Information Esthetics: from MoMA to Wall Street

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Abstract

My after-dinner talk has the goal of being a visual dessert, showing some of the information designs and explorations that I've put together in the last twenty years as a practicing designer and more recently, as an artist. I'll show the ones that people reacted to most strongly; partly to soothe and entertain, but partly in the hopes that some of the techniques I apply might be useful in the work of other attendees.

To that end I'll present a simplified Knowledge Acquisition Pipeline, a kind of designer's checklist that has been valuable in guiding my students and me while creating information-rich displays and user interfaces. It helps organize the wide variety of techniques available to us as information designers. But more--it helps us understand why they might work, where they might be useful in a design, and even what types of information can best be shown with which techniques. It works as a generative guideline as well as an intellectual framework. I'll tie parts of the examples back to this pipeline to show how it works in practice.

The application of this pipeline to visualization work suggests that as a field we are getting good value out of our understanding of the earlier processes--those having to do with sensation and perception. But later processes still have a lot of room for exploration: the visual attributes we use to represent data can often be made more specific, and therefore both more communicative and easier to decode. The world is richer than we can describe with circular nodes and linear links. And when we can get a visual vocabulary from the target audience, their own higher level semantic relationships may also be more easily absorbed and manipulated. I suggest that what such "illustrative information displays" lose in generality they more than make up in ease of interpretation and viewer engagement.

Bio

W. Bradford Paley is an interaction designer and artist whose focus in both worlds is readable, clear, and engaging expression of complex data. His visual representations are inspired by the calm, richly layered information in natural scenes. His process invokes three perspectives: rendering methods used by fine artists and graphic artists are informed by their possible underpinnings in human perception, then applied to creating narrowly-scoped, almost idiosyncratic representations whose visual semantics are driven by the real-world metaphors of the experts who know the domains best.

Brad did his first computer graphics in 1973, founded Digital Image Design Incorporated (didi.com) in 1982, and started doing financial & statistical data visualization in 1986. He has exhibited at the Museum of Modern Art; he created TextArc.org; he is in the permanent collection of the Whitney Museum of American Art; has received multiple grants and awards for both art and design, and his designs are at work every day in the hands of brokers on the floor of the New York Stock Exchange. He is an adjunct associate professor at Columbia University, and is director of Information Esthetics: a fledgling interdisciplinary group exploring the creation and interpretation of data representations that are both readable and esthetically satisfying.