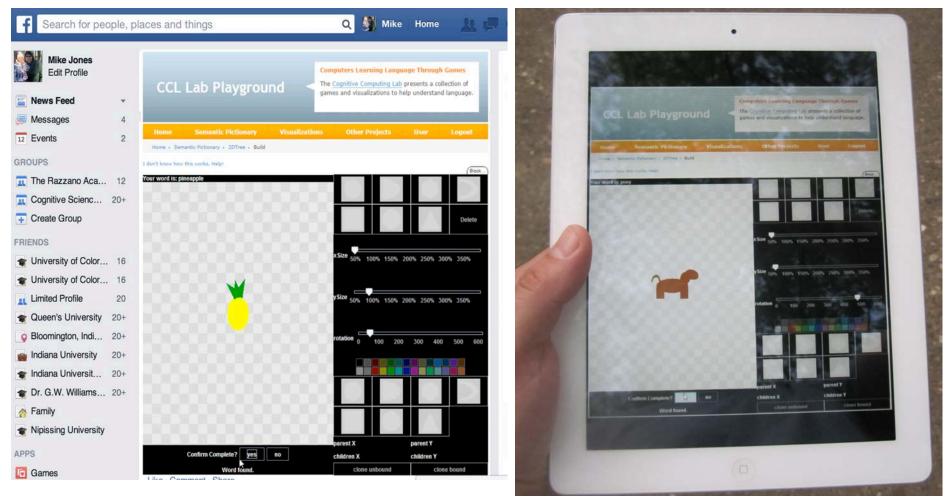


- Humans and Information:
  - 1. Humans have been "designed" to efficiently compute similarity, abstract knowledge, make inferences, and generalize to novel domains
  - 2. We are both the producers and consumers of language
  - 3. Small data  $\rightarrow$  Big Data
  - 4. Translational cognitive science

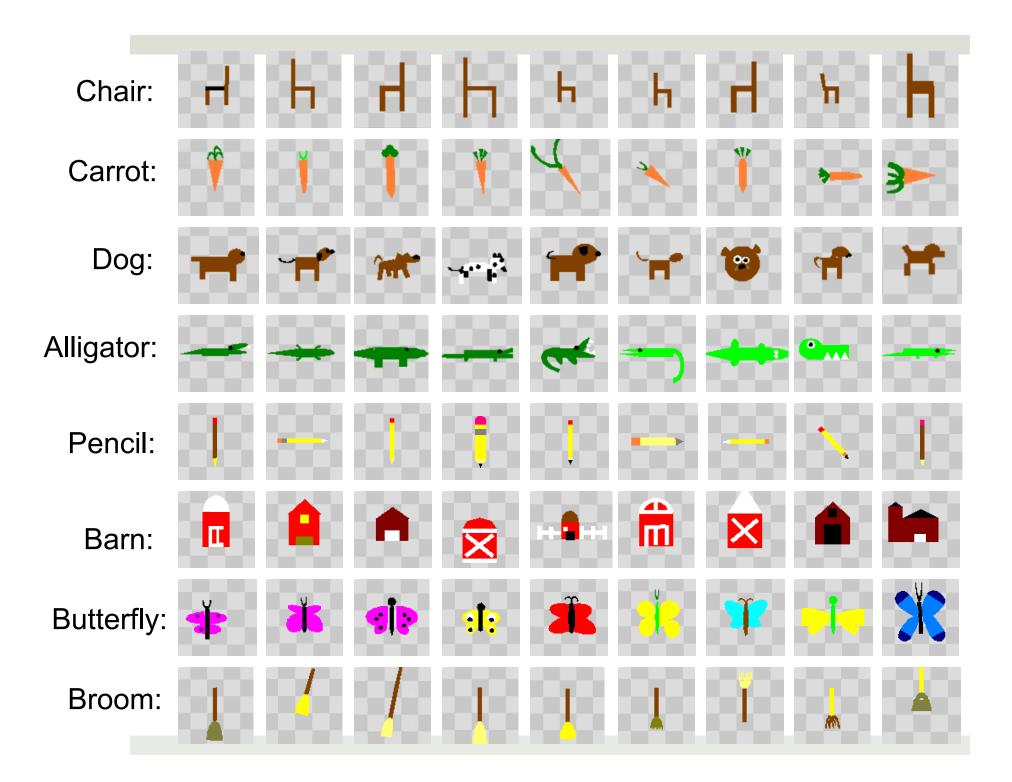
- Integrating linguistic and perceptual information
- Clinical data mining w/ cognitive models
- Model-based optimal teaching and learning
- Mining the neuroimaging literature
- Translational cogsci from lab to real world:
   *"Decontamination" of review ratings*

# **W** NSF Semantic Pictionary Project:

#### www.SemanticPictionary.org



Jones, 2014; Jones & Kievit-Kylar, 2013; Kievit-Kylar & Jones, 2011



#### Absolute Judgments are Relative ПП

We are *terrible* at rating absolute magnitudes

- Regardless of task, judgments of absolute magnitude of a stimulus, experience, of feeling, are inherently contaminated by relative information from the sequence of judgments prior to the current one
- Example: Mass of a weight at the gym

#### Parducci (1968): Moral judgments on 1-10 scale

- (1) Stealing a towel from a hotel (1\*) Testifying falsely for pay
- (2) Keeping a dime you find on ground
- (3) Poisoning a barking dog

- (2<sup>\*</sup>) Using guns on striking workers
- (3<sup>\*</sup>) Poisoning a barking dog

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# $\Psi$ Yelp and Amazon:

