The Relevance of Logic to Human Reasoning

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My project investigates the question "what is a correct characterization of the relationship between logic and human reasoning (or thinking)?" from a philosophical perspective. Immanuel Kant and Gottlob Frege argue for a single, objectively valid logic the laws of which are taken to be laws of thought—they are normative, necessary, and universal. Their endorsement of the central status of logic in actual reasoning, however, has been challenged by philosophers such as Gilbert Harman, who argues that logic has no special relevance to human reasoning because logical rules do not describe how we actually make belief revisions. More recently, Keith Stenning and Michiel van Lambalgen further argue that logic must not be conceived of as normative rules, if it is to have special relevance to reasoning. The difficulty of the problem seems to lie in understanding the issue of normativity of logic and reasoning. Does it make sense philosophically that logic should impose a strong normative requirement for reasoning, given that relevant psychological experiments show how human reasoning deviates from rules of logic? I will argue that we might be able to understand the debate better by investigating whether there are a priori logical principles or basic logical notions that human beings cannot rationally doubt, a line of thought that Thompson, Putnam, and Leech endorse.