

## **Social Inquiry and Bayesian Inference**

Fairfield and Charman provide a modern, rigorous and intuitive methodology for case-study research to help social scientists and analysts make better inferences from qualitative evidence. The book develops concrete guidelines for conducting inference to best explanation given incomplete information; no previous exposure to Bayesian analysis or specialized mathematical skills are needed. Topics covered include constructing rival hypotheses that are neither too simple nor overly complex, assessing the inferential weight of evidence, counteracting cognitive biases, selecting cases, and iterating between theory development, data collection, and analysis. Extensive worked examples apply Bayesian guidelines, showcasing both exemplars of intuitive Bayesian reasoning and departures from Bayesian principles in published case studies drawn from process-tracing, comparative, and multi-method research. Beyond improving inference and analytic transparency, an overarching goal of this book is to revalue qualitative research and place it on more equal footing with respect to quantitative and experimental traditions by illustrating that Bayesianism provides a universally applicable inferential framework.

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# Social Inquiry and Bayesian Inference

Rethinking Qualitative Research

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## A Note on the Cover

The cover illustration is based on the oil painting *Le Monde de Images* ("The World of Images") by the well-known Belgian artist René Magritte. Both authors had the pleasure of viewing this painting at an exhibition at the San Francisco Museum of Modern Art in 2018 while writing this book. Taken with its luminous color, elegant simplicity, and a composition at once calming and confounding, but with Bayesianism very much on our minds, we were also struck by parallels between intimations of Magritte's canvas and themes explored in our book.

Magritte's surrealist paintings often involve playing with perception and challenging viewers' preconceptions, highlighting the slippery nature of experience and memory, while evoking what Magritte called the "essential mystery of the world." Here, he both embraces and problematizes the painterly emphasis on surface appearance and what critic Clement Greenberg referred to as "the integrity of the picture plane," while inviting viewers to ponder questions of perception versus reality, abstraction versus representation, veracity versus verisimilitude, knowledge versus doubt, and the external versus the internal. As Magritte himself wrote of his motif, "the pane breaks and with it the landscape that was visible behind it and through it. If what is at least possible should truly happen one day, I would hope that a poet or philosopher ... would explain to me what these shards of reality are supposed to mean." Indeed, Bayesian inference also endeavors to construct possible representations of an underlying if ultimately elusive world from limited observations and fragmented pieces of evidence, which we too might regard as "shards of reality." Reflecting on his art, Magritte remarked: "This is how we see the world. We see it outside ourselves, and at the same time we only have a representation of it in ourselves." As Bayesians, we would concur.