

Investigating Intuition Automatic and Deliberate Processes in Quick Decisions

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Behavioral decision research has intensively explored deliberate processes in decision making. Accordingly, individuals are often viewed as bounded rational actors who, because of cognitive limitations, use simple heuristics that are successful in certain environments (Gigerenzer, 2004; Simon, 1955). In recent work, however, it has been shown that human cognitive capacity is less severely limited than has previously been assumed. When automatic processes are considered, one finds that cognitive capacity is not a binding constraint for many decision problems (Glöckner, 2007, 2008; cf. Kahneman & Frederick, 2002). It is argued that in order to describe decision making comprehensively, models have to account for the interaction between automatic and deliberate processes. Based on the parallel constraint satisfaction (PCS) approach to decision making (Holyoak & Simon, 1999), the PCS model is delineated, which specifies this interaction (Glöckner & Betsch, 2008). The model shifts the bounds of rationality considerably and has further evolutionary advantages. Evidence from empirical studies on different probabilistic inference decisions shows that choices, decision times, and confidence judgments are in line with the predictions of the PCS model (Glöckner & Betsch, in press-b). Corresponding results have been found in risky decisions (i.e., standard gambling decisions, Glöckner & Betsch, in press-a). The findings speak against the application of simple heuristics (i.e., Priority heuristic, Brandstätter, Gigerenzer, & Hertwig, 2006). It is argued that intuitive processes like the ones postulated by the automaticity-based PCS model allow individuals to approximate expected utility models (i.e., cumulative prospect theory, Tversky & Kahneman, 1992) without calculating weighted sums of utilities and probabilities.

The core background papers for the talk are (free of charge) available at SSRN:
http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=905123

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