COGNITION

Symbolic Distance Effect
Semantic Congruity Effect

Fall 2012
The SYMBOLIC DISTANCE EFFECT in cognition is essentially the magnitude comparison effect from perception but in cognition it is concepts of magnitude, rather than perceptual experience, that is being considered.

THE TASK:
1. present subjects the names of 2 things that have different values on some dimension
   - e.g., size, intelligence, time, space
2. vary the difference between the 2 values, from low to medium to high
   - e.g.,
     - animals that vary in SIZE
     - people who vary in INTELLIGENCE
     - historical events that vary in TIME
     - cities that vary in SPACE
3. subjects decide which of the 2 things is larger (smaller) on the dimension
4. press a button as quickly as possible indicate a response

SIZE:
- DOG vs. CAT  as compared to  DOG vs. Elephant

NORTHNESS:
- L.A. vs. San Francisco  as compared to  L.A. vs. SEATTLE

INTELLIGENCE:
- Obama vs. Romney  as compared to  Bush vs. Gore
Semantic: Of or relating to meaning, especially meaning in language.

Congruity: the state of being congruous (Corresponding in character or kind; appropriate or harmonious)

The **SEMANTIC CONGRUITY EFFECT** in cognition is like the semantic distance effect but rather than semantic distance being the important variable it is the “fit” of the to-be-judged dimension with the stimulus provided that is the important variable.

**Illustration:**
1. present subjects the names of 2 things that have different values on some dimension
e.g., size, intelligence, time, space
2. vary the question asked of the 2 values, from one that is more appropriate to one that is less appropriate.
e.g., for animal SIZE (which is SMALLER/MORE MASSIVE)
   For human intelligence (SMART/DUMB)
   For historical events (MORE RECENT/MORE ANCIENT)
   For geographic space (NEARER/FURTHER APART)
3. subjects decide which of the 2 things is the better exemplar
4. press a button as quickly as possible indicate a response

**MASSIVENESS (SIZE):**  
FLEA vs. MOUSE versus HIPPO vs. ELEPHANT

**TININESS (SIZE):**  
FLEA vs. MOUSE versus HIPPO vs. ELEPHANT

**BOLD** comparison is faster, **UNDERLINE** is the correct choice of the pairing
Key Terms (partial list)

- Magnitude Comparison Effect
- Symbolic Distance Effect
- Semantic
- Congruency
- Semantic Congruency Effect