How to Map and Explain the Diversity of Research Programs in the Field of Science Studies

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Content

• Problem of Understanding of STS field transformation – Model of Social History
• Empirical model of reconstructing the field - case for analysis (examples)
• Results of qualitative research – the Tacit History of STS (tacit knowledge)
Short outline of PhD project

• My research project is about the history of developments within Sociology of Science since early 70th till 2000
  – with a special emphasize on
    • rational, epistemological foundations
    • and internal, historical explanations.

• I'm trying to observe defferent approaches and theories in so cales Second Wave. My task is to combine two different kinds of explanations of theory’s competition, elaboration and transformations.
  – analysis of texts
  – and understanding of external contexts – Science, Philosophy and Culture.
Problem of Understanding of STS origins

• What is the problem with modern History of Sociology of Science (1970-2000)?
  – It is a [Postbiography] or [History in-the-making]
    • STS Wave’ story is still unknown and remains unpredictable 😊
  – Most of the actors are very much alive – all the rational reconstructions of the field are impossible because they are non-defendable
  – Detective story of book references OR specific non-academic practice of STS authors writing (warning: hot content inside)
4 ways how History of STS can be done

Cognitive (Rational)

- Philosophy
- Epistemology
- Context of Culture (Forman Thesis)

Scientific Research Programmes (Lacatos, Zelditch)

External

Concept of Social Interest (post-Marxist approach)

Scientific community approach (Mullins & Griffits)

Internal

Social
Analysis of Philosophical Presuppositions and Basic Assumptions (Culture, Fashion)

Books Articles (Logical reconstruction) Geography of Concepts

Social Context (Economy, Politics, Society and its main Institution)

Mapping of the field (Citations, Controversies, Coauthorship, Grants)
Main focuses of analysis to understand the Second Wave of STS

Culture & Society (Zeitgeist)

Intellectual and Philosophical Environment

Sociology (as Theory)

Sociology of Science (“First Wave”)

“Second Wave” of Science Studies
Mapping of STS (examples)

• Maps was provided by Prof. Yves Gingras (Canada, Chair in Sociology of Science)
• Source: Social Science Citation Index (Web of Science)
• Periods:
  – 1971-75
  – 1976-80
  – 1981-85
  – 1986-90
Can we explain it?
Network for SSS (76-80)

Can we explain it?
Network for SSS (81-85)

Can we explain it?
Network for SSS (86-90)

Can we explain it?
Classification of Reasons and Causal Explanations of 2Wave development

Basic hypothesis of field development

Relativism?
Post-Marxists?
Is it Thomas Kuhn fault?
Was it against Merton?

• Dolby and Barnes critics of Merton
• Mulkay way of discuss analyze
• Intention to study content of science (knowledge), not institution

• Choice between Functionalism and Marxism
• New Left Critics

• Reinterpretation of Wittgenstein through Kuhn and Winch
• Distrust in Science
• "Martian's" methodology

• Counterculture
• Political situation (War in Vietnam)
Some qualitative results...

• **Hot content:**
  – Non-academic cognitive style: wrong links to intellectual environment.
  – “They are all physics!” 😊 What does it mean? Why did they come to Social Sciences? Did they know mertonian Sociology of Science or Sociology itself before?
    • They study Scientific controversies, not consensus
    • They study content of knowledge (23 years of Gravitation Waves)
    • They have specific point of view – extending of horizons, breaking the rules and cross-disciplines walls, search for new dimensions... cause they have their own experience
    • They use very unclear and non-sociological notion of **Culture** – it leads to misunderstanding: no distinction between Social and Rational, Internal and External
  – then... casual **Irrationalism**, sometimes mistakenly known as “Relativism”: tacit knowledge, hidden contexts, zeitgeist (form Forman)...
  – Their explanations of Science have 4 of “10 Problems in History of Science” (Gallison, 2008, ISIS)
    • WHAT IS CONTEXT?
    • HISTORICAL ARGUMENTATION
    • FABRICATED FUNDAMENTALS
    • POLITICAL TECHNOLOGIES

• **STS main critic is the “FABRICATION OF THE CONTEXT”**
Some results...2


• How did it happen that your started to do Sociology of Science?
• What was the first paper in the Sociology of Science of 70th-80th that impressed you much?
• Where did New Sociology of Science COME FROM FOR YOU? (Edinburgh, Barnes, Mulkay, philosophy).
• Was there any strong intellectual connections between Second Wave and certain Philosophy of Science of that time?
• How important and known were next philosophers FOR YOU: Thomas Kuhn, Rorty, Winch, Wittgenstein, Manheim, Karl Popper
• Was there any political considerations that had impacted much on the origins of Second Wave? Vietman War, New Lefts in Europe?
• How much was Robert Merton’s books known among the Sociologists of Science in 1970-th?
• Was the Second Wave the movement against the Mertonian ideas or it was independent elaboration?
• Can we say that Second Wave is a second live of Marxist Sociology of Knowledge within the field of Science Studies? Was the post- or neo - marxists those who benefited a lot to Second Wave?
• What was the intellectual environment of that time that could affect on Second Wave? (Distrust in Science? Culture of Protest?)
Some results...3


• Can you nominate Top 5 books that are the most brilliant achievements of the Second Wave?
• Can you divide a number of theories or people within Second Wave into *schools, bands or research programmes*? Please, name the most influenced ones.
• What differ them from each other?
• Can we say there is or there was a whole generation of Second Wave sociologists?
• Was there friendship or competition among them?
• The next question can be quite difficult... So, we know that Second Wave has many examples of relativism to be applied for empirical or theoretical investigations in the field. Why is it so? I mean, was the relativism BEFORE (as philosophical or methodological presupposition) or was it find out in the process as a RESULT or EXPLANATORY DECISION?
• What was the relationships between Sociology (as Theory and Methodology) and Second Wave in 1975-85? Can we say that Sociology of Science made special difference against Sociology itself?
• Why are there so many self-citations between Second Wave sociologists?
• Do you think that Second Wave ideas and approaches are still alive within Sociology of Science or do thay have any future in Theories and Researches?

More results forthcoming...

Thank you!