



On the methodology of proofs in social sciences.

The weak chains of reasoning according to Josef Macek

Presentation at the Center for Theoretical Study, Charles University
based on the book by

Josef Macek: *How Do We Think?* Praha, Karolinum, 2006
(edited from the posthumous manuscript by V. Benacek)

<http://www1.ceses.cuni.cz/benacek/Foreword-Macek.pdf>

2008

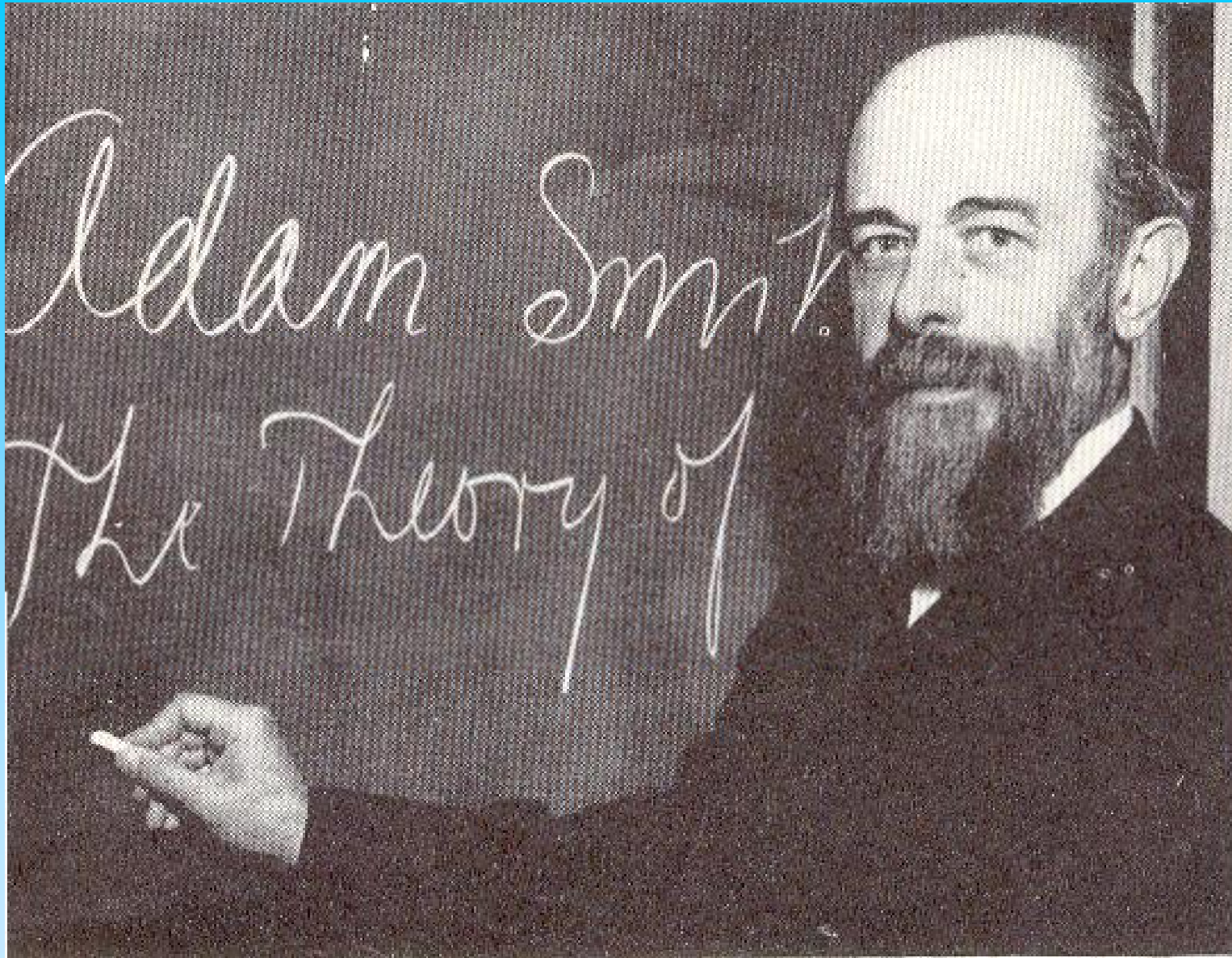
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Objectives of this talk:

To use the opportunity of Josef Macek's book "How Do We Think?" for :

- Discussing the methodology of social sciences:
economics, sociology, political science and law.
- Discussing the concepts of objectivity/subjectivity, determinism, causality, God, positivity versus normativity (values).
- Considering the evolution of economics since the time Macek wrote this book (1950-67) vis-a-vis his ideas.
- Evaluating Macek's philosophy in contrast to the approaches of K. Popper, J. Bentham, B. Russel, L. Wittgenstein, R. Nozick, J. Rawls, T. Kuhn; J. Stamp, J. M. Keynes, G. Cassel, T. Veblen, H. Simon, M. Friedman.



Josef Macek, Univ. of Pittsburgh, 1951

CV of Josef Macek – 1.

1887 – borne in Zábřeh /Moravia

1906 – Law at the Czech Charles University

1911 – Philosophy at the German Charles University

1913 – Philosophy at the University of Berlin

1915 – book On Moral Sentiments of Adam Smith

1917 – 1948 active in the Social Democratic Party

1918 – 1921 in charge of the Czechoslovak land reform

1919 – Czechoslovak Peace Delegation in Paris

1921 – in Britain; acquainted with Keynes

1922 – member of the gvt Council of Advisors

1923 – 1948 editor of „Naše doba”

1924 – lecturing in the US; Germany, Denmark and Italy

CV of Josef Macek – 2.

1925 – 1948 polemics with K. Engliš; the Dean of the College of Commerce of the ČVUT

1925 – 1938 Friday Talks of K. Čapek

1928 – 1939 member of the Parliament

1937 – co-organiser of the Congress of Social Policies in Paris

1938 – 1944 appeals for national unity and self-education

1945 – 47 dean of the re-opened College of Commerce;

„Social Economy” published

1948 – harrassed and discriminated

1949 – in November Nová Mysl – shattering attack of O. Šik;
before Christmas crossing the Iron Curtain

1950 – 1961 professor at Pittsburgh University

1961 – 1972 lived in Vancouver /Canada.

CONTENTS OF THE BOOK

- I** **The burden of proof**
- II** **The survey of the kinds of proof**
- III** **Proof of the logical consistence**
- IV** **Proof of facts**
- V** **Proof of values**
- VI** **Proof by logic**
- VII** **Proof by experience**
- VIII** **Proof by authority**
- IX** **Proof by analogy**
- X** **Proof by consensus and tradition**
- XI** **Proof by miracle**
- XII** **Proof by sacrifice, martyrdom and death**
- XIII** **Proof by silence**
- XIV** **Proof by definition**
- XV** **Proof by statistics**
- XVI** **Sophistical proofs**
- XVII** **Proof in the perspective of history**

Highlights of the Macek's methodology

1)

Follower of the anglosaxon (Hume's) legacy of **empirism and agnosticism**, including Newton's **constraint on the logic by experimental science** :

- è Infinitely complex richness of the reality is comprehensible by reason (science) → estimation of π .
- è Consistent with H. Simon's (1978) approach to “bounded rationality” in economics (vs. technical economics).
- è T. Kuhn's explanation of the progress in science /paradigms/.
- è Gödel's incompleteness theorem.
- è **è THERE IS AN ENORMOUS SPACE LEFT FOR CHEATING IN MAKING PROOFS.**

2)

Social sciences' methodological snag:

Cointegration of the man with the object of the study, which by itself is extremely complicated.

è Problems of the endogeneity (versus exogeneity) of instruments (vicious vs virtuous loop).

è Man as a co-creator of his future.

è Incomplete pre-determination of social events, implying that social sciences are not compatible with natural sciences.

è Problem of values (subjectivity vs. objectivity).

è **è THERE IS A SPACE FOR POSITIVE INTUITIVE SHORTCUTS.**

Social sciences should be creative, intuitive and relying on qualitative judgments (vs. neopositivism).

Quantifying is not breaking their lock-ins.

Impossibility of the Turing's machine.

3) The role of values (axiology) is central to social sciences. Values are as “objective” as the material things.

- è Belief in the existential trinity of basic values:
welfare, justice and truth in the environment of **human freedom**.
- è Chains of values (vs. chain of reasons in logic and chain of causes in facts). Moral axioms -- Intermediate values.
- è Values as exogenous imperatives to individuals, even though they can opt differently (Hayek's Cosmos vs. Taxis).
- è Values, ethics and priorities are a part of rationality - see R. Nozick (The Nature of Rationality, 1993).
Principles of prudent conduct for attaining objectives.
Teleological devices.
- è Bentham's legacy of **happiness** as an objective function.

4)

Economics as a descriptive science of economic behaviour in whatever social context (G. Becker, M. Friedman: economy and money is everywhere), even though there are niches of disregarded other objectives.

Economics as a normative science because the value free system of science failed.

è Role of predictions as empirical proofs of the “truth”
(M. Friedman).

è **Law and economics**, solving the efficiency of property rights, contracts and exchanges (“life is the trade”).
Rationality of the institutional setup.

è **Public choice theory** as an instrument for harmonising individual priorities with social (collective) choices.

è Sociology and politics are an empirical subset of a universal social science.

5)

Ranking of logic (facts and knowledge) in social sciences:

a/ Known answers (undisputed conclusions).

b/ Known undecidable (uncertain) answers.

c/ Known (so far) unknown answers.

d/ Unknown unknown questions.

e/ Never to be known problems (because our time is finite while the reality is infinite).

è Intuition, speculation and experiments by trial and error are natural methods of social science.

(Darwinian selection). K. Popper.

è Logical (axiomatic) systems provide finite “truths” but are they trustworthy? Triviality, inconsistency with reality.

è Some systems are logically dubious but their prediction is not falsified by reality.

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7)

Social sciences as applied maths (Walras, Morgenstern, Wittgenstein).

Clear definitions, clear assumptions, predetermined criteria (maximisation of utility, income, power, happiness), sophisticated instruments of dynamics [derivatives, differential equations] è unambiguous conclusions.

Science as a logical benchmarking.

Science as esthetics.

Science as an art that is not dealing with reality.

Science as an instrument of **signalling** è proof by signalling.

8)

The role of markets in the economy

Macek as a market sceptic.

Analogy between the God and the Markets:

Anselm: proving the existence of God from the idea of supreme perfection.

Leibniz: “God, the Creator of the entire universe, is omniscient, omnipotent, and most benevolent. Thus everything in the universe is good (the best possible)”.

Markets and Gods are not identical, thus markets can fail.

Thank you for your attention !