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Notes on the Negative Side of Rationality: Critical Principles

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A central but neglected aspect of rationality is its negative aspect: knowledge of error. Knowledge of error warrants and motivates criticism, so it constitutes knowledge of principles of criticism, or *critical principles* (Bickhard, 1991, 2001a, 2002; Bickhard & Campbell, 1996a). I will outline a model of rationality, grounded essentially in an interactive, agent based model of representation and cognition (Bickhard 1993, 1996, 1998a, 1998b, 2001b; Bickhard & Campbell, 1996b; Bickhard & Terveen, 1995), that gives central place to such negative knowledge, and show how it solves and dissolves multiple problems. It puts creative interaction and problem solving at the center of the nature of mind, rather than portraying reason trying to rule the passions. It is a non-foundationalist model, thus avoiding the problem of the rational warrant for the foundations of rationality. Nevertheless it is self-consistent in the sense that being rational is itself rational, but without having to demonstrate that rationality leads closer to truth. It accounts for logic as a natural development of rationality given reasonable additional assumptions, such as that of language and of the possibility of conscious reflection, and, thus, renders logic as a rational creation rather than the essence of rationality.

In this talk, I will focus on logic as rational construction rather than as the center of rationality. Historically, logics have been developed of greater and greater power, but no logic can construct a logic more powerful than itself. If logic were the essence of rationality, therefore, the history of logic would necessarily be arational. In this model, logic emerges as an inherently wide, natural domain of possible error and of means of avoiding those errors, and thus avoids that problem, as well as the many other problems of foundationalism. This model also naturally situates higher order logics and modal logics within the broader framework. I will not be addressing the technical details of these points, but will outline the basic perspective.

If there is time, I will also outline another realm of advantages of this model of rationality: It dissolves several problems in the philosophy of science, such as the perplexities involved in

notions of progress, of realism and truth, and of induction.

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