

Heuristic Design

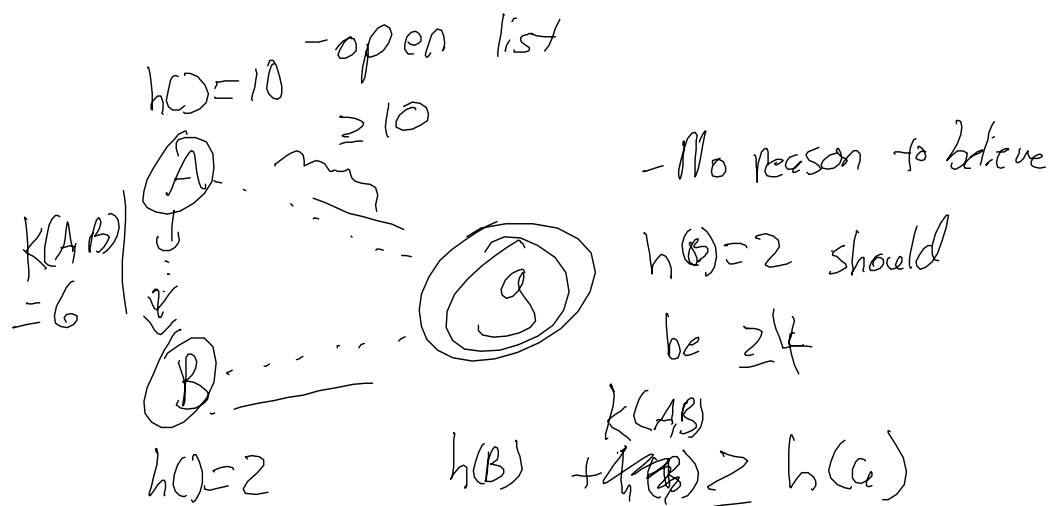
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Many ways to evaluate heuristic

- Admissibility
- Informedness: $\frac{\text{size of search space}}{\text{number of nodes explored using } h()}$
- Allows direct heuristic comparison
- $h_a(n) \leq h_b(n) \leq h^*(n) \Rightarrow h_a(n) \text{ dominates } h_b(n)$

Consistency

- Overestimation is bad.
- What happens when you grossly underestimate?
- Shortcuts still happen!



$$h(A) - h(B) \leq K(A, B)$$

Monotonicity

- Always increasing/decreasing

