THE CENTER FOR AUSTRIAN STUDIES PRESENTS

THE VIENNA CIRCLE'S SUCCESSORS IN MINNESOTA AND AMERICA THE LAKATOS-FEYERABEND-KUHN PROGRAM



STEVEN MEYER PRAGMATIC C SOFTWARE CORP.

THURSDAY, JANUARY 27, 3:30 P.M. Ford Room, 710 Social Sciences Building (WB)

College of Liberal Arts

UNIVERSITY OF MINNESOTA

The Vienna Circle Successors in Minnesota and America - Feyerabend-Lakatos-Kuhn

During the 1920s the Vienna circle embodied the best and most advanced human knowledge. Its leader Moritz Schlick was an avowed democratic socialist and the entire Vienna Circle was motivated by democratic socialist ideals. Schlick's murder by a deranged student in 1936 and the Anschluss in 1938 ended the Vienna Circle in Vienna, but many of its members emigrated to the United States and Great Britain.

The talk discusses Schlick's student Feigl's emigration to the US in 1932 and then to the University Minnesota in 1941. Feigl founded the Minnesota Center for the Philosophy of Science (MCPS) in 1953 and was instrumental in establishing the Lakatos-Feyerabend-Kuhn (LFK) research programme. Although, the LFK programme criticized original Vienna Circle Logical Positivism, it also embodied the best and most advanced human knowledge during the 1960s and 1970s. The LFK research programme ended with the death of Feyerabend and Kuhn in the early 1990s. It is argued that its demise was caused by its continuation of the original Vienna Circle's social idealism and that the LFK programme continued longest in Minnesota because of Minnesota's social idealism.

What is the LFK Program? - Focus on History

Lakatos' Paraphrase:

Philosophy of science without history of science is empty; history of science without philosophy of science is blind.

Kant's Original Dictum:

Mere polyhistory is a cyclopean erudition that lacks one eye, the eye of philosophy.

Some Definitions

Hilbert's Programme:

Mathematical research program aimed at formalizing all knowledge using mathematical logic.

Phenomenology:

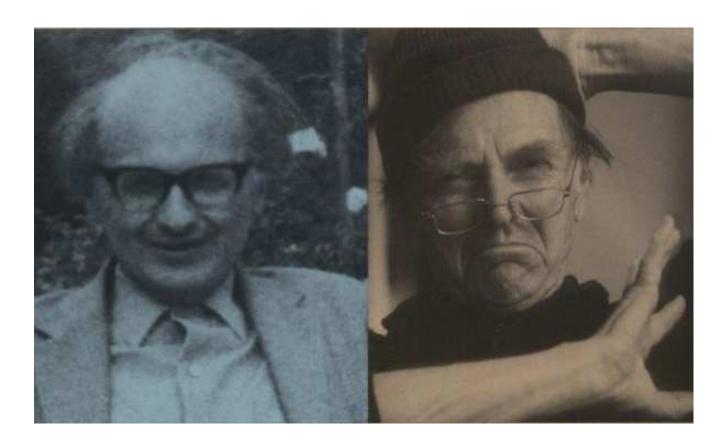
Method of physics in which interpretation of facts depends on a scientific theory. Pickering's modern example: Bubble chamber tracks are meaningless until 'constructed'' by the quark theory of particle physics.

Logical Positivism:

The name adopted by the Vienna Circle (including Rudolf Carnap and Alfred Ayer) for their philosophial position, most famous for introducing the verification principle as a criterion for meaning of synthetic propositions, and for dimissing metaphysics as meaningless.





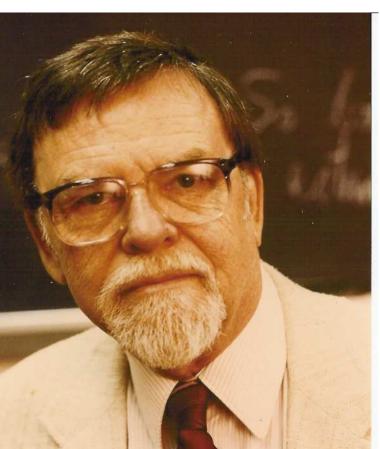


Paul E. Meehl

(1920-2003)

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- <u>Publication List</u> ---<u>Publications by Category</u>
- Curriculum Vitae
- Autobiography (1989)
- ''The Power of Quantitative Thinking'' (Speech given at American Psychological Society, May 23, 1998)



- <u>Taxometrics Home Page</u>
- MAXSLOPE taxometric procedure

Recently added to publications list: #118 A funny thing happened to us on the way to the latent entities.

Web site maintained by Leslie J. Yonce; last updated 11/25/04



The views and opinions expressed in this page are strictly those of the page author. The contents of this page have not been reviewed or approved by the University of Minnesota. **Popper's Naive Falsificationism:**

Knowledge can never be proven but only disproven. Scientific theories are eliminated when they are experimentally falsified.

LFK Methodology of Scientific Research Programmes:

> Science may be rational or not rational, but it is still possible to study scientific research programmes. Is a programme degenerating? What is a programmes' core tenets. What is its protective belt? Has a paradigm shift occurred. Is quasi-empirical heuristic mathematics involved?

1. References

Feyerabend[1981]	Feyerabend, P. <i>Philosophical</i> <i>papers. Vol. 1. and Vol. 2.</i> <i>Realism, Rationalism &</i> <i>Scientific Method</i> (Cambridge 1981).
Kuhn[1962]	Kuhn, T. <i>The Structure of</i> <i>Scientific Revolutions</i> (Princeton 1962).
Kuhn[1963]	Kuhn, T. (Ed.) 'AHQP Archive', UC Berkeley Press, 1961 (in U of M library).
Lakatos[1978]	Lakatos, I. <i>Philosophical</i> <i>papers. Vol. 1 and Vol. 2. The</i> <i>Methodology of Scientific</i> <i>Research Programmes</i> , Ed. J. Worrall and G. Currie (Cambridge 1978).
Lakatos[1999]	Lakatos, I. and Feyerabend P. For and Against Method, Ed. M. Motterlini (Chicago 1999).
Stadler[1997]	Stadler, F. The Vienna Circle: Studies in the Origins, Development, and influence of Logical Empiricism (Springer 1997).

Lakatos Criticism of Feyerabend:

[...] On studying your Against Method I am increasingly worried. To my mind you have a basic weakness in your position which is at least as bad as mine. If you were consistent you would have the courage to be a sceptic. For the first time my knowledge, you now to say that epistemological anarchism cannot be equated with scepticism. If so, I shall prove that epistemological anarchism is double faced. One face is the face of a sceptic, the other is the face of a Kuhnian authoritarian. I am terribly sorry about this, but you either return to complete scepticism or I shall show that you are inconsistent. All that I can promise is that I shall do it with a light touch so that you will be killed and most people will believe that you are being praised ... The word paradigm has entered popular culture and no longer has any meaning.

Feyerabend criticism of Lakatos:

So--forget about rationality and find out what is was that made everyone accept Einstein's research programme and abandon Lorentz's. 'Everyone,' this means a few big shots in England, Germany, France, for the rest are content with the Lorentz transformations and E equals mc² tacked onto it; that is, they are content with some purely formal tricks and would not even know the difference between Einstein and Lorentz. That Lorentz turns out to be not ad hoc at all, but progressive, pleases me very much and cheers me up on an otherwise rainy day. **Herbert Feigl**

- 1. Student of Moritz Schick -1927.
- 2. Young member of the Vienna Circle 1927-1933.
- 3. Visited Harvard from Vienna in 1930.
- 4. Professor University of Iowa 1933-1940.
- 5. Professor U of M 1940-.
- 6. Founded Minnesota Center for Philosophy of Science 1953.
- 7. Strongest supporter of Feyerabend 1957-.
- 8. Died 1988.

Imre Lakatos

- 1. Visited Moscow 1949.
- 2. Detained in Hungarian prison 1950-1953.
- 3. Escaped from Hungary to Vienna and then London 1956.
- 4. Received letters from George Polya encouraging his study of Polya's heuristics.
- 5. Completed Ph.d at Cambridge thesis became book 'Proofs and Refutations' 1959.
- 6. Lecturer and then professor at LSE in London 1960-1974.
- 7. Decided that everyone accepted his antiformalist mathematics. Began studying philosophy of science 1964.
- 8. Frequent visitor to the US and often the U of M 1964-.
- 9. Most well know work 'Methodology of Scientific Research Programmes' published 1969.
- 10. Died 1974.

Paul Feyerabend

- 1. Studied in Vienna secretary of Alpbach summer seminars 1948-1954.
- 2. Studied with Karl Popper at LSE 1952.
- 3. Lecturer in Bristol 1955-1958. Learned physics from David Bohm.
- 4. Temporary appointments at various places U of M, Yale 1957-1959.
- 5. Professor at UC Berkeley 1959-.
- 6. Worked with Thomas Kuhn at UC Berkeley 1959-1961.
- 7. Cooperation and correspondence with Imre Lakatos 1964-1974.
- 8. Frequent visitor to U of M. Often went down to Mayo Clinic for treatment of his war wounds.
- 9. Summer visitor at Stanford 1968.
- 10. Teaching (ideas?) attacked by Ayn Rand and Hubert Dreyfus 1971.
- 11. Published 'Against Method' 1974.
- 12. Half year appointment at ETH in Zurich 1980-.
- 13. Continued developing his sceptical 'methodological anarchism'' theory but mostly in isolation 1975-1994.
- 14. Died 1994.

Thomas Kuhn

- 1. Received Ph.d. in physics from Harvard protege of Harvard president James Conant 1949.
- 2. Assistant professor US Berkeley 1956-1962.
- 3. Head of the Archive for History of Quantum Physics project. Conducted the interviews - AHQP archived published 1962.
- 4. Denied tenure by UC Berkeley philosophy department 1961.
- 5. Professor of philosophy and history of science Princeton 1964-1979.
- 6. Main supporter of Lakatos promotion to full professor at LSE 1968.
- 7. Professor of philosophy and history of science MIT 1979-.
- 8. Died 1996.

Trivialization of the LFK Programme and its Language

Treat Lakatos Philosophy as engineering.

Edinburgh scientists Pease and Colton trivialize Lakatos to solve the problem of automating reason using "a multi-agent approach to automating Lakatos style techniques."

Shift the meaning of Kuhn's technical term 'paradigm'

The word paradigm has entered popular culture and no longer has any meaning.

Forced Feyerabend to call his theory Dadaist

Because of continual misunderstanding Feyerabend changed the name of his theory from 'epistemological anarchism' to 'dadaism'.

1. Secret References

Planck[1932]	Planck, M. <i>Where is Science Going</i> , Trans. J. Murphy (New York 1932).
Int. Coop[1938]	International Institute of Intellectual Co-operation, <i>New</i> <i>Theories in Physics</i> , Warsaw, 1938.
Shockley[1966]	Shockley, W. and Gong, W. <i>Mechanics</i> , Merril Physical Science Series (Columbus Ohio 1966).

Conclusion and Postmortem on LFK Programme and Vienna Circle

- 1. Without philosophy of science there will be no progress in physics.
- 2. The LFK Programme probably ended in the US with publication of Paul Mehl's last paper that he completed just before his death in 2003 in the current issue of 'The British Journal for the Philosophy of Science'
- 3. The LFK programme is no longer taught in Minnesota.
- 4. Feyerabend protege Paul Hoyningen-Heune is active at the University of Hannover, but I think he is having trouble supporting his students.
- 5. Closest scientific laboratory to founders of modern physics that preceded the Vienna Circle is Anton Ertl's computer science lab at Vienna Technical University. Another similar lab at Harvard lost people to industrial research.
- 6. Germany is expanding their universities in the Goettingen/Humboldt model that combines the study of philosophy and sciences as natural philosophy, but German universities are still seen by the establishment as profit centers.