Introduction

In the 1960s when theorists were building the design methods movement, it seemed that the outline of a singular theory of design might be constructed that would become a framework for all subsequent theoretical work. That did not happen. What occurred instead was the emergence of a highly pluralistic field of design research with no fixed center and an ever-evolving array of themes and issues. From this multipolar field has arisen an active community of researchers who are inventing a framework of inquiry as they go. Rather than searching for an overarching theory of design, however, they have been cultivating particular interests that are forming new nodes of investigation. Two strong characteristics of this new framework are the attempts to relate design to other bodies of knowledge in order to better understand it and to draw design into other fields in order to add a new dimension to them. Both characteristics are evident in the articles we have selected for this issue.

In his article that relates Aristotle's philosophy to design thinking, James Wang argues that Aristotle's theories of reason, imagination, and practical intellect encourage attention to the designer as a maker. Wang distinguishes in Aristotle's philosophy the difference between makers and doers and discourages attempts to impose on designers the obligations to produce social effects that are independent of the process of designing. However, he notes in Aristotle's philosophy a relation between formal causes, which are involved in designing, and final causes, which are their consequences. Wang believes that a study of Aristotle can restore a relation between reason and imagination thus validating the presence of the latter as a component equal to reason in the education of designers.

Marc Steen draws heavily on the philosophy of John Dewey for his article on the role of joint inquiry and imagination in co-design. Steen is concerned with the process of what he calls "collective creativity" that can enable participants from different disciplines to create shared understanding in order to achieve common objectives. He finds in Dewey's emphasis on pragmatism a method for "moving back and forth between practices (primary experiences) and reflections (secondary experiences) in order to develop practical knowledge…" Steen draws on Dewey's writings about joint inquiry and imagination to create a process for co-design activities that can include a moral element as he finds it embodied in Dewey's work. To demonstrate the process he describes, Steen presents a case

study, TA2, in which researchers in different disciplines have collaborated to develop and evaluate a series of telecommunication, multimedia, and gaming applications.

Clifford Deaton is a political scientist writing about the posters that the Atelier Populaire in Paris created during the political demonstrations of students and workers during May 1968. Art and design critics and historians have discussed these posters, but Deaton embeds them more deeply in the political process that characterized the 1968 demonstrations. He writes, in particular, about the ironic rhetoric of the posters and their capacity to disrupt the prevailing ways of thinking about the situation. A new element that he introduces is the relation to the resistance during the Algerian war of the early 1960s, which he sees as a precedent for the events of 1968.

In their article which addresses the value of information systems to architectural designers, Pieter Pauwels, Ronald De Meyer, and Jan Van Campenhout discuss the difficulty of matching the kinds of reasoning that architects employ in the design process and the types of information systems that are available to assist them. Like Wang and Steen, they examine the reasoning process and recognize different modes that are adopted for specific aspects of it. They discuss philosopher Charles Sanders Peirce's theory of abduction, which many design theorists believe to be appropriate to the design process, and also develop an approach to problem-solving that has some analogies to Dewey's method of joint inquiry—though concerned with the individual designer rather than collaborative design. They believe that three modes of reasoning—abduction, deduction, and induction—are parts of a continuous flow and find that the technological applications, that might enhance these modes as a unified process, are still developing with only early results. However, Pauwels, De Meyer, and Van Campenhout describe the limitations of such applications because they believe it infeasible to include—in them—the many intangible aspects of design knowledge. What is more feasible, they state, is a more limited technological approach that still assigns the fundamental thinking about a project to the designer.

Ruth Blacksell's article, "From Looking to Reading," examines a group of texts associated with the Conceptual Art movement. Blacksell analyzes these texts in terms of their designerly elements of typography and layout, while also discussing how they were inserted into contemporary art discourse. Notably, she sees a shift from looking at visual objects to reading texts as part of the audience experience. The attention that Blacksell calls to these examples of text-based art are important for historians of graphic design because they have been previously overlooked within the graphic design history narratives even though, as Blacksell points out, they laid the groundwork for the vital typographic debates among graphic designers during the 1970s and 1980s.

Cara Wrigley is concerned with ways of making products more appealing and satisfying to consumers. To assist designers in better addressing this question, she has created the idea of "visceral hedonic rhetoric" to put greater emphasis on the emotional relation of consumers to products. This framework of hedonic rhetoric, as she notes, builds on other frameworks for dialogue between designers and consumers. Wrigley draws heavily on psychological studies of emotion, which she believes have not been sufficiently utilized to better understand consumer behavior. She recognizes existing theories of affect that divide human responses into three levels—visceral, behavioral, and reflective—and sees all of them relevant to the design of products. The gap she finds in the research literature, however, relates to the properties of a product that "elicit the pursuit of pleasure through an instinctual level of cognition." She thus proposes that designers take into account the "visual hedonic rhetoric" which she believes to be an essential component of product design that has heretofore not received its due.

By publishing the diverse range of articles that characterize each issue of the journal, we are challenging our readers to construct their own design research frameworks within which they can make sense of the multimodal emergence of inquiries and find connections that may be useful for themselves and others.

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