**Distributed Cognition**

* Distributed cognition, like any cognitive theory, investigates the organization of cognitive systems.
  + Unlike traditional cognitive theory, distributed cognition
    - (1) considers the cognitive system beyond the individual,
    - (2) includes interactions between individuals, and
    - (3) incorporates resources and materials into an individual's environment.
  + While social constructivism attends to the knowledge created through interactions between individuals, it does not attend to the tools and resources available to the individual in the creation of knowledge.
* Investigates the process by which cognitive resources are shared socially to extend an individual's ability to accomplish something that they otherwise could not achieve alone.
* The theory of distributed cognition allows for us to seek to understand the relationships between elements in an individual's cognitive process.
* Distributed Cognition process(es):
  + may be distributed across the members of a social group
  + may involve coordination of internal (social/individual) and external (materials/courses/workshops) structures
  + may be distributed through time, so that products of earlier events and transform the nature of later events
* Tenants of Distributed Cognition:
  + Cognitive processes involve trajectories of information (transmission and transformation), so the patterns of these information trajectories, if stable, reflect some underlying cognitive architecture.
  + The organization of mind, both in development and in operation, is an emergent property of interactions among internal and external resources.
  + The study of cognition is not separable from the study of culture, because agents live in complex cultural environments. (Hollan, Hutchins, & Kirsh, 2000).
* Distributed cognition means more than social constructivism, as it includes phenomena that emerge in social interactions *as well as* interactions between people and structure in their environments.
* The study of cognition is not separable from the study of culture, because agents live in complex environments.
  + Culture emerges out of the activities of human agents in their historical contexts.
  + Culture in the form of history of material artifacts and social practices, shapes the *current* cognitive processes that are distributed across agents, artifacts, and environments.
  + These cultures transcend the boundaries of individuals.
  + The environment that individuals are embedded in, is a reservoir of resources for learning, problem solving, and reasoning.
  + *Culture is a process that accumulates partial solutions to commonly encountered problems.*
  + Culture provides us with intellectual tools that enable us to accomplish things that we could not ordinarily do on our own.
  + *However, culture may blind us to other ways of thinking.*