

# Quantum Theory, the Chinese Room Argument and the Symbol Grounding Problem

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In P. Bruza et al. (2009) (eds.) QUANTUM INTERACTION-2009  
*Lecture Notes in Artificial Intelligence*, vol. 5494, pp. 174-183  
Springer-Verlag: Berlin, Heidelberg

**Abstract.** I offer an alternative to Searle's original Chinese Room argument which I call the Sanskrit Room argument (SRA). SRA distinguishes between syntactic TOKEN and semantic SYMBOL manipulations and shows that *both* are involved in human language understanding. Within classical mechanics, which gives an adequate scientific account of TOKEN manipulation, a symbol remains a subjective construct. I describe how an objective, quantitative theory of semantic symbols could be developed by applying the Schrodinger equation directly to macroscopic objects independent of Born's rule and hence independent of current statistical quantum mechanics. Such a macroscopic quantum mechanics opens the possibility for developing a new theory of computing wherein the Universal Turing Machine (UTM) performs semantic symbol manipulation and models *macroscopic* quantum computing.

**Key words:** Artificial Intelligence; Chinese Room Argument; Symbol Grounding Problem; Sanskrit Room Argument; Quantum theory; Universal Turing Machine; Topology; Exotic manifolds