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# How to Explain the Automaticity of Object Recognition

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## Abstract

Capacities for object recognition are capacities to either categorize a perceived object as belonging to a conceptual category (e.g., being a cat) or identify it as being a specific individual (e.g., being Mr. Whiskers). There is wide agreement that at least some of these capacities operate automatically. Empirical studies have determined that recognition can occur as quickly as within 200ms after stimulus detection. This short time frame excludes any possibility for subjects to exercise conscious control over the development of the process. Though several detailed models have been advanced to explain how recognition processes work (especially in cases of face and object recognition), no adequate explanation of their automaticity has been offered. Here, we advance a proposal according to which recognition is automatic because it is the result of an associative processing mechanism. In particular, we propose that recognition implements a competitive learning mechanism to solve the match-selection problem.