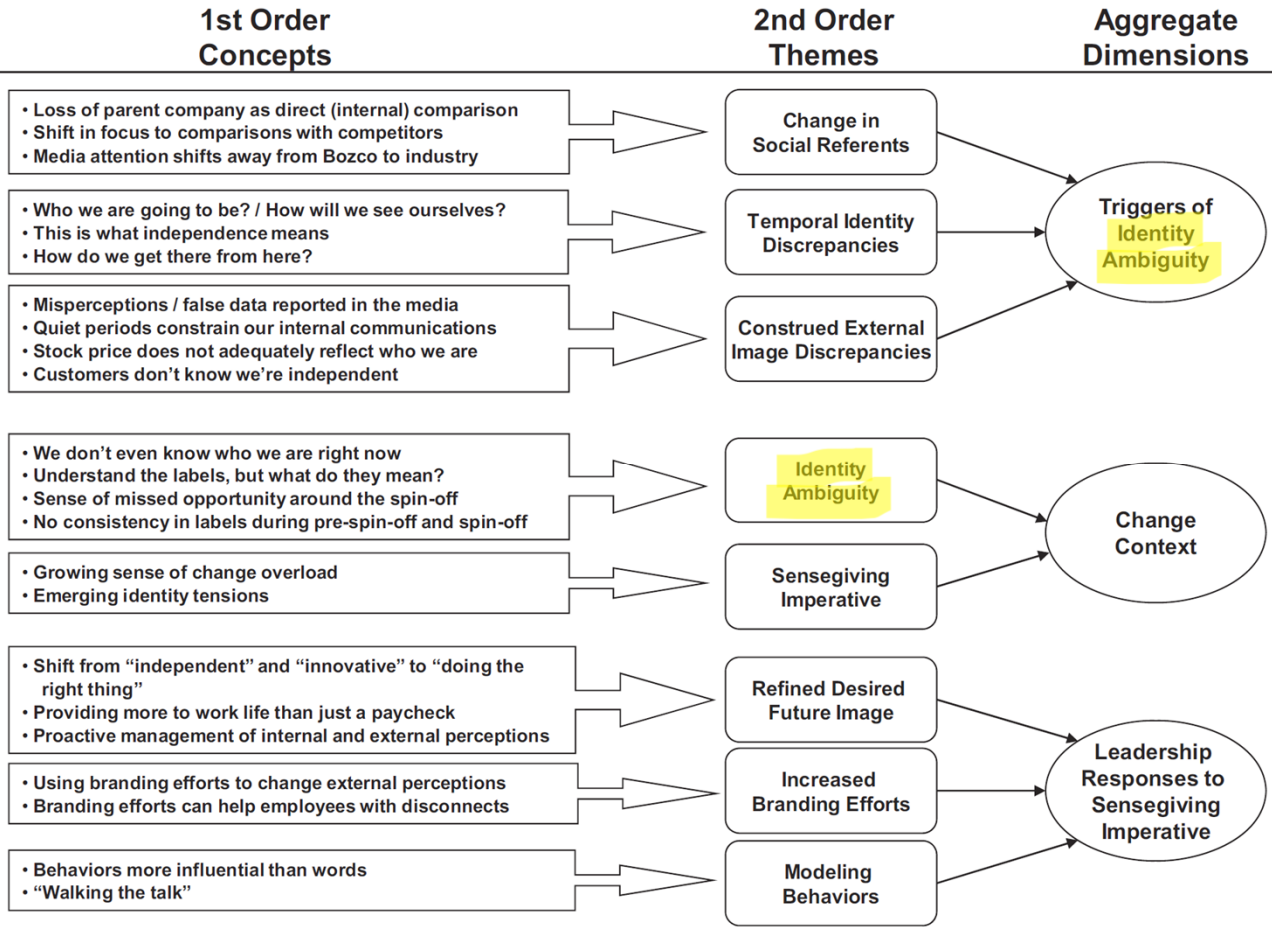
The Vertical Integration of Production: Market Failure Considerations*

By OLIVER E. WILLIAMSON
University of Pennsylvania

The study of vertical integration has presented difficulties at both theoretical and policy levels of analysis. That vertical integration has never enjoyed a secure place in value theory is attributable to the fact that, under conventional assumptions, it is an anomaly: if the costs of operating competitive markets are zero, “as is usually assumed in our theoretical analysis” (Arrow, 1969, p. 48), why integrate?

Introducing a new concept in qualitative research: The case of Gioia Methodology

Corley and Gioia (2004) studied a corporate spin-off in a Fortune 100 company.



GIOIA, CORLEY & HAMILTON (2013) CORLEY & GIOIA (2004)



**What are we
ultimately
trying to
understand?**

Organizational researchers do not engage in *observable-fact abductions* but, rather, *theoretical abductions*. We are not detectives who ask, “What explains this specific event?” Instead, we ask, “What kind of insight does this case offer about organizations more generally?” or “**What is this case a case of?**”

- 1) Corley and Gioia (2004) studied the spin-off of an organizational sub-unit of a Fortune 100 company. Their argument is that the case can be understood as a case of identify ambiguity.
- 2) Abushaikha, Wu, and Khoury (2021) studied the Za’Atari refugee camp in Jordan. Their argument is that the case can be understood as a case of the emergence of informal supply networks.

We must understand the role of researchers as active reasoners who interpret and make sense of empirical material based on various predispositions, idiosyncratic skill sets, professional histories, and experience.

*New ideas originate in our minds,
not in our data.*

To summarize

Instead of declaring that the researcher is objective, we must seek to turn the subjective aspects of reasoning into inter-subjective

*We must make our abductions
as transparent as possible.*

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