## A COMPARISON BETWEEN THE POSITIVIST AND THE KUHNIAN HISTORIOGRAPHIES OF SCIENCE

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## Introduction

After science united with technology in the middle decades of the 19<sup>th</sup> century, it became a pivotal force in social and cultural changes. So powerful were the effects of science and technology on the human mind that most of humanity from the East to the West fell prey to its spell. This dominance reached such an extent that philosophy, which hitherto had been romancing with rationalism in one form or another, began to harbor the desire to become scientific.

A scientific philosophy arose in the form of Logical Empiricism. As modernity's last offspring, Logical Empiricism advanced an extremely materialistic philosophy of science, which, from a materialistic perspective, was the climax of the movement of modernity; from the viewpoint of metaphysics, however, modernity was not a step forward, but a step backward; it was not an advance in epistemology, but a deviation; not realistic, but chimerical. Thus, empiricist historiography espoused science and shunned metaphysics, religion, and morality.

In response, Thomas S. Kuhn challenged the empiricist notions and caused the demise of Logical Empiricism and, along with it, modernity. Kuhn unearthed the inevitability of metaphysical elements in epistemology, especially in scientific thinking, and based his historiography not on a supposed, myopic view of science, but on the actual, day-to-day human happenings of the scientific enterprise. Undoubtedly, the Kuhnian historiography is more realistic and humanistic in its character; however, it shares a common characteristic with its empiricist counterpart: it also has no final truths to offer; consequently, it envisions no final destination in sight and leads nowhere. Ironically, whereas at the philosophical level and in the higher circles of academia Logical Empiricism has been swept into the garbage bin of history, a large majority of mankind

continues to harbor some form of the modernistic worldview at the practical level.

The modernistic mindset is particularly acute among Muslims, who have been at the receiving end of foreign worldviews. The primary reason for this predicament lies in our educational systems, with their overwhelming focus on the physical and technical sciences, and in diminishing attention to the human and philosophical disciplines, an inclination itself indicative of the modernistic hold on the Muslim mind. Such a trend results in awarding a lopsided importance to science and losing higher, therefore deeper, understanding of the intellectual world in which we live.

Thus our institutions of higher learning churn out graduates who can program machines, design skyscraping superstructures, and are conversant with everything latest in the arena of technology and gadgets, but do not have any semblance of understanding concerning the issues of higher intellectual disciplines, the philosophies and ideologies that lie at the bottom of their infatuation with technology and their love for science. Given this context, it is imperative that Muslims acquaint themselves with the latest trends in the intellectual disciplines of our times and thereby develop the capacity to discern the state of their own endeavors. Towards this end, the present essay seeks to expose the essential features of the positivistic historiography of Logical Empiricism and its successor and slayer, the paradigmatic historiography of Thomas S. Kuhn.

## Logical Empiricism

Modernity, the seeds of which were sown by Francis Bacon, culminated into the movement of Logical Empiricism (also known as Logical Positivism, Neo-Empiricism, Scientific Philosophy, Inductivism, and Scientism), a school of philosophy of science *en vogue* since the 1920s. It was in 1924 that Moritz Schlick founded the Vienna Circle at the University of Vienna. Schlick was soon joined by Rudolph Carnap, Herbert Feigl, Kurt Gödel, Otto Neurath and Fredreich Waismann, among others. Parallel to the Vienna Circle, Hans Reichenbach founded a similar group, called the Berlin