

SILS 500 (Human-Information Interactions)  
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Assignment 2  
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Nathan Shedroff's 1994 "Information interaction design: A unified field theory of design" was published on his website <http://www.nathan.com/thoughts/unified/>. There, the article is divided into 21 different parts, which can be navigated from one page to another (via a "next" link at the bottom of each page) or through direct links arranged in a time-line like arrangement at the top of each page. The article is also available on Shedroff's website as a continuous pdf document and was reprinted as a chapter (p 267) in Robert Jacobson's book *Information Design* (2000).

Since Shedroff's article was initially self-published on his website, there is no journal front matter (the introduction to the journal's purpose, intents, etc). Instead, Shedroff's website has a page dedicated to himself and his philosophy as well as "thoughts" page; these serve as the front matter equivalent. There, he makes two statements that I believe succinctly describe what he intends to communicate. Firstly, "I believe that all experiences share particular characteristics that make them successful," and secondly: "[i]ssues of understanding and meaning (information) and usability and appropriateness (interaction) are cerebral solutions that are only expressible with very sensory components" Shedroff believes that all human experiences (such as the expression of and interaction with communication) share particular characteristics and that one of those characteristics is the need for elements that engage our senses.

The purpose of this particular article is to describe the process of information interaction design process, which is "roughly" universal. He concludes that "[a]n interface to any experience, whether technological, physical, or conceptual, must have a message and a reason for communicating it and begin with the creation of meaning and the development of appropriate types of interactivity. These decisions drive the use of sensorial media to present the experience to the audience in an appropriate

and supportive way.”

This is very similar to his purpose expressed on the about-me page, only with an added emphasis of choosing the correct medium for each experience.

I feel that in this article Shedroff is successful in describing the theory, but I am frustrated that, despite his assertion in his conclusion, he does not discuss how to choose the correct medium. He explains the need for choosing the correct medium, mentions in passing some of your options (internet, print, video, etc), but does not discuss specifically how to decide what medium is most appropriate for a particular experience. The ending reads as a call for further idea development then the presentation of a conclusion.

The lack of concrete examples is one way that this article is different from Klemmer, though there are similarities. Klemmer reads like a much more refined and focused set of ideas. He is focused on the sense of touch and physicality as related to learning and processing information, while Shedroff does not limit himself to a particular sense. Because Klemmer is focused on only one of our senses, he can give many real world examples of his ideas, making his article extremely practical and useful. Meanwhile, as we have seen, Shedroff rarely uses real world examples, probably to preserve the sense that his ideas are universal to any experience.

Both Klemmer and Shedroff share the idea that their philosophy can extend beyond a particular type of experience. For example, Klemmer discusses his theories in relation to DJs, paper makers, and children's play, while Shedroff considers the Vietnam Memorial a form of information communication.

Like Klemmer, I think that Shedroff's primary intended audience was information designers, and my citation search revealed that he is indeed primarily cited within the interaction design fields.

I think that the well-constructed internet presentation would be attractive to both the technology-savvy and to the artistically-inclined. Certainly, Shedroff did not write this piece for

traditionalists, whether they be traditional librarians, newscasters, etc. Besides the non-traditional presentation of his article (segmented on his website), many of his ideas (such as including cooking and perfumery as media creators/presenters) would be alienating to those who interpret information very literally.

Personally, I enjoy such crazy talk. However, I am biased because I tend to highly approve of multi-disciplinary approaches and believe that more concepts are universals than are not. So, my response is not horror but rather interest as I start to consider the similarities and differences between a chef and a librarian. I'll have to save that for another paper!

Readers who are not so enamored with cross-disciplinary approaches will probably become frustrated with Shedroff's broad scope and building-block ideas. Even I would not call this article practical (rather, thought-provoking). Still, whether or not they agreed with his ideas, I think anyone would find this article very accessible and understandable.

I think a large part of the article's accessibility has to do with its web design. For such broad ideas, they are laid out in coherent, relevant pieces. From the start, I noted the article's navigation system (a time-line like design). It is engaging and eye-catching due to its unusual design but also simple and muted enough that it is not distracting from the article's content. As I read, I saw that Shedroff makes effective use of graphs. Not only are they crisp, simple, and easy to comprehend, but they are clearly connected to the text via the use of bold words in the text. The glaring exception is his three-dimensional experience cube, which he himself admits is difficult to show on the page. Like the "Ecological Model of Information Seeking and Use" model that we looked at in class, his experience cube is simply too complex to easily comprehend on a 2-dimensional page.

The page breaks and navigation system are well-designed to support the structure of his article, which discusses three facets of information interaction design: information design, interaction design, and sensorial design. While he does not spend equal time on each facet, I thought that these three facets

are an effective way of breaking down and arranging the theories he proposes.

When reading the continuous pdf version of Shedroff's article, these three facets are much less clearly defined because the limitations of formatting make it harder to mental segment and digest the material Shedroff is presenting. Also, his graphs are far less useful and readable in the low-resolution black/white pdf. I feel that anyone reading his article from the pdf or in Jacobson's book will find this article much less accessible.

When I looked for this article's citations, I found results on Google Scholar and ISI's Web of Knowledge. ISI revealed 13 citations, while Google Scholar resulted in 104 citations. The citations were for the article itself and as a chapter in Jacobson's book.

I enjoyed the citation search on ISI; it was an excellent service with some very helpful features. As a result, I was able to examine the citations easily and coherently. Almost all (12) of the 13 ISI-listed citation of Shedroff were related to information design or human computer interaction. The 13<sup>th</sup> was related to ergonomic and emotionally-pleasing design; I think Shedroff would have been delighted to see his article cited in such an off-the-wall context. Of the other 12, not all were based in information science. One article was about expressing data about protein studies, two concerned user customization of information (one was related to entertainment), and one was about artificial intelligence.

I was interested to note that of the 13 works that cited this article, only three had themselves been cited over 10 times (eight were not cited at all). Two had been cited 17-19 times, and one had been cited a whopping 41 times. In the last case, Shedroff was in a list of 78 other references, making it slim that many people would track back to his article.

The articles are spread fairly evenly over the past seven years, which make me believe that the article became more popular after it was published as part of a book and has remained somewhat interesting and relevant over the years since then. Six of the citations, almost half, were proceedings papers.

I was a little surprised that the article was not cited more in information design-related work. From these results, I'd say that Shedroff's article is viewed as interesting, but not of any great importance. Maybe like Klemmer, his ideas are considered interesting, but too difficult to implement?

Unlike ISI, using Google Scholar was overwhelming. Due to the large number of, varying degrees of relevancy, and the different formats (pdf, book book preview, website, etc) of the results, it was very difficult to coherently evaluate the citations. A perusal though the results gave me a sense that many of those citations are also related to information design or interactivity.

I was interested and intrigued by the ideas presented in this article, but I can also understand that this article could be read as a pompous, crazy, self-pleasing rant about general ideas without offering any practical advice. Frankly, that opinion is probably correct as well, depending on your point of view. Still, I liked it and wish that there were more citations and more example of these ideas in application.

On a side note, I think Shedroff would have a lot to say about interactive bots, because they can engage a person on multiple senses: auditory (talking back and forth through microphones and speakers), visually (through animations), and physically (through typing, etc). Though bots can be used effectively in many types of experiences, they are not effective in all.