Human Computer Interaction

HCI. Also known as ComputerHumanInteraction (CHI), depending on where you are.

Basically the study of usability and how to improve interfaces. Techniques involve watching and/or recording users as they use a program (or cheaper, a prototype or mock-up), making measurements based on those observations (such as how long it takes to complete some task), and making recommendations for the next version or prototype.

Resources:

- The HumanComputerInterface listing at the ResearchIndex (http://citeseer.nj.nec.com/HumanComputerInteraction/) (BrokenLink - 20140510)
- ACM Digital Library check out proceedings>CHI (need an ACM account but its good) http://portal.acm.org/dl.cfm
- Usability News http://www.usabilitynews.com/

Navigation in Electronic Worlds: Research Review seems to be an interesting paper, explaining basic concepts such as metaphor, types of metaphor (orientational and ontological), criteria for utility of metaphors, et cetera. (http://citeseer.nj.nec.com/modjeska97navigation.html)

The book TheInmatesAreRunningTheAsylum examines why even good SoftwareEngineers are usually bad HCI designers. Also see BooksOnUserCenteredDesign.

Physical metaphors are very important in UI design, but this tends to be an oddly neglected topic. Here's a recent short paper on the topic: Interface Ontology: Creating a Physical World for Computer, http://www.mcs.vuw.ac.nz/~chikken/research/papers/europlop2003/barr_europlop2003.pdf

Skimming it quickly makes it look like it says some basic reasonable things on the topic, even though I was highly annoyed at two things: first, it opened with a belabored "gee whiz, computers are too complex for **anyone** to understand completely" claim (true if no one understands light bulbs, either; false otherwise), and secondly, it's not saying anything people didn't know 20 years ago, yet it's published as new research? Anyway, still worth a look, because the topic isn't addressed very often. The very fact that it was published as new research doubtless says something about how infrequently this aspect of things is covered.

CategoryUserInterface CategoryInteractionDesign

Last edit May 10, 2014, See github about remodeling.