Stimulus generation procedure

Sample house characteristics from distribution

Square feet: N(300, 100)
Waterfront: P(yes) = .2, P(no) = .8
Neighborhood score: N(5, 3)

House price is calculated as a linear combination of features

Price = X1 * square feet + X2 * waterfront + …

Add bias to generate recommendation mean

Recommendation price low bias:
10% of the house price is added or subtracted

Recommendation price high bias:
70% of the house price is added or subtracted

Generate recommendations by sampling from a normal distribution with recommendation mean and different SDs.

High agreement (low noise)
N(recommendation mean, SD = 3%)
Low agreement (high noise)
N(recommendation mean, SD = 10%)

Practice trials

Imagine you are a real estate agent, you will see some houses and guess their price

House 1
Sq feet: 300
Waterfront: no
Neighborhood score: 7/10
…

Your price:

The real price was X.

You overestimated the price by Y

House 2

…

Critical trials

Now you won't see feedback about your performance, but you will get some advice

House 11
Sq feet: 300
Waterfront: no
Neighborhood score: 7/10

Your price:

Here are the prices given to this house by (1, 5, 10) (real estate agents, algorithms)

Zillow estimate: X_1
Google House: X_2
Meta Home Price Algorithm: X_3

(X_i varies depending on agreement and wrongness of recommendation)

House 11
Sq feet: 300
Waterfront: no
Neighborhood score: 7/10

Do you want to adjust your estimated price?

Your new price: