

Peer Review

Review of: "Measuring Complexity using Information"

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Review from a Social Science perspective:

1. Complexity Theory:

- Complexity theory, emerging in the 1970s, remains an evolving field that has generated significant debate among scientists.
- Reference to E.O. Wilson's call for empirical data to measure complexity underscores a persistent gap in the field.

2. Challenges in Measuring Complexity:

- The difficulty of measuring complexity in multidimensional systems is acknowledged, highlighting the ongoing challenge in both natural and social sciences.

3. Dynamic Effects and Resilience:

- Klaus Jaffe asserts that complex systems exhibit resilience, where actions intended to achieve specific outcomes can lead to unexpected results. This concept is crucial in understanding social dynamics.

4. Sociological Implications:

- The multifaceted nature of human interactions, which involve layers of beliefs, desires, and intentions, lead to unpredictable behavioral outcomes.
- The stagnation in social sciences, particularly in addressing complex social issues, is of significant concern. I attribute this stagnation to a reliance on early 20th-century theories from the Frankfurt School, and Jacques Derrida theory on Deconstruction of systems.

5. Need for New Approaches:

- I advocate for the need to measure the complexity of social systems to foster new methodologies and creative solutions to contemporary social challenges (e.g., migration, criminal justice, refugees).
- The article suggests that a multidisciplinary approach, integrating insights from evolutionary biology and complexity theory, could enrich social science research and practice.

Suggestions for Deeper Exploration:

- **Empirical Evidence:** Further exploration of specific empirical studies that illustrate the challenges of measuring complexity in social systems could strengthen an argument. For me the question is: Are there recent studies that have attempted to quantify complexity in social interactions?
- **Case Studies:** Incorporating case studies that exemplify the unpredictable outcomes in social systems due to their complexity could provide concrete evidence. For instance, how have certain policies intended to address migration led to unforeseen consequences?
- **Interdisciplinary Collaboration:** Discussing examples of successful interdisciplinary collaborations that have addressed complex social issues could highlight the potential benefits of integrating different fields of study.
- **Methodological Innovations:** Explore current innovations in sociological methodologies that attempt to account for complexity. Are there new models or frameworks being developed that embrace the intricacies of human behavior?
- **Future Directions:** How can future research address the complexities of modern society? What new theories or frameworks could emerge from an interdisciplinary approach?
- There are many questions with no answers, where research is much needed and an opening for new free thinking and observation of human society where complexity in each interaction carries multiple variables: beliefs, desires, preferences, mental maps, cultural conditioning codes, emotions, etc.

Conclusion:

This review articulates the need for a deeper understanding of complexity applied to social sciences and advocates for innovative approaches to address contemporary challenges by suggesting to the author Klaus Jaffe, to continue to expand on empirical evidence, case studies, and interdisciplinary collaborations.

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Declarations

Potential competing interests: No potential competing interests to declare.