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**Fuzzy logic and science.**

Seising, Rudolf (ed.), Views on fuzzy sets and systems from different perspectives. Philosophy and logic, criticisms and applications. Berlin: Springer (ISBN 978-3-540-93801-9/hbk; 978-3-540-93802-6/ebook). Studies in Fuzziness and Soft Computing 243, 67-77 (2009).

Summary: In this paper we point out that experimental science is a part of the human adventure to gain knowledge built upon classical binary logic. Great advances have been made under two key premises: observation for objectivity and logic for consistency. But science has focused its main effort on observation and experimentation, while not much attention has been paid to the underlying logic, which is in charge of enabling us to design experiments and understand observations. Moreover, we also point out the existence of a humanization process within science, in which human beings themselves are being introduced into the scientific model – first as an inevitable observer, then as a key actor in world affairs, and finally as a main objective (even intergenerational through environmental concerns). This growing role of human beings in science implies in our opinion a search for alternative logics in order to ensure appropriate consistency. To become the logic of a new science, such a logic should be related to natural language and other standard human models for describing reality, managing information, and producing implementable results in a society ruled by social and economic arguments. In this context, fuzzy logic should play a key role in the next stage of the human adventure aimed at gaining knowledge.

*Keywords:* experimental science; fuzzy logic
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