

Aesthetics and Interaction Design— Some Preliminary Thoughts

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Many of us probably think of aesthetics as what makes something beautiful or pleasing; I know I do. But in looking it up, I find greater complexity than that: Merriam-Webster's Tenth Collegiate defines aesthetics as "a branch of philosophy dealing with the nature of beauty, art, and taste and with the creation and appreciation of beauty." After reading David Heller's article, I found myself appreciating the depth to which aesthetics can go—it can extend far beneath an interface's presentation layer. Not only does beauty exist in the visual design, but David finds it in task flow, interaction, and behavior as well. In this Whiteboard, he shares his thinking about aesthetics and its role in interaction design, and encourages us to explore and assess the relationship more deeply and to integrate it into our professional approach.

—Elizabeth Buie

FOR THE LAST TEN YEARS, my work has involved some aspect of the design and development of network-distributed informational applications. My career has relied on self-education, and thus self-discovery. Not only does this lend me a bit of freedom to formulate design thoughts in new ways, it also enables me to create new metaphors and to mix and match them, where previous articulations haven't quite satisfied me as clear enough.

Lately, I have focused on exploring the foundations of interaction design. While visual design and industrial design share aspects of line, color, weight, type, volume, space, etc., interaction design lacks the tangible aspects that can be used to formalize a creative process or a critique of aesthetics.

Throughout literature, great thinkers have spoken about aesthetics in various creative domains. Visual beauty has probably received the most attention; entire organizations have sprung up to discuss the philosophy of aesthetics and to apply their philosophical ideas in further critique of creative works.

Interaction design, as primarily a business endeavor, has had the fewest attempts at this type of "philosophy + critique" practice. The relative youth of the discipline has also contributed to this want of depth. But we have a further complication: Interaction forms but one part of a whole solution; moreover, it is skeletal in nature, hidden under our more tangible and sensory details.

The complex role of interaction within the system makes it difficult to define the separation of the presentation layer from the interaction or behavioral layer. For example, if a menu's presentation fails to make it

clear that the menu even exists, its behavior will receive less appreciation from humans trying to engage that system.

When I think about interaction design in comparison with the other "arts" that have deeper roots in aesthetics, the one that strikes me as its closest relative is dance. The aesthetics of dance merge many elements through the choreography. Five come immediately to mind: visual—line, form, position, space, color, etc.; music—tempo, melody, rhythm, tone, key, etc.; costume—I know very little of costume design but imagine that such aspects as period, style, and color contribute heavily to the aesthetics of a performance; movement—synchronization with the music, fluidity, dancer interaction, etc.; lighting—color, intensity, focus, movement, spacing, etc.

Interaction, too, has various components that evoke a visceral response, which would drive a critique of its aesthetics. I don't think we interaction designers understand well the aesthetics of our profession; I also believe that we are still nurturing our discipline through its adolescence.

During the last two years, two aspects of interaction design have dominated my theoretical musings: what components of interaction distinguish themselves from the presentation and behavioral layers with which they work in choreography to create a complete aesthetic of interaction; which aesthetic attributes apply within specific contexts, and how to bring that understanding into wider focus for the discipline.

As does dance, interaction design has many elements of presentation, especially the visual and the aural. But like dance, it also has aspects that arise purely from the experience of the interaction of a human

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with the whole. Although I have not yet succeeded in articulating these as clearly as I did for more mature disciplines, I have identified some describable and understandable examples that can assist us in building and growing this discipline.

My primary examples revolve around the selection of one or several objects that we either group (creating a collection) or act upon while they are selected. The presentation of the initial objects is key, but we also need to consider the similarities and aesthetics in the flow to reach that list, the method for making the selection, and the means of triggering the action. Thinking of this general example has enabled me to identify several aspects of interaction so far: flow—what happens before and after a given moment; context—what other elements exist within the system and in its environment (some of these do not drive the creative exercise directly, but how the creative system accommodates them will affect the aesthetics); responsiveness—when users act on the system, how it lets them know that something is happening, and whether it is what they wanted.

As for the appropriateness of different aesthetics to specific user contexts, most of my experience has concentrated on comparing consumer-based environments with business-based environments. Dance, again, works to help explain “appropriateness.” For example, even with the same costumes, music, and lighting, I would use one type of movement in a performance for adults and another for children. The same holds for interaction design for a consumer and for a businessperson, even though they can be the very same human being. Similarly, adults at a dance performance can have very different responses, depending on whether they are alone or with their children.

An interesting complication has arisen in the consumer world. Everyone is a consumer, and software folks wearing their “consumer hats” direct the aesthet-

ics of software design. Unfortunately, this has created an ambiguous and confusing environment. Owners of software projects often ask for inappropriate aesthetics on the basis of their own consumer experiences, merely choosing the best from what they know.

I hope we are moving toward—and I have seen this in the work of good designers—contextualized and holistic design solutions, within both business and consumer environments. To do this work better, though, we need to discuss aesthetics more widely within interaction design. We need to identify and define the elements that we craft to create an interaction experience. We need to determine how they cooperate with the aesthetics of other disciplines, and also how they work within interaction design alone. Finally, we need to emphasize that the choices we make for aesthetics carry as much weight for interaction design as those we make for usability. Interaction design involves so much more than just usability, and until we manage to articulate these values equally well within our profession and to those outside it, interaction design will fall short of its potential. ♦



ABOUT THE AUTHOR *David Heller is principal designer at IntraLinks, Inc. (www.intralinks.com). Before IntraLinks, David followed a zigzag dot-com career through various design, development, and management positions over the last ten years. Outside of work, David is a founding, steering-committee member of the Interaction Design Group (<http://ixdg.org>), and blogs regularly at his site (<http://synapticburn.com>) on topics related to interaction design. He also finds time to travel, go to movies, and hunt for other forms of design inspiration throughout the galaxy.*