

Week 11 Presentation: The Mirror Neuron System & Affordances

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Introduction:

This session explores the Mirror Neuron System and its role in social cognition, alongside J.J. Gibson's ecological theory of 'affordances'—how we perceive the environment in terms of action possibilities.

Brainstorming Questions: 1. **Monkey See, Monkey Do:** Explain Mirror Neurons. Explain, as if you were talking to, your little brother why he winces when he sees someone else get hurt. Tell him his brain has “copycat cells” that practice the feeling just by watching, which helps us have empathy.

2. **The Chair Says “Sit!”:** Explain Gibson's “Affordances.” Explain, as if you were talking to, your grandma that objects tell us what to do with them—a handle screams “pull me!”, a button screams “push me!”—so we don't just see shapes, we see “action possibilities.”

3. **Action Understanding:** Why do we understand what someone is doing just by looking? Explain, as if you were talking to, a friend that we simulate their actions in our own motor cortex. Basically, “to know it, you have to mentally do it.”

Recommended Readings:

- Rizzolatti, G., & Sinigaglia, C. (2008). *Mirrors in the brain: How our minds share actions and emotions*. Oxford University Press.
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Houghton Mifflin.