

A hybrid cognitive architecture based on the relationship between consciousness, memory and attention

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Abstract: To discern what characteristics an information processing architecture should have to achieve the full range of human cognitive tasks, it might be helpful to explain the relationships between consciousness, memory and attention, which could operate independently as well as dependently. In this case consciousness would be a subjective awareness of momentary experience and also have the characteristics of an operating system performing control and consolidation information processing , Mental architecture could be composed of hierarchical parallel processing, the recursive embedding of models, and the high-level model of the system itself. Modules as processors in the hierarchical parallel processing architecture both employ and are based on the relationship between consciousness, memory and attention in a basic common mechanism which should be well enough understood to be used in an explanation of mental architecture. Some theoretical and empirical evidence instanced in the areas of metacognition and language processes