

The KU Brain, Behavior, & Quantitative Science Program Presents:
Toward a Formal Framework for Creative Cultural Evolution



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This talk will present a theory of in what sense culture evolves, and of how creative processes unfold and fuel cultural evolution. I will present a theory of creativity, referred to as honing theory, which posits that the mind is a second level of self-organized, self-mending, self-reproducing, 'autocatalytic' structure which, like the body, is the hub of an evolutionary process. In this sense, the mind plays the role in cultural evolution that the body or 'soma' plays in biological evolution. Innovation is the generative component of this second evolutionary process, ensuring that continuity is balanced with creativity. I will present an agent-based model of two cognitive transitions en route to the capacity for strategic creativity and cultural evolution. Creative restructuring can be modeled using a quantum cognition framework, and how cognitive networks relax during incubation, and reform anew in a context-sensitive manner, enabling new ideas to emerge. The unique configuration of one's cognitive network is exploited as the individual develops their personal creative style and externalizing one's intermediate (half-baked) thoughts (e.g., as sketches or prototypes) can catalyze the next step of a reiterated honing process. The framework for creative cultural evolution outlined here paves the way for a new understanding of convergent and divergent thought and suggests that ideas may be invented with respect to consensus reality, which reflects the totality of human knowledge to this point, but discovered with respect to a more encompassing reality, which additionally reflects knowledge we have not (yet) attained.

Friday, October 6, 2023
1:00pm – 2:00pm CST
Please join us over ZOOM
Meeting ID: 967 7415 3770
Password: 450953