CONSTRUCTIVISM AND POST-CONSTRUCTIVISM

THE METHODOLOGICAL IMPLICATIONS OF EMPLOYING A POST-CONSTRUCTIVIST RESEARCH APPROACH

Trial lecture
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Road map

• What is constructivism?
• From constructivism to post-constructivism
• Unifying characteristics of post-constructivism
• Methodological implications
• Concluding remarks
Constructivism

- Meta-theoretical label for various approaches
- Adopted in a number of disciplines and fields in the 20th century
- Critique of naïve realism
- Emphasis on interpretative flexibility: reality is contingent on observer’s standpoint
Constructivism in sociology

• Reality, objects, facts, phenomena are created and institutionalized through social interactions

• Social construction is an ongoing process; maintained through knowledge, culture and tradition
The social construction of what?

- The child viewer of television
- Gender
- Homosexual culture
- Illness
- Knowledge
- Literacy
- The medicalized immigrant
- Women refugees
- Youth homelessness
- Zulu nationalism
Social construction as a liberating force

• 1980s: peak in the social construction literature with a political agenda

• Liberating effect: ideas and meanings were not fixed, but a product of
  – Historical events
  – Social forces
  – Ideology

• Social construction related in particular to the traditional objects of sociology: race, gender, etc.
Social construction critique

• A group of scholars criticize social construction works for its social reductionism (critique is directed against those with a political agenda)

• Ian Hacking depoliticizes social constructivism: objects and ideas may interact

• Something can be real and socially constructed at the same time
From social to post-constructivism

• The development towards *post*-constructivism stems from a desire:
  - To move away from social reductionism
  - To deal with new objects for sociological research: technology, science, and scientific practices

• Growing desire to move beyond the *social construction – realism dichotomy*

• Bruno Latour: “social scientists need a *new realist attitude*”
Post-constructivist approaches

• Another *post*!

• Confusing and perhaps not so interesting label at first sight

• Umbrella notion for:
  
  Pragmatic realism       Andrew Pickering
  
  Philosophical naturalism       Joseph Rouse
  
  Feminist science studies       Donna Harraway
  
  Actor-network theory       Bruno Latour, John Law, Michel Callon

• Included here: co-production idiom in STS (particularly the work of Sheila Jasanoff)
A return to the construction-site metaphor
Following construction practices

- Construction of scientific facts: without devices, no facts!
- Thought experiment: water freezes at 0 degrees: either inside or outside the laboratory!
- Water freezes at 0°C, but only after its construction through instruments, standards, devices, institutions, congresses
- It has become a stabilized fact; to which no one pays attention anymore
The construction process continues....

- When studying facts or objects in the making: include material practices
- With different materials or practices, the object could have been totally differently
- Following construction practices provides insight in the actual design, its durability, stability and reliability
What unites post-constructivists?

The desire to explain how science, nature and politics are interlinked and produced together.
Studying the science-politics interface

• How is environmental knowledge-making incorporated in governance?

and, in reverse

• How do practices of governance influence the making and use of knowledge?
Implications of a post-constructivist research approach

• Notes on the practicalities of method
• Connecting scales
• Science as practice
• Performativity of science
Notes on the practicalities of method (1)

- Post-constructivist studies are rather silent on practicalities of method

- Why? Dealing with very different, transforming, messy objects *in-the-making*

- Requires a variety of practical techniques for empirical inquiry
Notes on the practicalities of method (2)

• A situational, relational, dynamic view

• Less-formalized, adaptable and flexible research practices

• Follow *a case-study method*, which is
  – Mobile
  – Multi-sited
  – Materially sensitive

• Follow objects in the making *in real-time*, when
  – Uncertainties proliferate
  – Values are in conflict
Connecting scales

- Post-constructivist approach is simultaneously *local* and *global*
- The objective is to build systematic connections between the *micro*-worlds of scientific practice and *macro*-categories of political thought
- Relational approach: trace attachments and associations
- Study empirically the shifts from analytical categorizing to co-constructed phenomena
Shifting scales: From local weather models to global climate science

• Miller (2004): Case study of how climate science started from science concerned with local weather patterns

• With ascendance of computer use: possibility of aggregated modeling

• ‘Climate change’ developed into globally connected whole

• Global outlook made possible through, and maintained in, local networks
Follow science as practice

• From ‘science as knowledge’ to ‘science as practice’
  – Science as knowledge: passive mode
  – Science as practice: active mode (processes of *transformation*)

• Follow situated **discursive and material practices** at the construction site

• Interdisciplinary science: the shaping of reality in different places and institutions, with a variety of practices
Science as practice: constructing knowledge gaps

- Environmental governance: production of *non-knowledge*
- Barents Sea management plan: construction of knowledge gaps
- Who constructs? Where? When?
- Who prioritizes?

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The transformation of a knowledge gap

• Abstract notion of ‘knowledge gap’ has transformative power

• How is (non)knowledge transformed further, outside the scientific ‘laboratory’?

• Follow the ‘knowledge gap’ as an active agent in the governance network
Consider the performativity of science

• Co-production of science, nature, politics

• ‘Nature’ as such does not exist: thus be aware of the performative powers of science and politics in *enacting* environmental realities

• Construction of nature starts after there is a human interest in an area
Consider the performativity of science

• Before nature is made governable, it needs to be made readable and measurable (categorizing and classifying)

• Scientists become the *spokespersons* of nature

• Creation of *boundary infrastructures* for environmental governance
Delimiting the Doggerbank: an example of the co-production

• The Doggerbank potentially qualifies as a marine protected area

• Question: what is a sandbank? Ecological categories in the making

• Through delimitation practices scientists have performative roles in the enactment of new eco-political realities
Ontological politics

• Study of performativity and enactment; of ontological politics

• Science not only represents, but enacts nature

• By analyzing the potential solidness and durability of the construction of eco-political realities, the social scientist takes part in this process of co-production

• The post-constructivist researcher is part of shaping the world that we (wish to) live in
Thank you!