**Affordances in the Eyes of the Observer**

As defined in the three readings, affordances represent **opportunities** for action provided by a particular object or environment. I think that the word “opportunities” has got a very deep meaning if we were to take into consideration the actor’s “culture, experience, and intentions” which Gaver (1991) considers as key factors in user-system interaction (Albertchsen et al, 2001). Indeed, a person who has not experienced the use of multi-touch screens may be puzzled in front of an iPad or an iPhone and will not understand the affordances of this tool. Hence, a tool may provide an opportunity to a person and the actor’s perceptions of the tool’s affordances may be different from what the actual tool’s affordances are. I liked Greeno’s (1994) use of the situation theory in interpreting affordances who takes Albertchsen et al’s idea a step further. He explains that situativity theory “treats symbols as a special kind of resource for cognition, however, and attempts to analyze the ways in which symbols function as components of the situations that people are in when they reason and communicate” (p. 340). Hence in addition to the actors’ experience differences, culture, and intentions, the situation in which the learner is present imposes on the learner making sense of a tool’s affordance. For example, an iPhone provides several affordances to the user such as making calls, checking emails, playing games, downloading applications, etc. However, these affordances may make sense to the user only if the user needs to check his email or likes to play games. Of course there are many affordances that may be “hidden” to the user maybe because they are not directly observable in the interface, or because he has not been put in a situation where he needs to figure out whether the affordance exists.

To concretize my discussion, I think that affordances may be particular to the actor and his perceptions. Perceptions may be affected by a perceiver’s experience, intentions, culture or situation. Therefore, I concur with Gibson’s description of hidden affordances which he describes as “existing affordances in an information system where no perceptual information is available in the interface” (Albertchsen et al, p. 9).

**Expert vs Novice**

In their description of Cognitive Systems Engineering, Albertchsen et al (2001) mention the Skill-Rule-Knowledge Model of an actor’s level of cognitive control during work. This model reminded me of my previous blog post, where I stated, “Not only does an experts’ level of knowledge differ from a novice’s level of knowledge, but the function of their schemata differs as well.” An expert’s reaction to an environment is different from that of a novice. First, experts possess the skills in their area of expertise, therefore they need to exert less cognitive efforts in order to act in a familiar medium. I like Albertchsen et al’s comparison of an expert’s performance in a familiar and unfamiliar situation. They explain that in a familiar situation, experts rely on rule based behavior whereas they tend to rely on knowledge based behavior in complex situations. However, the novice who is usually presented with an unfamiliar situation acts consciously at all three behavioral levels: skill-rule-knowledge. In other words, affordances may be perceptible to experts in familiar situations whereas they need a higher level of cognitive thinking in unfamiliar situations. On the other hand, affordances may not be immediately perceptible to novices who use higher levels of cognition to understand complex situations, and hence affordances need to be evident through user-friendly interfaces. The question lies in whether interfaces should be designed for novices or experts and whether interfaces should have design features that target both novices and experts. All three readings did not discuss these questions.

**A Mediator between Action and Perception**

Both Albertchsen et al (2001) and Milne (2007) discuss mediators between action and perception directly and indirectly. Albertchsen et al (2001) discuss the presence of mediators between perception and action: “cognition, decision making, intentions, and values” (p. 13). Therefore, they discuss the importance of critical thinking, intentions, and values in making sense of any affordance before action takes place. An intuitive interface includes elements that help the learner create a narrative before acting, hence using a higher level of thinking, metacognition. I liked Milne’s (2007) description of the current age of interaction. I believe that we reached a point where every learning technology involves interaction and information sharing. Examples of these tools are Web 2.0 tools and LMS: Blackboard, Facebook, wikis, blogs, twitter, etc. Interaction is another type of a mediator between action and perception. Through interaction, learners have a chance to share other students’ thoughts which in turn act as a mediator between their actions and the perception of an affordance. Therefore vicarious experiences and sharing information play a great role in the interfaces that are designed for an interactional age.