

The representationalist assumption.

Symbol structures are internal representations of external reality. They are made up of symbols, and are operated on by rules, search, and other psychological processes. Symbolic representations have a constituent structure, in that the meaning of a given representation is a function of the meaning of its constituent parts.

Disputed by

"The Front-End Assumption Is Dubious,"
Map 1, Box 74.

Notes:

- Symbol structures in this sense are often referred to as mental representations or classical representations.
- For more on this classical AI theory of representation, see Newell and Simon (1976), Fodor (1975), and Pylyshyn (1984).
- Much of the debate between connectionism and classical AI is focused on the issue of mental representation. One of AI's major charges against connectionism is that connectionist networks can't model constituent structure. See the "Can connectionist networks exhibit systematicity?" arguments on Map 5.

