

The Cognitive Systems Monographs (COSMOS) publish new developments and advances in the fields of cognitive systems research, rapidly and informally but with a high quality. The intent is to bridge cognitive brain science and biology with engineering disciplines. It covers all the technical contents, applications, and multidisciplinary aspects of cognitive systems, such as Bionics, System Analysis, System Modelling, System Design, Human Motion, Understanding, Human Activity Understanding, Man-Machine Interaction, Smart and Cognitive Environments, Human and Computer Vision, Neuroinformatics, Humanoids, Biologically motivated systems and artefacts Autonomous Systems, Linguistics, Sports Engineering, Computational Intelligence, Biosignal Processing, or Cognitive Materials as well as the methodologies behind them. Within the scope of the series are monographs, lecture notes, selected contributions from specialized conferences and workshops, as well as selected PhD theses.

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Emanuele Bardone

### Seeking Chances

One of the most distinguishing abilities that human beings display is the ability of turning almost everything into a clue to make a problem affordable in relation to what one knows and, most of all, to what one does not know. That is what characterizes humans as chance seekers. A poor pattern of reasoning and even our ignorance may help us make a decision, and eventually solve a problem. This is the rationale of biased rationality. However, not everything leads us always to a good decision. Some people are not satisfied with weak arguments or it-is-just-so strategies. They want something better. This second attitude points to a different form of rationality that takes advantage of the idea of distributed cognition. Basically, human beings improve their survival strategies by building cognitive niches capable of delivering potentially ever more symptomatic information. It is through various manipulations of the environment that we gain new and more reliable chances which can be used to de-bias our rationality. Through the laborious activity of cognitive niche construction, we come up with situations in which we are better afforded by our environment, and thus biases or fallacies cease to be appealing.

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From Biased Rationality  
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