

Exploring the Relationship between Aesthetics and Usability

The use of web is resolved by three different factors: the provided information, the usability of the website and the given impression to the user (Schenkman and Jonsson 2000). The latter factor has been the least researched and many of its potential effects are yet to be explored (Lavie and Tractinsky 2004). Usefulness and usability have been two of the fundamental qualities of the web experience and their impact has been tremendous on several fronts. Nevertheless, the need of exploring new and non-traditional factors, such as visual aesthetics and visual attractiveness, can be considered as imperative (Hartmann 2006). Positive feelings induced by aesthetics can impact how usable a product is (Schenkman and Jonsson 2000). Such pleasurable feelings have been found among several products (Jordan 1998), and these products were more usable than those that could not convey some visual attractiveness.

A significant volume of research in Human-Computer Interaction (HCI) has focused exclusively on usability. Aesthetics is arguably an equally significant factor as those already studied within the context of HCI, and its impact on usability has been underestimated. More recently, HCI research has attempted to keep a balance between usability and aesthetic considerations (Lavie and Tractinsky 2004). The result of that effort can be found in findings that clearly indicate a correlation between aesthetics and Usability (Tractinsky 1997).

Website users are most likely, either consciously or subconsciously, to remain at greater lengths of time in an attractive environment than in a less attractive one (Nakarada and Lobb 2005). That is partly due to positive feelings associated with the visually attractive stimuli. Symmetry can be such a stimulus and Sutcliffe's (2002) heuristics suggest that a highly structured layout along with information accessibility impacts the system's usability. Furthermore, perceived attractiveness has been shown to impact search perseverance (Nakarada and Lobb 2005). In other words, a user is mostly likely to keep searching when the environment, in which the search occurs, has a higher aesthetic level. Schenkman and Jonsson (2000) suggest that positive feelings generated by aesthetics can impact how usable a product is. They cite Jordan's (1998) findings for several products, which could engender pleasurable feelings. Those products were more usable than those that could not convey some visual attractiveness. Also, a high correlation exists between visual aesthetics and a system's perceived usability before, during and after the interaction (Tractinsky 1997). Lastly, simplicity, which is a key component of usability, could be the connection between aesthetics and usability because simplicity is considered an aesthetic notion as well (Karvonen 2000).

The literature review shows a tendency to separate visual aesthetics into two distinctive approaches, i.e. classical aesthetics and expressive aesthetics (DeAngeli et al. 2006). The former dimension consists of components such as clarity, cleanliness, symmetry, contrast and generally aesthetic design. The latter dimension of expressive aesthetics, which is characterized by creativity, originality, fascination and sophisticated design is a subject for future research. The integration of both sets of aesthetic components and their potential impact on usability constructs such as efficiency, effectiveness and satisfaction presents an important area of exploration for the domain of HCI. This conceptual study is, therefore, guided by the following research question:

RQ1. What is the relationship between aesthetics and usability?

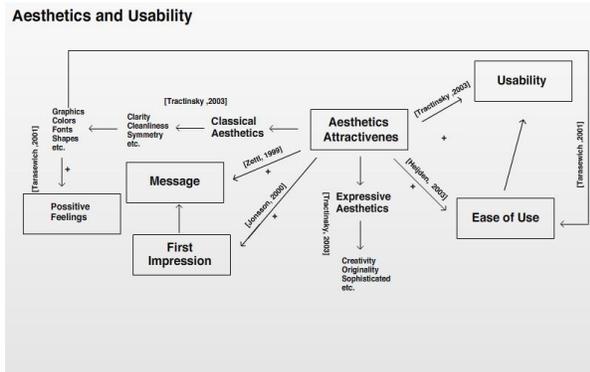


Figure 1. Research Framework (draft)

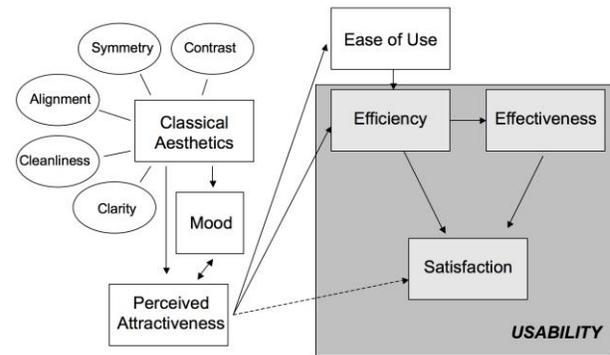


Figure 2. Research Model (draft)

There are significant implications for theory, as the traditional scope of utilitarian usability will be expanded to include hedonic dimensions emerging from the realm of aesthetics. This conceptual paper will propose a framework that addresses this gap in the literature. The framework may be used in future research as the foundation to empirically validation of the effects of discrete aesthetic dimensions on usability. One such research model will be proposed and discussed as an example for future empirical validation. Implications to practice will also emerge, starting with those on Experience Design (ED). Our understanding of ED and all of the related fields such as User Interface Design (UID) and Interaction Design (ID) is expected to shift by heightening the role of aesthetic dimensions in contextual design. Furthermore, contribution towards practice will also be described in the context of improving Marketing Communications by advancing the effectiveness of organizations' web designs.

References

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