Today

• Class mechanics
  – Experimetrix (http://experimetrix2.com/ucsd/)
  – Reading presentation 1: R12 (Jan 31)

• HW1

• HW2
  – Questions
  – Examples

• Aspect
HW1

• Max: 94%, Min: 33%, Mean: 73%, Median: 73%
• Instructions
• Assumptions, predictions, explanations
• Hybrid models?
(a) Capture of multiple instances in a simulator

Physical stimuli → Sensory representations → Shared conjunctive neurons in an association area integrate sensory representations across category instances
Aspect

• Grammatical *aspect* marks event structure
  – Perfect: *John has opened the drawer.*
  – Progressive: *John is opening the drawer.*

• Aspect may modulate attention to or focus of simulation on events (Comrie 1976, Chang et al. 1998)
  – Perfect focuses simulation on the endstate
  – Progressive focuses simulation on the nucleus
The Action-Sentence Compatibility Effect
Action-sentence Compatibility Effect

• Quicker response movements when the two actions (described and performed) are in the same direction

• Shows that action execution and motor language understanding share neurocognitive mechanisms
Aspect method (Bergen & Wheeler in prep)

• Manipulated aspect between subjects
  – Perfect: John has opened/closed the drawer.
  – Prog: John is opening/closing the drawer.

• Manipulated either verbs (as above) or nouns:
  – Perfect: Pat has adjusted her glasses/the thermostat
  – Prog: Pat is adjusting her glasses/the thermostat

• Prediction: More simulated action (more of an ACE) in progressive than perfect condition
Perfect results
Progressive results
Aspect discussion

• Aspect modulates what parts of events are simulated, with what degree of detail

• How is language using perfect language understood, then?