

non-conscious organism otherwise indistinguishable in its other mental functions and behavior, e.g., memory and language.

**CS1-1.3. *Redcar Rocks: Strong AI and Panpsychism.*** J. M. Bishop, Department of Cybernetics, University of Reading, Whiteknights, Reading, Berkshire, United Kingdom. E-mail: J.M.Bishop@Reading.ac.uk.

The claimed observer relativity of computational states forms the basis of both Putnam's 1988 attack on Functionalism and Searle's 1990 attack on Computationalism. The argument to be presented herein, being a simple extension of that originally given by Putnam, is not significantly original but appears to foil the main criticisms of Putnam and Searle's approach (see Chalmers et al., 1994), and hence has critical implications for our understanding of consciousness. In this paper, instead of seeking to emulate Putnam's claim that, everything implements every Finite State Automata (FSA), I will simply establish the weaker result that everything implements the specific FSA [Q], when executing program (p) on input (x). Then, equating  $Q(p,x)$  to an AI program passing the Turing Test, I will show that conceding the Strong AI thesis for Q (crediting it with mental states and consciousness) opens the door to a vicious form of panpsychism whereby all open systems, even rocks and cups of tea, have conscious experience.

**CS1-1.4. *Free Will and the Readiness Potential.*** Gilberto Gomes, CPRJ, R. Lopes Quintas 100-605-I, 22460-010 Rio de Janeiro, Brazil. E-mail: ggomes@ax.apc.org.br.

The readiness potential precedes voluntary acts by about half a second. According to Libet, free will does not initiate the neural process that leads to action but is able to control it. While disagreeing with many points of his interpretation of results, we should agree that voluntary acts are nonconsciously initiated. Voluntary acts are felt to have been determined by a conscious decision. This seems to conflict with the idea that all physical events are caused by other physical events. However, choice, decision and action can be considered as part of the natural world. All we need to assume is a decision system that can represent actions before their performance and select them according to its internal state. Free will is not an illusion because free acts are not caused by external factors. From the first-person perspective, I am the cause of my actions. But what am I? According to compatibilism, the free agent is a brain system capable of choice, decision and action. The readiness potential will be seen as an expression of it. We should distinguish the intention to act in the future, the intention to act now and the irrevocable decision to act now. This causes the action before we become conscious of it. A distinction is proposed between deliberate and non-deliberate voluntary acts. A testable prediction is that the RP should be longer in the case of deliberate actions. Non-deliberate voluntary acts manifest an intermediate degree of free will, since they and the possibility of doing otherwise were not consciously considered before starting their performance.