

Features of Socially Distributed Cognition

What information goes where, when,
and in what form?

Features of SODC

- Distribution of access to information (sensing, direct and vicarious experience, horizon of observation; notice how this is shaped by the interactions of social and physical space)
- Propagation of representational state across multiple media
- Redundant memory (episodic memory)
- Distribution of knowledge (semantic memory) (specialization and sharing of knowledge)
- Distribution of expectations and anticipation
- Distribution of attention. The management of attention. How attention is organized by the flow of activity. (Who attends to what when and from what perspective?)
- Structure of communication (who talks to whom about what and when they talk?)

More features of SODC

- Coordinating the parts via...
 - stigmergy, aggregation, Daemons and production systems, buffers, command hierarchy, goal hierarchy and relations of goal hierarchy to social hierarchy
- Recipient design in communication and switching modalities to meet the needs of the listener
- Filtering effects in information hierarchies
- Redundant readback for error detection
- Distribution of cognitive task performance (multiple people working simultaneously on related task elements)
- The production and re-production of expertise
- Precomputation (the amortization of complexity)

Assignment 3

- Choose any 7 of the 14 features of SODC and for each one:
 1. Find an example of the feature in *Cognition in the Wild*.
 2. Cite the place or places in the book containing the relevant information. Use quotations as appropriate.
 3. Identify the cognitive accomplishments of the socially distributed system that are affected by this feature.
 4. Discuss the ways that this feature affects the cognitive properties of the socially distributed system.
- It is likely that a single example will illustrate several of the features. If this is the case discuss the relations among the elements.