

On Principles and Paradigms

Jerry Diethelm - July 2019

Editors Peter Jones and Birger Sevaldson and their authors appear to be of two different minds when it comes to principles and paradigms in the new summer edition of *She Ji*. How is it that the editors remain unconvinced about proposing principles or a paradigm shift in design thinking while the articles they have chosen for their systems issue are busily exploring this new territory? The difference I think grows out of the dislocations and inadequacies of adapting general systems theory, models and methods to the “wicked” problems of design thinking and practice.

As a logical principle, problems are either “wicked” or “not wicked.” It is a commonplace understanding and a fulcrum for most of the authors that design problems are “wicked” due to their human interest dimensions, qualitative wholeness and indeterminate nature. The scientific systems approach has long been to deal with such wickedness in designing by adding some qualitative considerations to their standard quantitative and factual routines.

The shift that is taking place is one in which designers find their natural place to stand is on the “wicked” side of such problematic logic looking back on the “not-wicked” side and its methods instead of the other way around. The reason for switching sides is clear. Adding a few qualitative considerations to a factual and decompositional analysis of a situation just didn’t cut it in practice when dealing with such things as qualitative boundary setting and all the other judgmental complexities of conscious living systems.

As Jones and Sevaldson point out, “a paradigm implies a dominant logic that is agreed upon, and a shift takes place when old ideas are challenged by new generations and the new wins out, replacing the old paradigm with a new one.” And that is exactly what is underway. Systems that have the capacity to be self-defining, self-maintaining and self-transforming are requiring new ways of designing that are centered in human interests, judgment and choice.

Richard Buchanan, in his article, *Systems Thinking and Design Thinking: The Search for Principles in the World We Are Making*, writes that traditional “Systems analysis provides no clear identification of the problems that designers may address.” And the editors quote Bruno Latour as suggesting that design situations are better understood and described as “systems of concern.” Latour asks, “Why can’t the powerful visual vocabulary that has been devised in the past by generations of artists, engineers, designers, philosophers, artisans, and activists for matters of fact, not be devised (I hesitate to say restyled) for matters of concern?”

The editors are more than just hesitant about Buchanan’s call “...to begin a discussion about the principles of design and the environments that we seek to create.” There is a “boiling pot of ideas” right now, they say. All that creative activity combined with a sense of basic humility makes it just “too soon to settle” on any principles.

The problem here, I think, is the mixing up of different meanings, levels and uses of the concept of principle. Buchanan’s proposed principles are not the same as such scientific principles as

entropy, relativity and uncertainty. His proposed principles - good, satisfying, useful, and just - aren't meant to be definitional laws. They belong to a new evolving design thinking/action ontology of "wicked caring." Here they become design process quality measures of such high level statements of value as "health care is a human right," where their job is to guide interest, choice, action and evaluation of such complex human problems into an embodiment of satisfaction and success.

In a normative design ontology of valuing and meaning, Buchanan's good, satisfying, useful, and just are in good company with "firmness, commodity and delight;" apt, poetic and just - eco-humanly just; significance, satisfaction and success; and the move toward John Ehrenfeld's target of a flourishing world.

She Ji: The Journal of Design, Economics, and Innovation, Volume 5, Issue 2. Summer 2019. Birger Sevaldson, Peter Jones, editors. Authors: Richard Buchanan, John Ehrenfeld, Kees Dorst, Florian Schütz, Marie Lena Heidingsfelder, Martina Schraudner, and Evan Barba.

Jerry Diethelm, "A Paradigm Shift in Design Thinking." uoregon.academia.edu, Jan. 2015. <https://uoregon.academia.edu/JerryDiethelm>