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## Peirce, Haack and Info-gaps

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Surprise and change are the way of the world. Philosophers have known this at least since Thales, and practical men knew it long before. Variety and the continual flux of one thing into another is, for Charles Sanders Peirce, a central notion. A very similar conception underlies the information-gap theory of uncertainty and its application to decisions with severely deficient understanding. For Susan Haack, whose treatment of warrant is strongly non-probabilistic, info-gap theory is a natural context. The connection between Peirce, Haack and info-gap theory is explored in this paper.

I will interpret a few ideas appearing in the work of Peirce and Haack — synechism, fallibilism, evolution and warrant — from the perspective of the info-gap theory of decision under uncertainty. Neither Peirce nor Haack had any familiarity with info-gap theory when they wrote the lines which I will analyze. We will nonetheless discover clear conceptual continuity between Peirce, Haack and central info-gap ideas.

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