

Problem Solving

Psychology

How problems are represented and solved, and what blocks solutions.

Key concepts in the psychology of problem solving.

Concept	Means
Problem space	All states between start and goal
Algorithm	Guaranteed but exhaustive
Heuristic	Fast, not guaranteed
Means-end analysis	Reduce the difference to the goal
Functional fixedness	Seeing only an object's usual use
Mental set	Reusing a strategy that no longer fits
Insight	Sudden restructuring of the representation

The candle problem demonstrates functional fixedness: people fail to see the tack box as a shelf because it is presented as a container.