Belief networks as complex systems

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Abstract- There has been extensive work on understanding belief, from a psychological, philosophical and neurobiological perspective. Meanwhile, artificial intelligence has produced compelling developments that can enrich and update the brain-as-a-computer metaphor and has tried to better represent beliefs as cognitive probabilistic processes.
In parallel, there has been a surge of research in Complexity Sciences, with applications ranging from Medicine to Finance. Some authors have already linked the connected nature of belief to the behaviour of complex networks. We would like to expand this approach to understand belief as a complex system with the main functions of providing a model of the world -including the individual and her surroundings- and producing guidelines for action.
The complex-system perspective allows us to understand some of the properties of belief systems in a comprehensive manner, which many authors have begun to study in isolation. Notably, this provides a framework to study the important phenomena of belief formation and change as processes of emergence and adaptation. In this exploratory paper, we propose an outline for this framework for this study.

Index Terms-

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