



Events

WILLIAM WIMSATT

University of Chicago and University of Minnesota

Friday, May 8, 2015

4:00-6:00pm

Gowen Hall 201

Reception to follow in Savery Hall 361

Scaffolding and Entrenchment in Cultural Evolution

Scaffolding occurs when a structure or behavior is utilized to make possible, easier, or faster the attainment of a goal. Generative *entrenchment* is the building of dependent structures, processes, or behaviors (SPBs) on earlier SPBs in a way that facilitates their addition to (and scaffolding) an adaptive structure. This makes the primary SPBs more essential, their loss more severe in its effects, and thus makes entrenched elements more conservative in evolutionary processes. Scaffolding and entrenchment are endemic to the evolution of complex systems in biology, technology, cognition, and culture. They have many consequences, from generating phylogenies, to making history relevant, to affecting more and less likely directions of evolutionary change. They play a role in the evolution of institutions, standards, and conventions. Wimsatt discusses how development and culturally induced population structure generate important differences between biological and cultural evolution and how technology, organizations, and institutions provide both targets for cultural change and formative influences on our cognitive development.

William Wimsatt is Ritzma Professor of Philosophy, Evolutionary Biology, and Conceptual & Historical Studies of Science emeritus at the University of Chicago and Winton Chair of Liberal Arts at the University of Minnesota. He studies the inexact and historical sciences, mathematical modeling, heuristics and biases, mechanistic explanations, complex systems, and the history of genetics and evolution. He applies evolutionary developmental biology to cultural evolution, particularly how norms, technology, social institutions, and science scaffold development and maintenance of knowledge and practice. His work helped make philosophy of biology a central focus in philosophy of science. His book *Re-Engineering Philosophy for Limited Beings: Piecewise Approximations to Reality* (Harvard, 2007) addresses these themes, as do the coedited volumes *Characterizing the Robustness of Science* (Springer, 2012) and *Developing Scaffolds in Evolution, Culture, and Cognition* (MIT, 2013).

This lecture is a keynote for the 2015 Joint Meeting of the **Philosophy of Social Science Roundtable** and the **European Network for the Philosophy of the Social Sciences**. Hosted by the Simpson Center for the Humanities; sponsored by Philosophy, the Science Studies Network, and the Certificate in Science, Technology & Society Studies.

