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Science and Politics in the Philosophy of Science of Popper, Polanyi, and Kuhn

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The names of Karl Popper, Michael Polanyi, and Thomas Kuhn are well-known among scientists and among historians and philosophers of science. Around 1960 they published books that excited considerable discussion because of their independent rejection of the philosophical tradition that uses simple empiricism or positivism to differentiate science from religion, metaphysics, ideology, or pseudo-science. Popper's original field of expertise was scientific education and psychology. Polanyi had a distinguished career in physical chemistry and chemical physics, while Kuhn worked briefly in solid-state physics before turning to the philosophy of science. Their descriptions of scientific practices and values have roots not only in their scientific educations and experiences, but also in the political questions of their time. This paper focuses on political dimensions in the philosophical work of these three twentieth-century figures.