Reconceptualizing Knowledge: Evaluating the Ontological Complexity and Emergence of Knowledge in Cognitive Systems

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Abstract

This study examines knowledge as an emergent, adaptive system shaped by the interaction between internal cognitive processes and external factors. Contrary to traditional views of knowledge as a static repository, this framework emphasizes its evolution through self-organizing processes and conceptual reorganization. The research addresses the limitations of computational models in capturing the complexity of cognition, questioning whether they can adequately represent the depth and emergent qualities of cognitive processes. Additionally, it explores how computational approaches might reconcile with the embodied, experiential nature of knowledge. The study adopts an interdisciplinary approach, combining systems theory and cognitive modeling. It focuses on functional variances and state transitions within, how they adapt and organize themselves. The goal is to uncover the ontological complexity of cognition and provide a nuanced understanding of how knowledge emerges, adapts, and reorganizes within cognitive systems and environmental contexts.

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