

The constructive/non-constructive duality and dual process theory

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We can observe that someone is cheating us by seeing him take more than his agreed proportion of a benefit to be shared out. Such an observation, from "below", gives us a constructive justification that some specific person is cheating us: we can name or point out this cheater. In contrast, we can infer in non-constructive reasoning, "from above", that someone or other we cannot name or point out is cheating us. Constructive thought depends primarily on System 1 and non-constructive thought more on System 2. Our ability to identify the cheater in the constructive case may even be found in a domain-specific module, though the arguments for innate massive modularity have been weak. Our capacity for non-constructive reasoning rests on general logical abilities that are not domain specific. This general capacity is useful in a number of ways. One of these is inferring a conditional from disjunction. For the ordinary natural language conditional, it cannot be logically valid to infer "if not-p then q" from "p or q". This inference is only valid for the material conditional, and there is very strong evidence that the ordinary conditional is not the material conditional. It would be obviously invalid to infer "if not-p then q" from "p or q" after inferring "p or q" from p constructively. However, we are sometimes pragmatically justified in inferring "if not-p then q" from "p or q" when these are assertions. We can also sometimes be justified in making this inference in our beliefs. Such an inference can rely on non-constructive reasoning in System 2.