## The network dynamic of absorptive capacity: Distinguishing selection from assimilation

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## Abstract

According to one vision of network evolution organizations are more likely to establish network ties with partners having similar operational experiences. A second vision suggests that interdependent organizations connected by network ties are more likely to assimilate each other's knowledge and develop progressively more similar portfolios of internal activities. In this paper I reframe the notion of absorptive capacity as a micro-relational mechanism to investigate which one of these two visions best characterizes the co-evolution of interorganizational networks and organizational structures in a regional community of health care organizations. I estimate newly developed stochastic actor-oriented models which specify how interorganizational networks affect organizational decisions to change the portfolio of internal organizational activities by adding or abandoning clinical activities. At the same time, the model allows examination of how the common affiliation to internal activities affects decisions to change network ties defined in terms of patient sharing relations between partner hospitals. I find that interorganizational network ties through which information and resources flow are more likely to be established and less likely to be dissolved between organizations sharing the same activities. I also find, however, that organizations linked by network ties are not significantly more likely to develop similar activities. Considered together these results suggest that absorptive capacity operates more strongly through social selection rather than social influence mechanisms activated by vicarious learning. I discuss some of the implications of the study for the evolution of interorganizational fields and communities.