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Philosophy of the Founders: Pragmatism in Economic Geology (1905-1929)

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Although many scientists do not explicitly dwell on the philosophical underpinnings of their work, such considerations are important for keeping their respective fields productive and intellectually vibrant. Economic geologists should perhaps be especially aware of the philosophy behind their practice and discipline given its applied nature, which can entail notable financial, institutional, and scientific implications. Unfortunately, much of the philosophy of science takes physics as its ideal, rendering much of it a poor fit for economic geologists. Thus, following the dictum of Imre Lakatos that "Philosophy of science without history of science is empty; history of science without philosophy of science is blind.", we look at the early years of economic geology since, in the words of Rachel Laudan, after early development, "presumptions about a discipline's aims and methods become internalized and hence more difficult to detect". We present here an overview of the resonance between the views of the founders of the journal Economic Geology and the Society of Economic Geologists with the philosophical tradition of Pragmatism. Originating with Charles S. Peirce and popularized by William James and John Dewey, Pragmatism (especially of the Peircean variety) holds that knowledge emanates from the practice and experiments of a scientific community; as such, ideas should be judged by their consequences, with inquiry (often via hypothesis-forming "abduction") driving the solution of practical problems. As a "critical philosophy of common sense," pragmatism stands in sharp contrast to many other philosophical frameworks for meaning, concepts, and truth. Pragmatist inclinations in the writings of early economic geologists are demonstrated throughout editorials and discussions in the first quarter-century of Economic Geology. Given the philosophical harmony between pragmatism and the founders of Economic Geology, it is recommended here as useful framework for economic geologists to improve their practice and advance scientific progress in the discipline.