



**Creativity, Entrepreneurship, and Organizations of the Future Conference**  
**A Centennial Event**  
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Speaker: James G. March, Stanford University

Title: The Search for a Theory of Novelty

Abstract:

Theories of adaptation in organizations combine (a) ideas about the refinement of practice through differential survival and reproduction of ideas, routines, or properties associated with success with (b) ideas about the generation of new ideas, routines, or properties. The theories are better developed with respect to the former than the latter. Models of selection, learning, and diffusion have been used to understand the elementary ways by which organizations ideas, routines, and properties are made more consistent with the demands of an environment. The search for a theory of the generation of new ideas, routines, and properties has been less rewarding. Since adaptive processes of selection, learning, and imitation seem more likely to eliminate novelty than to sustain it, a theory of novelty will probably have to assume processes different from the processes of differential reproduction. These theories of novelty have developed along two main tracks. The first track postulates one or more sources of errors in reproduction: random error, ignorance, mistakes, conflict, craziness, bias. The classic example is random mutation. The classic problem is specifying a process with a greater than nil likelihood of generating a good idea, routine, or property. The second track postulates some kind of combinatorial process by which new elements are produced from the interaction of old ones. The classic example is sexual reproduction and the genetic combinations it produces. The classic problem is specifying precisely the laws of combination. Theories of organizational adaptation have followed both tracks with incomplete success.