COMPLEXITY AS METAPHOR

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Complexity has been used extensively to show that computational problems of interest are intractable. This talk surveys a different genre of argument, in which complexity is used allegorically to suggest that an approach or area of scientific investigation is mathematically nasty or conceptually complex. Weillustrate this point by showing how complexity has been used as a metaphor for chaos in dynamical systems, for unfairness in economic theory, and for unbounded rationality in game theory. We also discuss the more subtle role of complexity vis-à-vis the protein folding problem in biology.