

**BRIDGING CONTESTED TERRAIN: LINKING INCENTIVE-
BASED AND LEARNING PERSPECTIVES ON ORGANIZATIONAL
EVOLUTION**

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Abstract

In this paper we present a general model of organizational problem-solving in which we explore the relationship between problem complexity, decentralization of tasks and reward schemes. When facing complex problems which require the coordination of large numbers of interdependent elements, organizations face a decomposition problem which has both a cognitive dimension and a reward and incentive dimension. The former relates to the decomposition and allocation of the process of generation of new solutions: since the search space is too vast to be searched extensively, organizations employ heuristics for reducing it. The decomposition heuristic takes the form of division of cognitive labor and determines which solutions are generated and become candidates for selection. The reward and incentive dimension defines the selection environment which chooses over alternative solutions.

The model we present studies the interrelationships between these two dimensions, in particular we compare the problem solving performance of organizations characterized by various decompositions (of coarser or finer grain) and various reward schemes (at the level of the entire organization, team and individual). Moreover we extend our model – in a still tentative fashion – in order to account for such power and authority relationships (giving some parts of the organization the power to stop changes in other parts), and to discuss the co-evolution of problem representations and incentive mechanisms.