

# Solving Complex Legal Cases Using the Intuitive System

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## **Aim**

Two major challenges in legal decision making arise from the usually high complexity of the cases and from the high level of uncertainty caused by incomplete or missing information. In most cases it is not possible to apply Bayesian probability calculus, and legal standards prohibit the application of fast-and-frugal heuristics. Based on a connectionist approach to decision making, Simon (2004) argued that decision making in legal decisions is governed by coherence-based reasoning. The underlying parallel constraint satisfaction processes, which belong to the intuitive system, are unconscious and enable individuals to quickly integrate huge amounts of information (Glöckner & Betsch, 2006; 2007). The aim of this work was to test the parallel constraint satisfaction approach to decision making in complex legal cases using U.S. official jury instructions, and to manipulate the standard of proof, the predictive power of evidence and the framing of the legal case.

## **Method**

In both experiments a repeated measurement design was applied. Participants were first presented with social situations, and rated their agreement with statements about the predictive power of certain pieces of evidence. After a filler-task, they were instructed to take over the role of a judge (or arbitrator), and were presented with a complex legal case. The students had to decide whether the accused was guilty of carrying out a crime or not. After their decision, participants again rated their agreement with the statements about pieces of evidence presented in the pre-test. In the first study, the standard of proof and the predictive power of evidence were manipulated, and in the second study the standard of proof and the framing of the case (arbitration vs. criminal case) were.

## **Results**

As expected, it was observed that ratings of the evidence significantly differed between pre- and post-test. In line with Simon (2004), strong coherence shifts were observed: evidence supporting the emerging decision was more strongly accepted in the post-test and contrary evidence was devaluated. Furthermore, it was found that the standard of proof manipulation had a strong effect on the conviction rate, whereas the manipulation of the predictive power of evidence had only a weak effect.

## **Conclusion**

The data replicate and extend findings from Simon (2004) and lend further strong support to the parallel constraint satisfaction approach to decision making. As argued by Glöckner and Betsch (2007), individuals are very efficient in combining deliberate and intuitive/automatic processes to understand and solve complex decision tasks. Most importantly for a legal-dogmatic perspective, it could be shown that the current U.S. official jury instructions are functional in that they influence the conviction rate in the intended direction; this was not the case for many official jury instructions used in the past (Kagehiro, 1990).

## Short Abstract

### Solving Complex Legal Cases Using the Intuitive System

Two major challenges in legal decision making arise from the usually high complexity of the cases and from the high level of uncertainty caused by incomplete or missing information. In most cases it is not possible to apply Bayesian probability calculus, and legal standards prohibit the application of fast-and-frugal heuristics. Based on a connectionist approach to decision making, Simon (2004) argued that decision making in complex decisions is governed by coherence-based reasoning. The underlying parallel constraint satisfaction processes, which belong to the intuitive system, are unconscious and enable individuals to quickly integrate huge amounts of information (Glöckner & Betsch, 2007). Elaborating on this approach, two studies were conducted in which individuals were presented with a complex legal case. In the first study, the standard of proof and the predictive power of evidence were manipulated, and in the second study, the standard of proof and the framing of the case (arbitration vs. criminal case) were. The data replicate and extend findings from Simon (2004), and support the parallel constraint satisfaction approach to decision making. Additionally, it could be shown that U.S. official jury instructions influence the conviction rate in the intended direction.