Concept term repurposing: Framing shifts in domains and terminology

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Framework

- Intersubjectivity, process of empathy (Husserl)
- Linguistic intersubjectivity and pragmatics (Habermas)
- Classics in Knowledge Organization
- Relation between disciplinary formation, human understanding, terminology

Why?

- Interdisciplinary communication
  - Harmonizing scientific terminology: Ease of research
- Term disambiguation at indexing level
- Synthesize a theoretical framework for understanding differences in terms and their emergence

Introduction: Types of Communities

- Types discussed in KO:
  - Communities of practice
  - Domains
  - Discourse communities
  - Invisible colleges
- Social glue

(Smiraglia 2012)

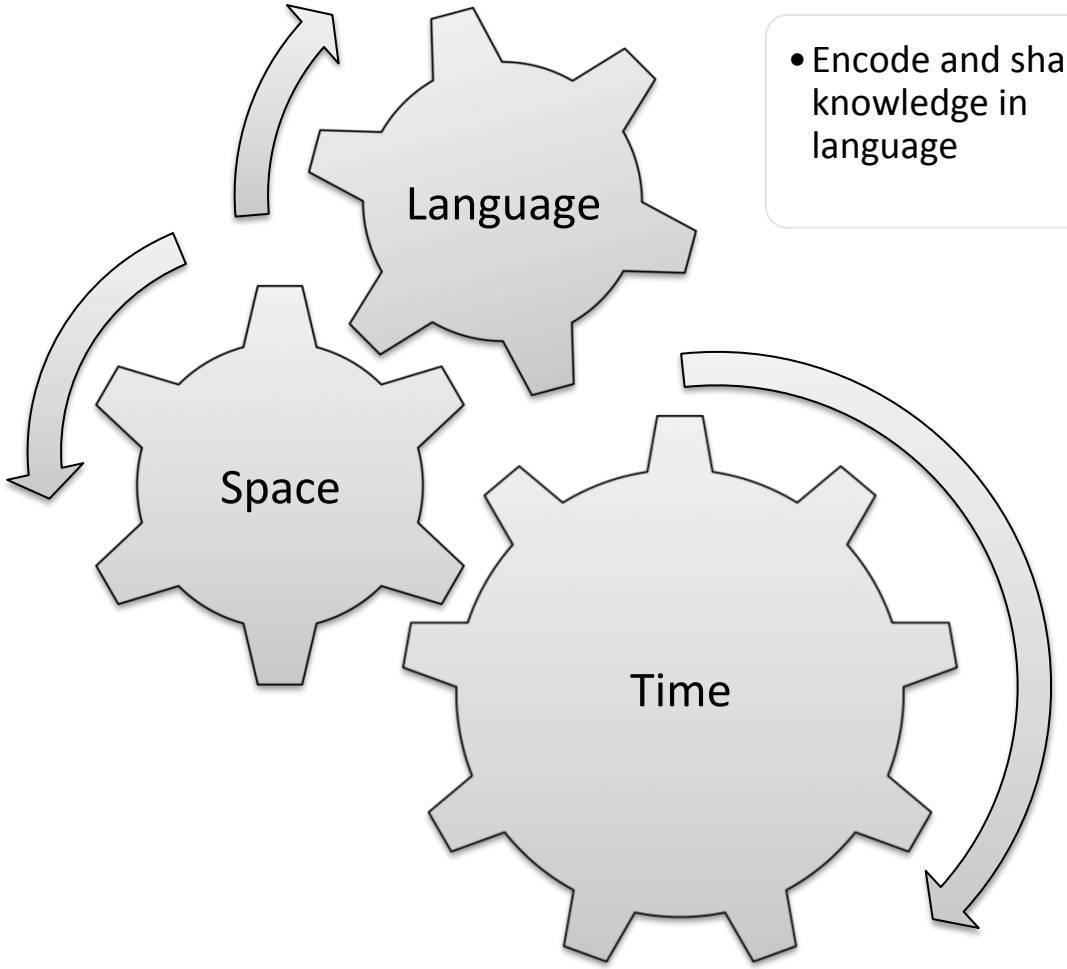
Introduction

- Dahlberg (2006): knowledge can be shared by means of language through space and time
- Communities have:
  - People
    - Individual understanding based on experiences
  - Shared conceptualizations
  - Shared language

Introduction

- What is a boundary object?
  - A point of information exchange across domains
    - Bowker and Star – mutually agreed upon across domains

Sharing of Knowledge

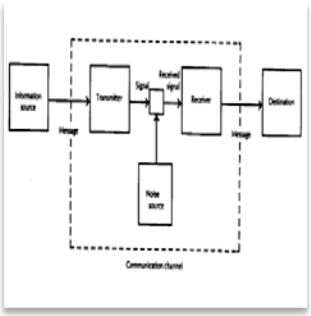


- Encode and share knowledge in language

- Physical distance
- Culture
- Education

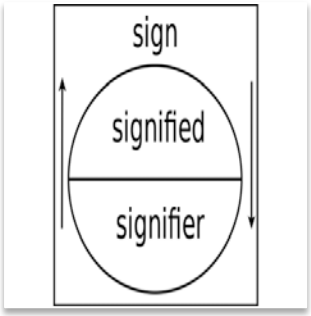
Dahlberg (2006)

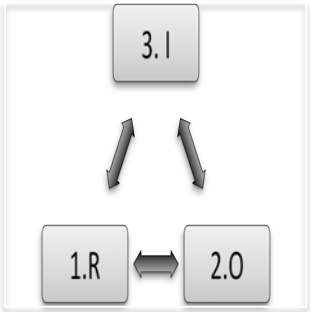
Models of Communication and Language



Shannon and Weaver: Noise introduced into a channel distorts meaning

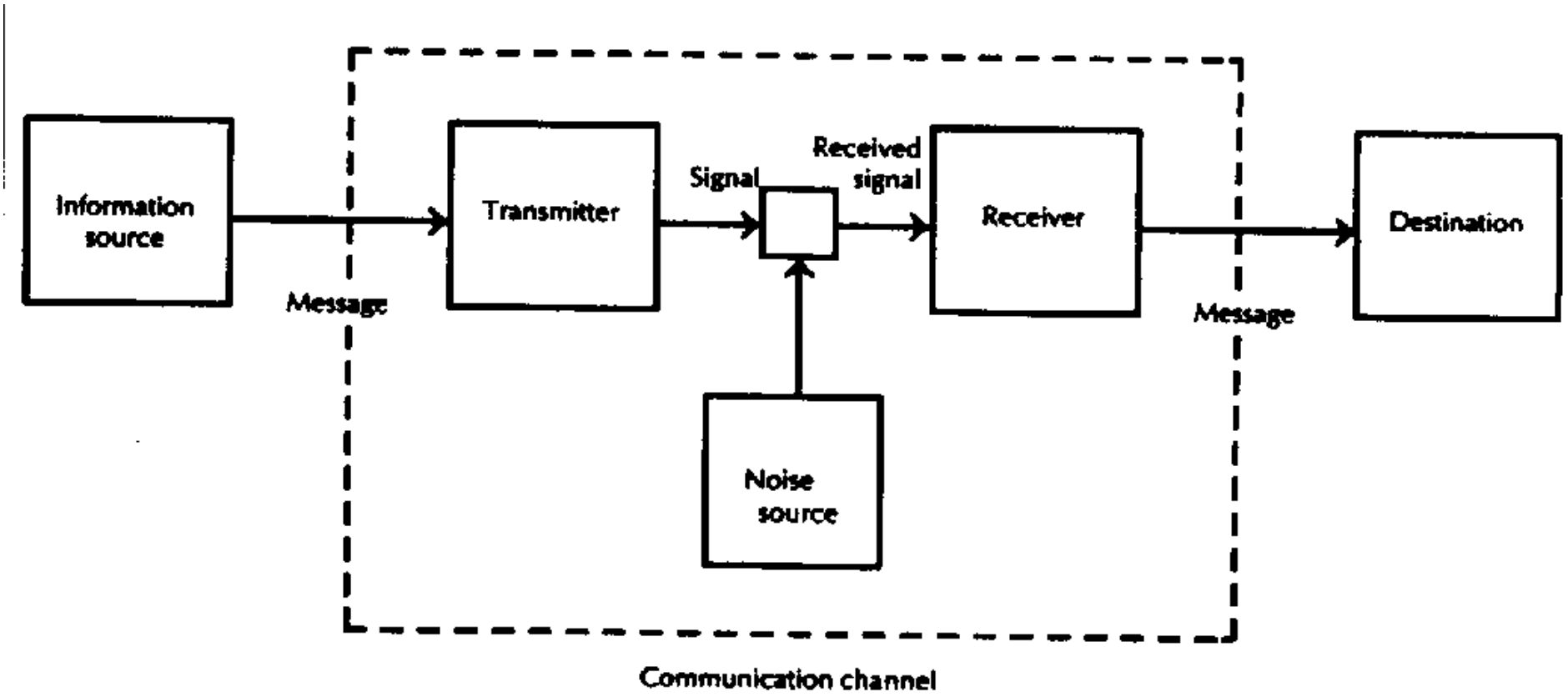
Saussure: dichotomy of signified and signifier (structural)



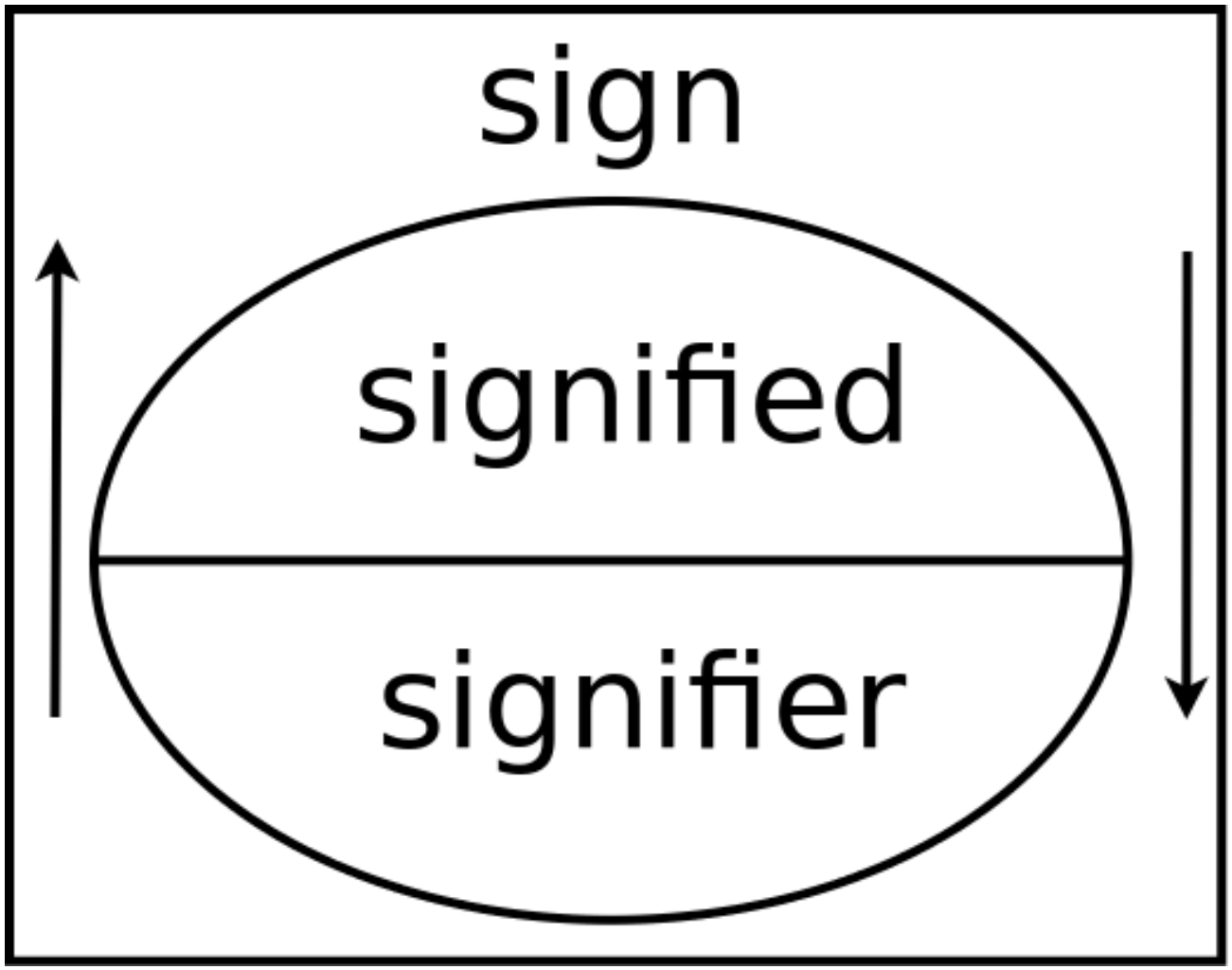


Peirce: trichotomy of ROI (internal process and development of understanding)

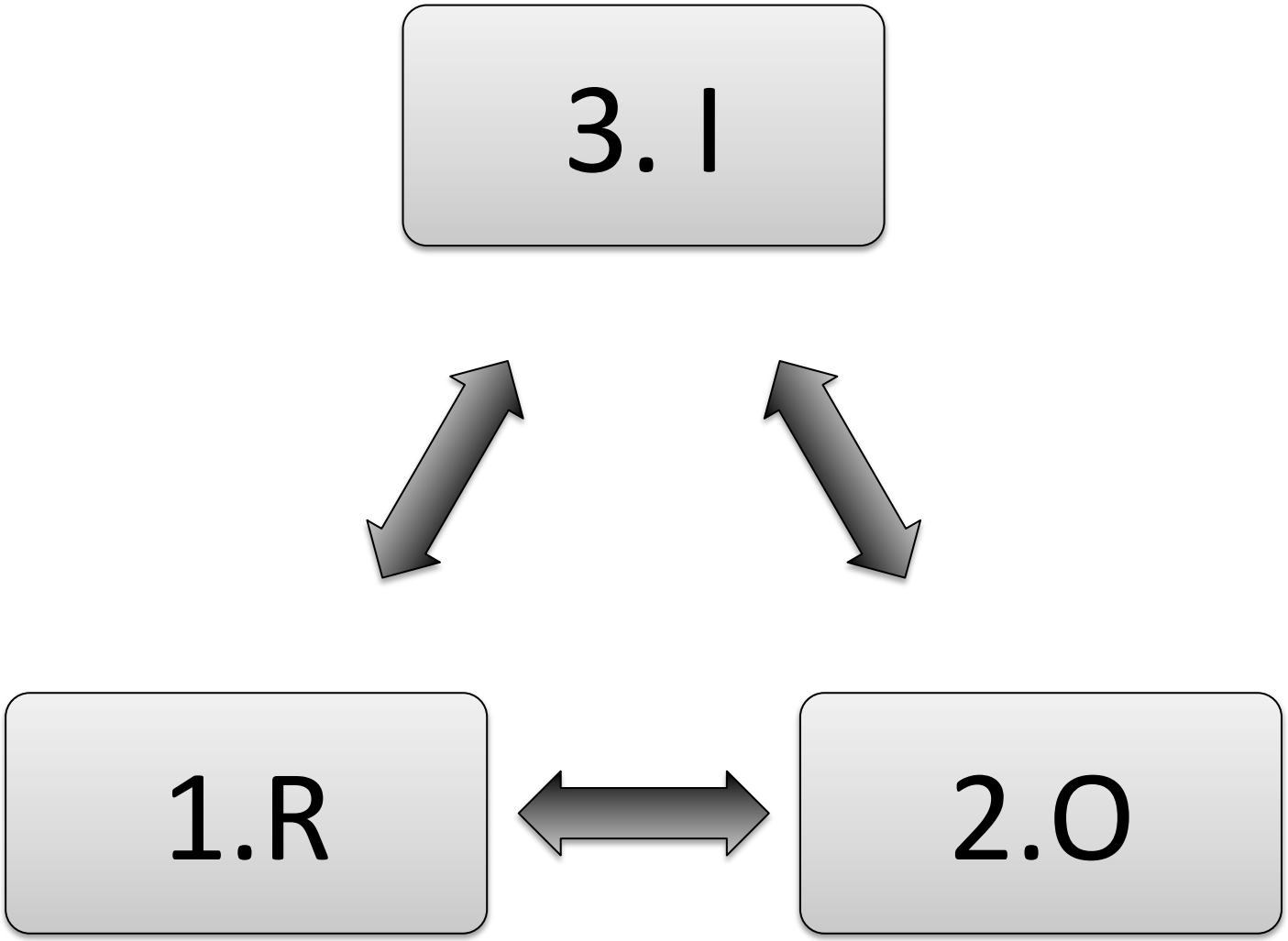
Shannon and Weaver



Saussure



Peirce's ROI



Popper's Three Worlds

World 1

(Physical world)

World 2

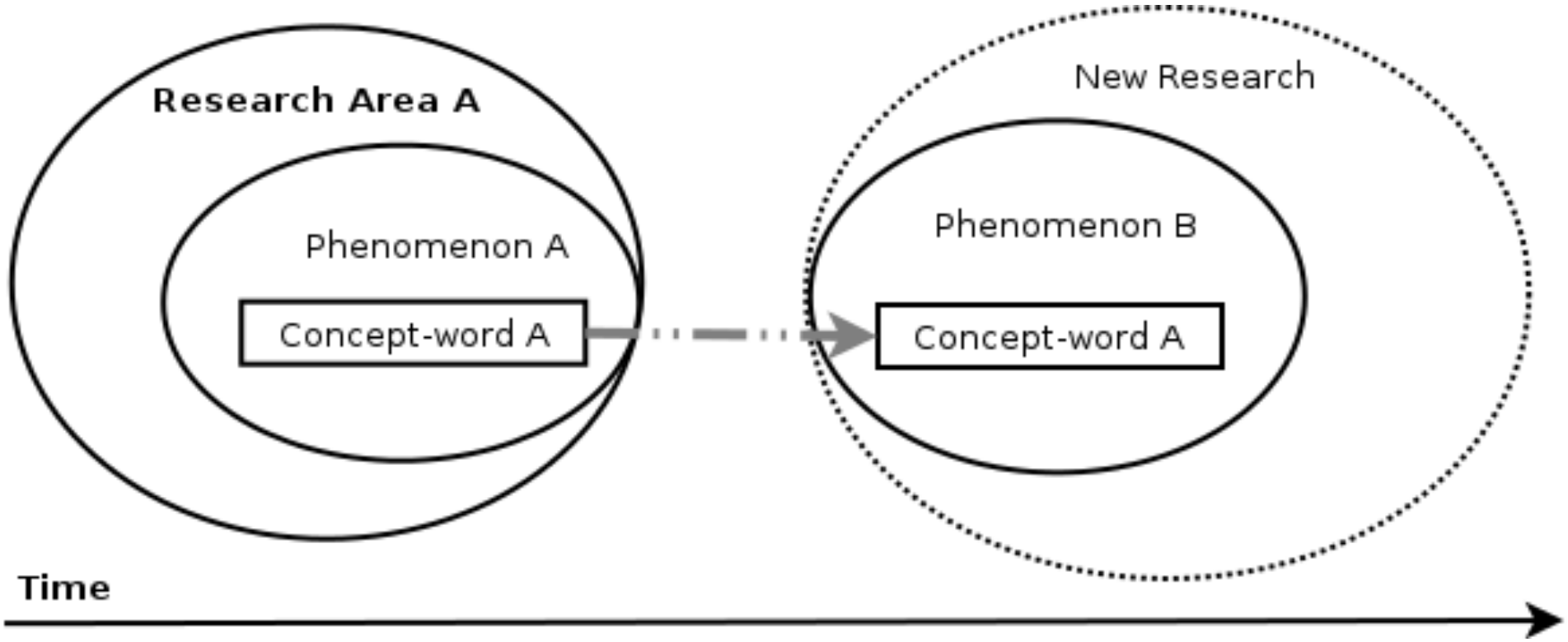
(internalized knowledge, subjective reality)

World 3

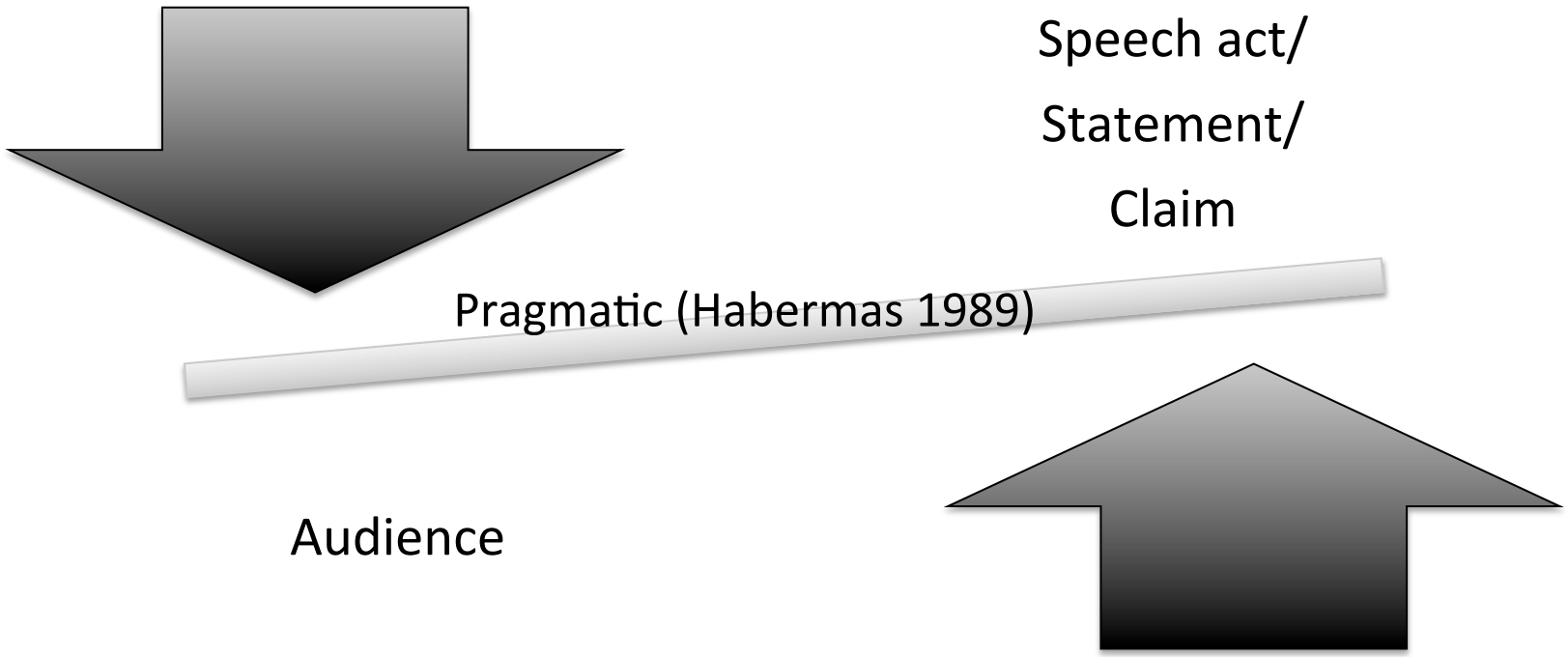
(Objective knowledge)

Reusing terminology: questions of validity if science must be reproducable

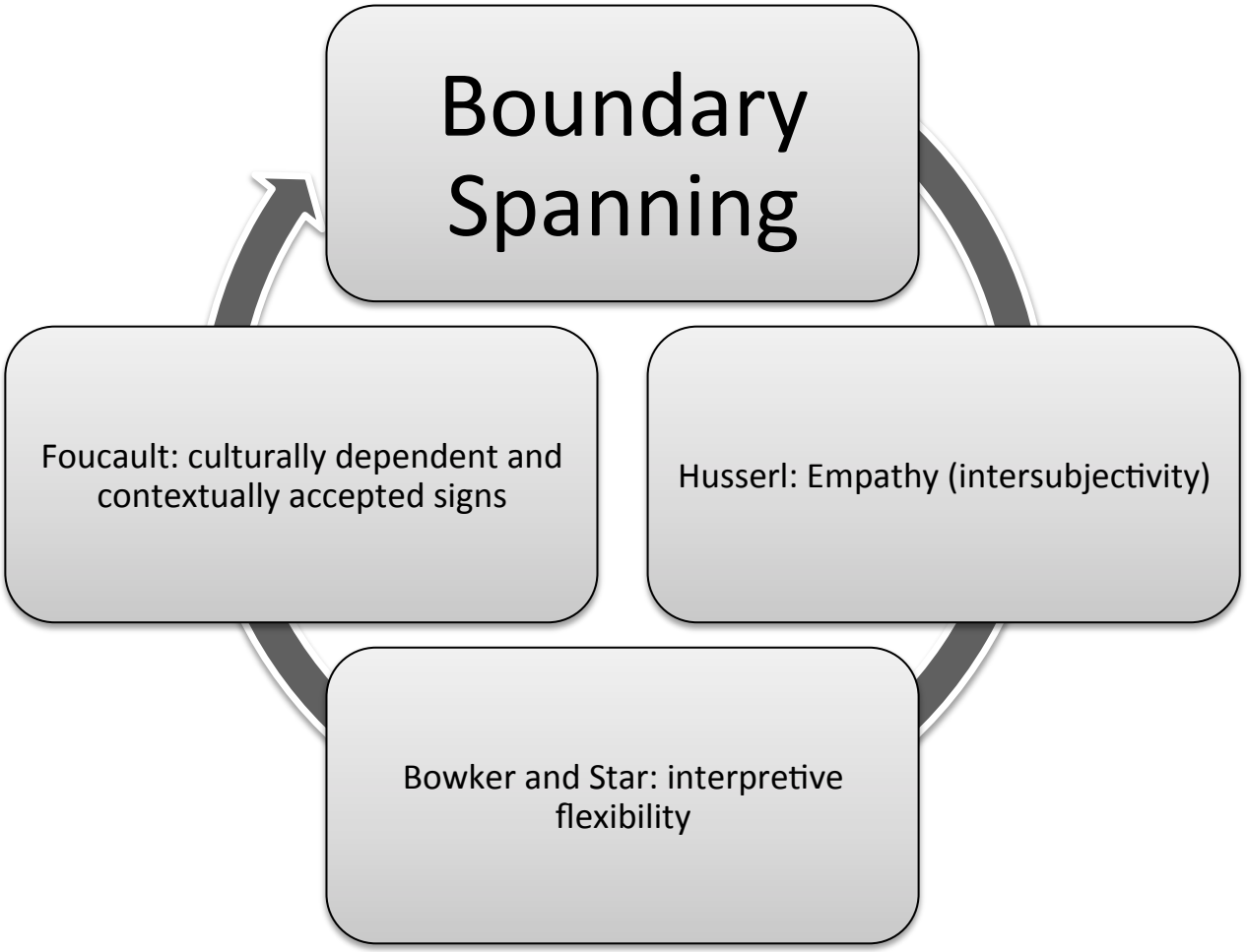
Paradigms: Transposing Terms



Acceptance of Introduced Terms



Interdisciplinarity



Domains and Evolution

Wilson

- Communication breakdowns occur between specialties, not researchers
- Sources outside a specialty: questions of reproducability

Habermas

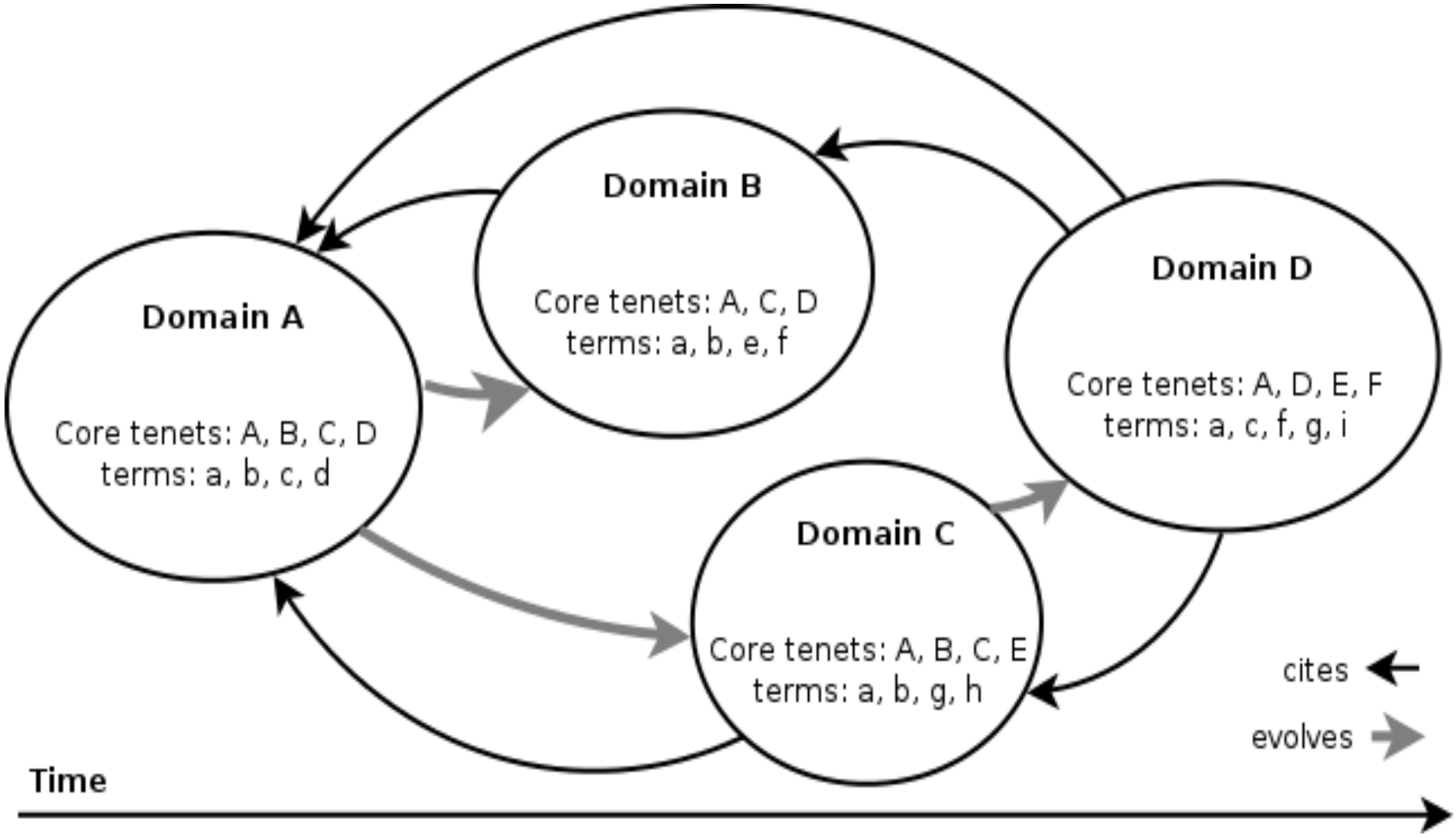
- Speech act: pragmatic
- "Reservoir of potential reasons"

Kuhn

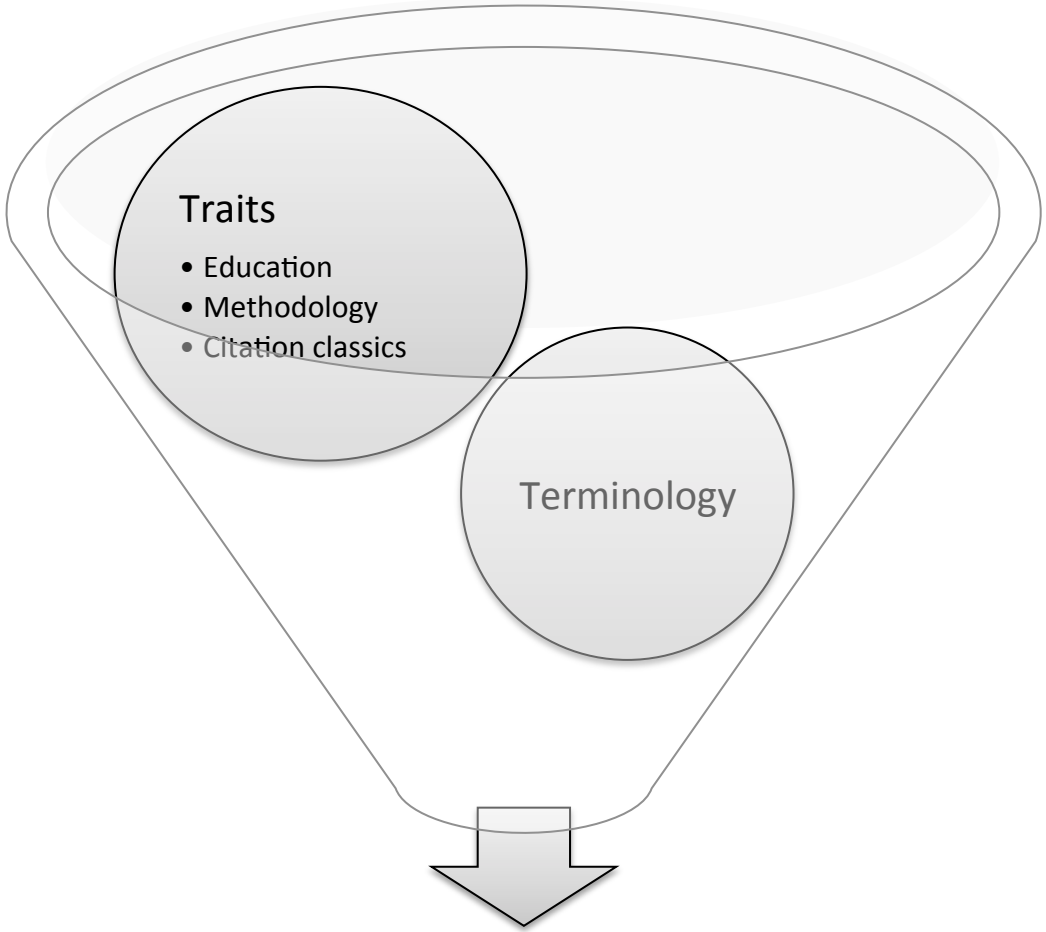
- Paradigmatic shift
- Change in assumptions

Popper

- 3 Worlds—interact with one another
- Validity of arguments: science must be reproducable, understood by anyone


Domain A
Core tenets: A, B, C, D
terms: a, b, c, d
Domain B
Core tenets: A, C, D
terms: a, b, e, f
Domain C
Core tenets: A, B, C, E
terms: a, b, g, h
Domain D
Core tenets: A, D, E, F
terms: a, c, f, g, i
cites
evolves
Time

Existing disciplines, research, concepts, ideas, etc.



New Discipline

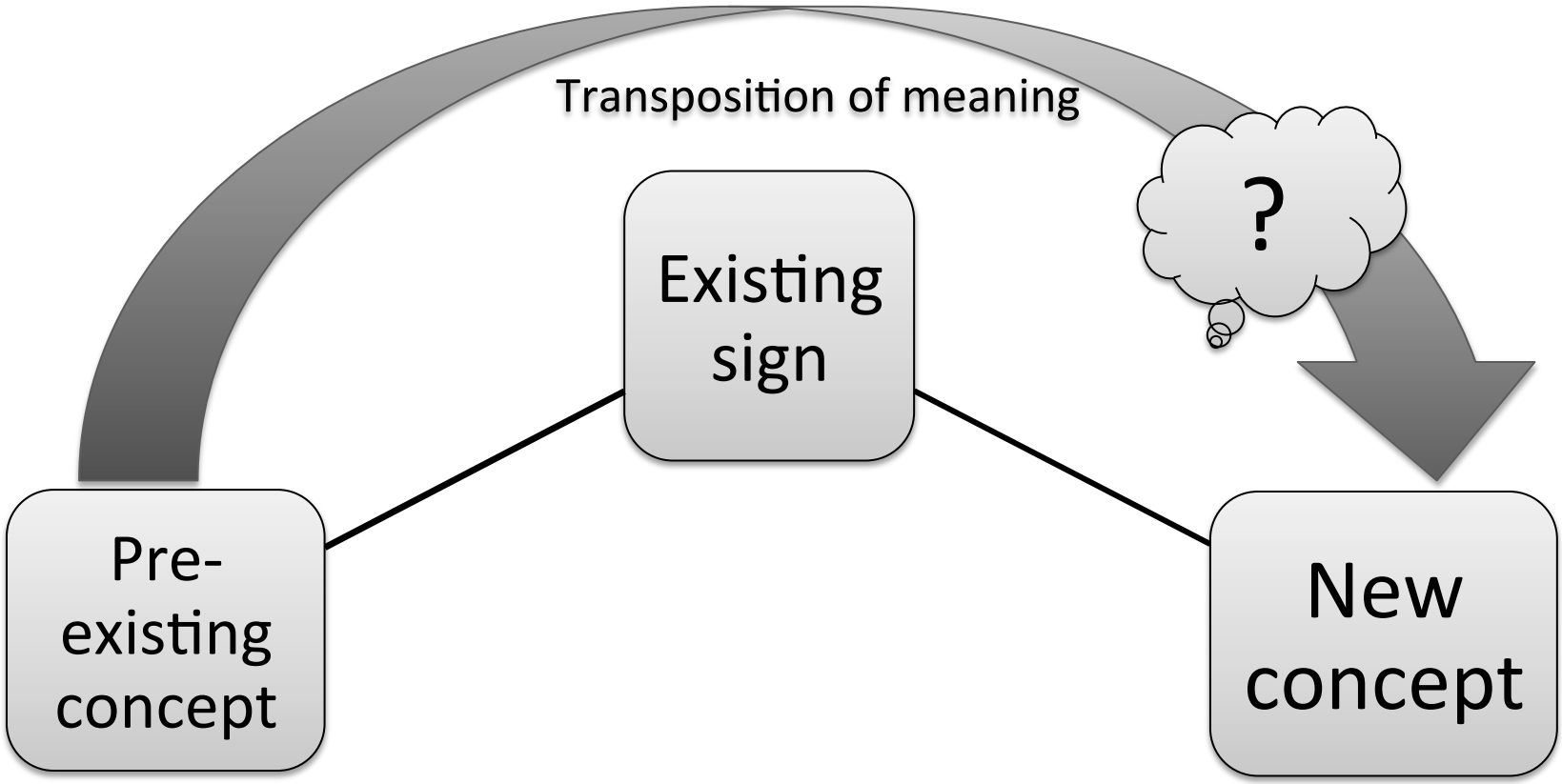
Term Adoption Demonstrates:

- Saussure's mutable relationship of signified and signifier
  - New concept determined to be related to an existing concept by the researcher
- Intersubjective relation of prior experience and understanding to a new concept (Husserl's empathy)

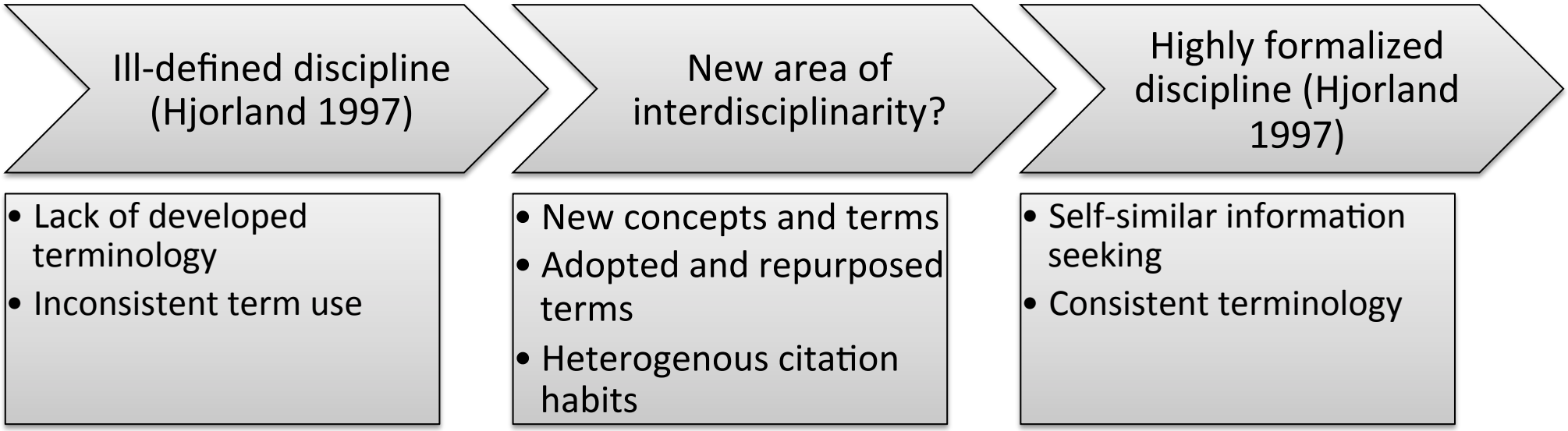
Examples in (Mostly) Information Science

- Berrypicking (Bates 1989)
  - Choosing most relevant information
- Cherry picking (Graham and Marvin 1994)
  - Choosing and keeping the most lucrative customers
- Ontogeny (Tennis 2002)
  - Growth
- Home rule (Kozak 2013)
  - Ability to govern as an independent entity

Bridging meaning



Formalization of Disciplines



Retitling?

- “Framing shifts in domains: Transposing ideas across contexts through language”

Conclusion

- Inconsistent, borrowed, and new terminology may indicate a developing discipline instead of an ill-defined discipline
- Choices in term use reflect representation of the individual's synthesized understanding in a term that is likely to be accepted by the intended audience as valid

Questions?

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