## VAN FRAASSEN AND A DEFENSE OF INFERENCE TO THE BEST EXPLANATION

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## ABSTRACT

Inference to the best explanation (IBE) is an inductive argument type that takes advantage of the fact that explanatory considerations serve as an epistemic guide to believing what is the case. Bas van Fraassen has presented a systematic series of three arguments against the justification of IBE. In this dissertation, I first describe and explain the machinery of IBE and show how the justification and defense of scientific realism is crucially dependent on the justification of IBE. I then carefully analyze and explicate each of van Fraassen's arguments: the argument from the bad lot, the argument from indifference, and the Dutch book argument against IBE. In order, I proceed to argue that each of these arguments fails. Although each of these arguments fails independently of one another, an important part of my overall strategy relies on the existence and tenability of a sufficiently probabilized version of IBE, i.e. a version which combines IBE with Bayesianism.