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Info C262

Reading Response 3

A taxonomy for and analysis of tangible interfaces

Fishkin's proposed taxonomy that takes embodiment and metaphor as two axes of measurement efficiently categorizes the different UIs. I believe the taxonomy can cover most of the existing UIs into certain categories. It was extremely helpful because it clarified how I can now classify the different existing UIs categorically by looking at their interactions. For example, even though I knew how a shaped car-seat control worked, I did not specifically know how it would fit to the broad topic of UI. However, with better taxonomy, I am able to classify it as nearby, distant sort of token.

I recognized how important it is to have a framework that can categorize the different UIs because often times the descriptions and categorization of these technologies are characterized with terms that overlap across the field. With this taxonomy that sets the degree of embodiment and types of metaphor, we can better evaluate the interactions involved, classify the different types into a category, and make comparisons and analyze trends.

I also agree how there are design trade-offs in regards to the different degrees of embodiment and metaphors. Even though full embodiment can be characterized as the most "powerful" form of interaction, this would not necessarily mean the best as there are technology limits and subjective user preference involved in evaluating the technology.

One thing I noticed about the taxonomy is that even though a TUI can belong to multiple categories, the taxonomy did not seem as a gradient spectrum. Instead the taxonomy appeared to be more of a detailed categorization based on different types of embodiment and metaphors. I think this can be reflected on the grey-areas depicted in the container, tool, and token table. While a UI can be identified as either container, tool, or a token based on its type of embodiment and metaphor, there are blank areas that are not fully represented.

I believe this taxonomy can be improved by taking into account the degree-ness of embodiment and metaphor. For example, a poorly designed, elementary VR set would employ some verb-metaphor (for its joystick), and full embodiment as the action is directly performed on the virtual surrounding. However, the user experience that its player receives would significantly differ based on the quality of the system. For example, an advanced, realistic VR would induce more embodiment compared to the elementary basic VR. I would love to see how such changes could further affect the categorization of UIs.