Abstract
Constructing spatial mental models from verbal descriptions. One experiment investigated the mental representation of spatial descriptions. Determinate and indeterminate descriptions about spatial relations among several objects were presented to subjects, sentence by sentence with a self-paced reading task. Immediately after reading each description, they had to verify whether an explicit or an implicit relation between two of the objects was true or false. The results showed that reading times of critical sentences were faster for determinate descriptions than for indeterminate descriptions. Furthermore, explicit statements were verified more accurately in the case of determinate than indeterminate descriptions. The comparison between explicit and implicit statements of determinate descriptions produced inconclusive results. The results suggest that readers construct mental models from spatial descriptions, and that both superficial and content-based information is incorporated in the representation.