

How Aspirations Shape Cognition

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Aspirations have become a central theoretical construct in research in the Carnegie School tradition. Extent theory, building on Cyert and March (1963), takes a behavioral perspective on an aspiration, viewing it as a trigger, or “master switch,” that invokes a wide variety of firm behaviors (Greve, 2003: 76). This view is consistent with Simon’s claim that when “performance falls short of the level of aspiration, search behavior... is induced” (Simon, 1959: 263). Simon’s earlier work, however, takes a somewhat more cognitive perspective, pointing to a different role for aspirations. Aspirations serve to encode rich performance feedback (this is Simon as computer scientist, e.g., an analogue to digital converter). In particular, Simon (1955: 104) suggests that behavior is based not on the rich pay-off function (e.g., GE’s actual and expected quarterly profits over the prior two years), but rather, a simplified pay-off function (e.g., count of times GE has exceeded expectations). We develop a computational model based on the multi-armed bandit to examine how encoding of feedback based on aspirations shapes cognition. We show that encoding of performance feedback impacts the interpretation of new information, the mental model that results from learning (accuracy of beliefs about policies, confidence, preferences, etc), and behavior (selection of a good policy, exploration, etc). One interesting result from our model is that a high aspiration generates an inherent trade-off: a firm is both more likely to make a good policy choice and is more likely to abandon that choice when faced with disconfirming feedback.