

## Goals

William hears a novel word, and generates an inquiry goal

"that's a dax"

I want to know what "dax" means!



## Hypotheses

He generates a set of possible word-object mappings

Which one is a dax?



$p = 0.4$   
"dax" — 

$p = 0.4$   
"dax" — 

$p = 0.2$   
"dax" — 

## Queries

He considers possible actions (queries) to learn what "dax" means

(A)

Which one is the dax?

(B)

Is that a dax?



(C)



## Answers

He considers the possible answers for each query

(A)

Which one is the dax? → **this is the dax**

(B)

Is that a dax? → **yes**  
→ **no**

(1C)

What's that called? (nonverbal) → **this is a dax**

(2C)

Is that a dax? (nonverbal) → **yes**  
→ **no**

William reasons about the hypotheses, queries, and answers to select the "most useful" query that leads to the largest decrease in his uncertainty

(A)

Which one is the dax?

(B)

