Interdisciplinary Futures:
Beyond Claims, Conjectures & Contradictions

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Outline

Introduction
- Re-reading *Open the Social Sciences*
- An abbreviated history of collaboration between disciplines
- The missing links

Background & Context of *Open the Social Sciences*
- Contributions of academic and non-academic institutions
- Inclusive or Insular social sciences

Common Misconceptions
- Recent contributions: claims, conjectures & contradictions
- 3 persistent misconceptions

Outlook & Prospects
- 3 main issues proposed in *Open the Social Sciences*
- Interdisciplinary Futures: Other Issues

Synthesis & Conclusion
Introduction

Re-reading *Open the Social Sciences*

- How are disciplines related to each other and society? Crossing boundaries, or removing boundaries?

- Organization of disciplines in universities & research institutes:
  Administrative & physical structures.

  Epistemological structures: specialization, sementation and subdivision vs. «the filiation of ideas» (Piaget, 1970).

  Fragmentation of the social sciences: Foundation of new disciplines or collaboration between exiting disciplines.

- Weak contribution of social sciences to global change research.

(Source: R. Lawrence, *Interdisciplinary Futures: Beyond Claims, Conjectures and Contradictions*. (draft conference paper).)
Introduction

Re-reading *Open the Social Sciences*

An short history of collaboration between disciplines : 2 periods

- The missing links:
  - Fundamental role of the Social Sciences in disciplinary collaboration in the 20th century
  - Institutional concern (SSRCouncil, 1920s)
  - Private funders concern (Rockefeller Foundation, 1930s)
  - Implementation in Universities (Chicago, Sociology, 1920s)
  - Individual and private initiatives.

- Ambiguity of the prefix *inter-*
  - Missing definitions of multi- and inter- disciplinarity:
    transdisciplinarity & other types of knowledge production since 1980s.

(Source: R. Lawrence, *Interdisciplinary Futures: Beyond Claims, Conjectures and Contradictions*, (draft conference paper).)
Publications on Interdisciplinarity

Why?

Source: td-net
Number of publications per year that include "interdisciplinary" or "interdisciplinarity" in the topic.
(search performed through Web of Science, 14th April 2016).
Publications on Transdisciplinarity

Why?

Crossing disciplinary boundaries is fundamentally different removing them!

Source: td-net
Number of publications per year that include "interdisciplinary" or "interdisciplinarity" in the topic. (search performed through Web of Science, April 14 2016).
Background & Context

Re-reading *Open the Social Sciences*

Fundamental contributions of non-academic institutions in the 1960s, 1970s

  
  *Main trends of research in the human and social sciences*

  Chapter 7
  
  Jean Piaget, *General problems of interdisciplinary research and common mechanisms.*

  Chapter 8
  
  Raymond Boudon, *Mathematical models and methods.*

Background & Context

Re-reading *Open the Social Sciences*

Fundamental contributions of non-academic institutions in the 1960s, 1970s

  
  Interdisciplinarity: *Problems of teaching and research in universities*

  Dealing with real-world problems
  Distinction between multi-, inter-, and trans-disciplinarity
  Different modes of collaboration between disciplines (Piaget)

NB: University consortiums are late-comers to the movement

Common Misconceptions

1. Disciplinary capabilities vs. Interdisciplinary inquiry

Claim 1: Substitution of Disciplinary competences by Interdisciplinary contributions.

Claim 2: Disciplinary skills are specialized & mutually exclusive

Contradiction:
Mutual interaction using disciplinary skills in interdisciplinary projects


Common Misconceptions

2. Interdisciplinarity: ‘Jack of all trades and master of none’!

Claim 1: Disciplines ignore complexity

Claim 2: Generalization replaces specialization in interdisciplinarity

Contradiction: Collaboration between disciplines is based on discipline-based capabilities and skills plus inter-personal dialogue and creative thinking.

References: Frickel et al., 2016; Repko 2008; Repko & Szostak 2017.
Common Misconceptions

3. Prerequisite of integration in interdisciplinary research

Claim 1: Integration is a prerequisite & outcome of interdisciplinarity

Claim 2: Mega-disciplines can deal with complexity
(e.g. Planetary Health Alliance)

Contradiction:
Piaget (1970) showed that integration is only one of several modes of collaboration between disciplines: 3 kinds of collaboration

Uses of Nomad concepts (e.g. resilience).

Conceptual Clarification

1. Beyond dichotomies to symbiosis
   Cartesian thinking in the Social Sciences –
   disciplinary vs. Interdisciplinary: basic vs. applied science
   A ‘poor relative’ of the natural sciences and the humanities
   Unique contribution: Human agency and the ecologic crisis.

2. Accepting differences, diversity and pluralism
   Requestioning the average, the norm and lawful relations
   Understanding differences & diversity
   Multi-directional, variable and dynamic relations between disciplines

3. Conceptual clarification, shared understanding & creative thinking
   Ethnographies of achievements between disciplines.

(Source: R. Lawrence, Interdisciplinary Futures: Beyond Claims, Conjectures and Contradictions, (draft conference paper).)
Outlook & Prospects

Contributions of the Social Sciences to real-world challenges (e.g. the ecologic crisis)

Q1: Have the social sciences been excluded?

Q2: Have the social sciences abdicated their role & responsibility?

Q3: Who decides which disciplines are invited to participate?

Innovative movements: The environmental humanities since 1990s. Andrew Mellon Humanities for the Environment, Observatory of the New Human Condition.

(Source: R. Lawrence, Interdisciplinary Futures: Beyond Claims, Conjectures and Contradictions, (draft conference paper).)
Outlook & Prospects

Wanted:
- steady increase in inter- & trans- disciplinary research
- many calls for interdisciplinary research by funding agencies
  but
- interdisciplinary research is poorly rewarded by funders &
- contributions are not valued for career advancement.

Lack of Enablers & Incentives:
- lack of explicit definitions in calls for interdisciplinary research
- lack of additional funding of time for collaborative research
- evaluation often done by disciplinary-based reviewers
- contributions cannot guarantee societal impact
  (e.g. weak institutional or political support)
  but
- many peer reviewed journals now call for ID papers.
Synthesis & Conclusion

Rethinking the Contribution of the Social Sciences
- An incomplete review in *Open the Social Sciences*
- Achievements & Missed opportunities.

Drivers of More Collaboration between Disciplines
- Personal initiatives and funding agencies
- University consortiums (e.g. LERU) are late-comers &
- Internal drivers for more collaboration remain rare
- Reforms of universities are necessary but not sufficient
- Influence of the Open Science Movement.

Debate focused on Knowledge of Real-World Issues
- Strengths & limitations of disciplinary knowledge
- Pertinence of disciplinary collaboration & interdisciplinarity

Interdisciplinarity: What are we talking about?
- Urgent need for conceptual clarification & epistemological advances.
References


