



**Prakash Mondal**

# **Natural Language and Possible Minds**

How Language Uncovers  
the Cognitive Landscape of Nature

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Natural Language and Possible Minds

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# Natural Language and Possible Minds

*How Language Uncovers the  
Cognitive Landscape of Nature*

By

Prakash Mondal



BRILL  
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*To*

*Mahamaya, my divine mother*





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## Preface

This book is part of an attempt to understand the nature and form of mentality in a vaster range of beings than is currently acknowledged in mainstream thinking in cognitive science. While the nature of human mentality is not under suspicion, when it comes to the exploration into the nature of other kinds or types of mentality people often raise eyebrows. Set against this backdrop, this book tries to trace the very foundations of minds and, in doing so, seeks to project a vista within which a tapestry of different types of minds can be delineated. Perhaps the only way the whole project here differs from other avenues of thinking in certain quarters of cognitive biology and cognitive semiotics is that this book attempts to project a picture of distinct types of mentality across organisms by drawing up a formalism extracted from natural language within which the abstract components of mentality in biological substance-independent terms can be described. This formalism is thus descriptive rather than explanatory. The formalism tries to grapple with the problem of describing the structural forms of possible types of mentality across the organismic spectrum. This is necessitated by consideration of the point that predicting or determining what other non-human organisms (can) do on the basis of what they have in their inner realms is still beyond our grasp. This is faintly understood because we do not yet get a handle on the question of whether other non-human species have anything approximating to mentality. Hence a more fruitful way of approaching the forms of possible types of mentality across the spectrum of various organisms or species is to first settle the descriptive problem of expressing what there exists that can be individuated inside the inner realms of non-human beings. With this goal set, the book undertakes to understand possible minds from natural language. Rather than injecting an anthropomorphic bias into an otherwise exploratory account, natural language turns out to carry certain advantages that have never been harnessed. Additionally, it emerges that this has surprising consequences for a description of the type of mentality we can attribute to machines. The nature of computation vis-a-vis natural language is also explored in this connection. Overall, this lends credence to the idea that natural language has the limitless potential for the task of unraveling many as yet unresolved riddles and puzzles surrounding language, minds and computation.

Nevertheless, I also think there is a danger inherent in any attempt at uncovering the mental world of the other—an issue which deserves careful consideration as well as caution. But as the discussion proceeds, I've tried to show that some, if not all, of the concerns can be adequately addressed if the sources

of the confusion and vagueness are identified. The problems are not simply theoretical; they are empirical too. In fact, one of the underlying assumptions adopted in the current work is that the cognitive landscape of nature is far more variegated and kaleidoscopic than we may ever conceive in the safest corners of our chambers of intellectual inquiry. No matter how the details of the proposal presented here unfold, one thing that seems clear is that even a description of distinct types of possible mentalities grounded in the natural world will require a stupendous amalgamation and aggregation of facts, ideas and insights drawn from various modes, fields and aspects of intellectual inquiry. This book is a mere fragment of this rather daunting venture.

Finally, I invite readers of all stripes to explore the book and decide for themselves what they need to seriously understand about minds in nature and the relation of natural language to minds.

*05 January, 2017 P.M.  
Hyderabad*