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Comments for week 7  
Tangible User Interface

Ishii's vision of HCI is making the world as the interface. He has stated in the paper a lucid differentiation from Weiser's notion of ubiquitous computing and other augmented reality projects. His focus is on employing the affordances of daily life objects by linking digital information to physical artifacts; the direct manipulation of tangible objects (graspable media) enables a new form of interaction by a seamless coupling of physical and digital worlds. Just imagine how many more objects you can handle simultaneously than that of in a computer screen, the physical space and objects give us multiplexed input and output. But sometimes the embodiment of digital information by physical objects is not intuitive, thus a proper mapping is important in transforming pixels to tangible bits. Marbles representing voice messages can also be used for storing digital music, the object's generality and context-dependency are things to be considered as well.

In addition to the notion grasp&manipulate, the ambient media aspect is along the same line as Weiser's calm technology. The important point here is also about how to change the focus of attention from background to foreground, and vice versa, smoothly. In my opinion, the tangible user interface provides a great framework of designing specialized computer embedded tools that enhance our life, yet the traditional GUI or the general purpose computer still has the edge in handling complicated and generic tasks.

I feel that the difference between TUI and ambient intelligence is that the latter does not focus on the manipulation of information but on how to retrieve information in an intelligent way. So the design orientation of TUI is about finding the best way to represent digital information in physical forms while ambient intelligence targets on how to give users the best results in a mobile and physical context.

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