

"What is Complexity? And why does it matter?"

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Complex systems consists of diverse, adaptive entities that interact in time and space. The payoff or fitness to an individual depends partly on its own actions, partly on the actions of those with whom it interacts, and partly on aggregate level properties that emerge from the micro level interactions. Complex systems, which include economies, ecosystems, the brain, and middle schools, are capable of producing **complexity**, a term which requires multiple definitions. In this talk, I'll describe several definitions of complexity, make the case for the necessity of multiple definitions, and finally comment on why complexity matters and how it differs from uncertainty, complicatedness, chaos, and hard. And, I'll do this in a lighthearted, intuitive, not overly technical, and relevant way (no really).

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