

NARS as a Normative Model of Cognition

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Abstract: In this paper, NARS (Non-Axiomatic Reasoning System) is discussed in the context of Cognitive Science. NARS is an artificial general intelligence system designed under the assumption that the system usually has insufficient knowledge and resources with respect to the problems to be solved, and must adapt to its environment. Since the human mind was evolved under the same restriction, this normative model shows many human-like properties. In this paper, NARS is used to reinterpret several well-known results in cognitive science, such as Wason's selection task, the Linda problem, and U-shaped learning. These results cannot be explained by traditional normative models, while now they can be handled by NARS in a unified way.