The Irreducible Artifact: In Search of New Ideals for Interface Design

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1 Context

Within human factor and ergonomic studies, it is often supposed that technologies should be developed to completely conform to human intentionalities and dispositions. Especially in regard to computational technologies, researchers and practitioners working from multiple disciplinary perspectives have advocated that user interfaces should be "transparent", in other words, that they should not draw attention to themselves in practical contexts, when a user seeks to realize an action by means of a technology. This belief is furthered by a number of phenomenologically inclined studies that have drawn from Heidegger's philosophy of technology, in particular, his famous "tool analysis" (e.g., BONSIEPE, 1999; DOURISH, 2001; WINOGRAD; FLORES, 1986). Recent advances in postphenomenological philosophy of technology, however, have problematized Heidegger's account, advancing in its place a more nuanced analysis of human-technology relations (e.g., IHDE, 1990). These contributions can offer interaction designers a wider range of possibilities when creating new user interfaces, where transparency is not the only ideals to be sought.

2 Method

The argumentation is developed on basis of a critical appraisal of current phenomenological theories in the field of human-computer interaction and presentation of the postphenomenological revision. In support to this, a case study of Apple's iPhone demonstrates how the postphenomenological perspective can bring new insights to the analysis of human-technology relations.

3 Results

The postphenomenological revision of Heideggerian approaches to interface design yields new insights concerning the ideal of transparency. Specifically, it is argued that technologies can never attain full transparency in real-world contexts of use. At best, technologies are "quasi-transparent", and their irreducibility in human-world relations is also what allows them to transform these relations in significant ways. The case study of the iPhone highlights the different modes of human-technologies relations (embodiments, hermeneutic, alterity, and background) that can be identified and described once the ideal of pure transparency is refuted.

4 Conclusions

Results from this research can be used to sharpen designers' analyses of human-technology relations and offer them a wider set of alternatives to consider when designing new user interfaces. Central in the revised approach, is the notion that interface transparency is not the only ideal to be sought.

5 References

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