Neither Modernist Nor Postmodernist —
A Third Way

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**Abstract.** In this paper I undertake an analysis of the heritage of Kuhn and Feyera­bend as compared with the main tenets of the logical positivism, and identify the components of logical positivism that directly lead to relativism. I argue that the notion of consensus creates major problems in historiography and philosophy of science, preventing a description of scientific change. I further argue that the concept of creative disagreement should be introduced into studies of science not only as a historical actuality, but also as a basic epistemological and methodological presupposition. I trace the grip of the notion of consensus in social studies of science to Durk-heim's heritage, focusing on the representatives of the Strong Program in sociology of science. I also argue that Thomas Kuhn inherited the same Durkheimian view of society through Ludwik Fleck. Finally, I briefly outline a dialogical alternative to the current historiography—an alternative in which the notion of disagreement plays a fundamental epistemological role.

Let us begin with a fairy tale. Once upon a time there was a Glorious Reign of Reason on Earth. The Golden Age lasted until as recently as thirty to forty years ago, before the “enemies” of reason invaded academia and dethroned the Goddess of Truth. “Reason today is not what it used to be”—this nostalg­ic outcry underlies the statements of the defenders of reason. The collection of essays, *The Flight from Science and Reason* (Gross et al. 1996) offers many examples:

Susan Haack (1996) opened her contribution by describing the intellectual integrity and love of truth, which characterized philosophical inquiry until such thinkers, as the noted philosopher Richard Rorty, joined the bandwagon of antireason. “Until the 70’s”—lamented the sociologist Stephen Cole, “the good Mertonian Sociology of science shielded the objective context of science from sociological analysis, till voodoo Sociologists or in other words, social constructivists, seized control of the field (1996). According to Mario Bunge in the same volume, over the past three decades enemies of learning and rigor infiltrated the hallow walls of academia. Up until the mid 60's such traitors of reasons were promptly ostracized. And Alan Sokal disclosed that the aim of his hoax (1996) was to protest the recent betrayal by academics and humanists of the worthy enlightened heritage of rationality and truth.
In this paper I offer a different perspective on the heritage of 20th century physics and philosophy. Contrary to the claim that reason is not what it used to be, I will argue that reason never was what it appears to have been. Thus, the assumed divide between the defenders of reason who wish to resurrect the ideas of modernity, and post-modernists who supposedly have dispensed with these ideas, is much less substantial than is generally perceived.

This paper is divided into three parts.

In the first part I connect the heritage of Kuhn and Feyerabend with logical positivism, and identify the component of logical positivism that directly leads to relativism. In the second part I analyze the notion of scientific community, used in the social studies of science, and will uncover its Enlightenment roots. Both defenders of reason and its enemies are trapped, I will claim, in the same conceptual predicament. In the third part I outline what I perceive as an alternative that is neither modernist nor postmodernist—it is a “third way.”

Let us begin with the early logical positivism. Logical positivism in its early incarnation was aimed to eliminate the metaphysical (identified with nonsensical) from philosophical discussion. It was used by Philipp Frank, a leading logical positivist, as a weapon against the irrational “metaphysical” trend of the 30s, (50 years before similar postmodernist trend of the 80s), which connected acausality of quantum physics with religion, mysticism and politics. According to Frank, the pre-World War II logical positivism recognized only two sets of legitimate terms—theoretical symbols and observational entities. The observable facts are deduced from theoretical principles of the theory by a long chain of mathematical deductions and operational definitions. It is the urge to take an illegitimate shortcut, to connect the general principles with common-sense terms directly, which introduces the “irrational” and “spontaneous” into quantum physics, and connects physics with religion and mysticism (Beller and Fine 1994, pp. 19-20).

After the war, in a different setting, we encounter a new face of logical positivism. Frank, now a Harvard professor and a founder of the Unity of Science movement, spelled out the necessary connection between science and values, between epistemology and ideology. The previous dyadic scheme of theoretical symbols and observed phenomena was supplemented, following Peirce, by a third, pragmatic dimension which comprises the relations between the scientist and the symbols that he (or she) invents. This ultimately