

Evolutionary Perspectives

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Evolutionary perspectives contend that complex structures in the social and the biological world have developed over time through causal processes that require little or no foresight but considerable trial and error. Evolutionary thought in organizational analysis comprises two distinct intellectual lines. The first, concerned with organizational change, relies to a considerable extent on a selection logic in which change comes about through the birth and death of individual entities that make up a population of similar things. This account of change contrasts sharply with theories in which omniscient actors perfectly transform individual entities to meet new environmental conditions. The second line of evolutionary thought draws on EVOLUTIONARY PSYCHOLOGY to explain the behavior of human beings in organizational settings in terms of the evolved nature of the human mind and body. The key idea in this more recent second line of thought is that the functions and processes of the human mind stopped evolving long ago when they were adapted to the life of Stone Age hunter-gatherer societies living in the African savannas. According to this theory, because today's physical and social world is so different from that of our Stone Age ancestors, our brains are ill adapted for many life patterns in present-day industrial societies. Management scholars in this tradition are developing detailed knowledge about the properties of the human brain (e.g., the role of emotions and cognitive heuristics in decision making) and how they shape our behavior at work. At the same time, these scholars aim to develop principles for designing work places that are more consistent with and compensate for some of the evolved shortcomings of human nature.

As Donald Campbell pointed out in the 1960s, one can formulate a model of stability and change at a high level of abstraction that applies across a large variety of domains, ranging from culture to biology. On the level of

pure logic, the three processes of variation, selection, and retention (VSR) collectively constitute a complete model for explaining both persistence and change in structures. The two lines of evolutionary thought in organizational analysis differ most fundamentally in terms of the time scales they examine. For evolutionary psychologists, the time scale is hundreds of thousands of years; for theorists of organizational change, the time scale ranges from minutes to hundreds of years. Because of the different time scales used, scholars drawing on evolutionary psychology focus on stable features of the brain (retention), whereas organizational theorists focus more on processes that generate novelty and competition (variation and selection), which bring about change. Over the past three decades, the latter theorists have developed detailed and complementary VSR-based models of change ranging from the micro to macro levels of organization: Weick at the level of the group, Burgelman at the level of the individual organization, and Aldrich and Nelson and Winter at the level of the industry and the economy. Because an evolutionary perspective—in contrast to essentialist ontologies—always involves a population of entities, the appeal and the future promise of this perspective lie in the possibility that change is already built into the basic structure of the theory. Unlike a Newtonian-type of science, the evolutionary perspective belongs firmly to the historical sciences. The ever-growing number of evolutionary-minded scholars will increasingly draw on historical methods to identify more detailed causal mechanisms that are transforming diverse arenas in the social and economic landscape.

See also: SELECTIONISM, POPULATION ECOLOGY

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