WEEK 2

IS 573 – 2013/2

Compare&Contrast Norman's views with Suchman's

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Figure 1 - Norman's Expectant(Self-Explanatory) Approach (based on my own critics)[3]

According to Norman, blaming themselves because of the computer related errors are common tendency among the users that the designers should care of. He claimed that people mentally model things around them with their limited background knowledge (or past experiences) which sometimes resulted in faulty deductions. Because people generally attribute causes to the events, with objects it shows itself as blaming himself, or blaming the environment in other situations especially for negative events. These failures at tasks can result in learned or taught helplessness as he explained, in which people stop trying the actions. In the light of his experiences, he supported the idea that reason for the faults was the designs. In his model of seven stages of action, people starts with goal and then it follows by intention to act, sequences of actions, execution of actions, perceiving the state of the world, interpreting the perception and evaluation of the interpretation. In addition, he claimed that these seven stages could not be done in everyday life in all. The goal and intention stages can yield by people for opportunistic actions which are driven by events in the world. He argued that the "gulf of execution" (the difference between the intentions and available actions) and "gulf of evaluation" (the effort to interpret the physical state of a system) should be minimized. And so for the designers, the stages of actions are mapped to visibility, good conceptual model, good mapping and feedback as suggested stages for ease of usage of objects by Norman[1].

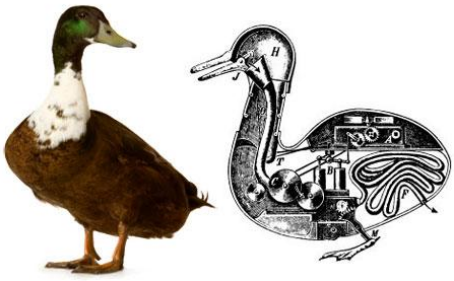

Figure 2 - Suchman's Automata(Self-Intelligent) Approach (based on my own critics)[4]

On the other hand, according to Suchman, the interaction between human and machines (as an object) is more intelligible with "reactive", "linguistic" and "opaque" properties. These abilities let them to explain themselves instead of waiting for be found out the intended purposes-action

mappings as Norman suggested. As the idea of automata improved in time with resemblances to human and embodied intelligence (like “environmental stimulus”, “act to processes” and “behavioral responses”), it becomes communication with a “partner” rather than interaction between human and artifacts. Furthermore, the interruptions or giving late responses are possible in this communication. So in contrast to Norman’s idea, Suchman proposed an object with an “ability” to “explain itself” which can “understand the user actions” and respond rationally-intelligently with “its own intention” rather than conveying its “designer’s intention” for its actions to the user. There is two features of Suchman’s self-explanatory machine: decipherable and instructive. According to Suchman, one of the main concerns in this communication is that because human actions are situated (as indicated by Norman too), the responses of human in unanticipated circumstances can remedy the robustness of communication. In human-to-human interaction to clarify the intention and situation, some sub-dialogues are used without breaking down the conversation. So it is a gap to detect and repair the misunderstandings in communication to be handled in the future.

References:

[1] Norman, D. (1988). *The Design of Everyday Things*. New York: Basic Books.

[2] Suchman, L. *Plans and Situated Actions: The Problem of Human-Machine Communication (Learning in Doing: Social, Cognitive and Computational Perspectives)* New York: Cambridge U Press, 1987.

[3] http://studiooflife.com/wp-content/uploads/2011/12/manual-1e-529x270.jpg

[4] http://www.goldenswamp.com/wp-content/duck1.jpg