## Introduction

One of the most interesting and curious features of design is that it is an art—a discipline, a field, a practice, a profession—without a subject matter. Most other disciplines have subject matters. Indeed, those subject matters often become the basis for a definition of the discipline: physics studies matter and motion; chemistry studies the interaction of molecules; biology studies living creatures and their relationships to each other and to environments; English literature studies, well, English literature—the novels, plays, poems and other forms of literary discourse with which we are familiar. In place of subject matter, however, design has problems. And what is still more curious about design is that the way designers address those problems ends up creating what appear to be subject matters, subject matters that are recognizable and "subject" to study by a variety of other disciplines—including, of course, by the disciplines of design history, design criticism, design theory and so forth. This makes design and the recent somewhat controversial variation of this term, "design thinking," difficult to define and pin down for others to understand. It is as if the work of design spins off, like sparks, concrete products that are often so interesting in themselves that they become substitutes for what the art and discipline of design is really about.

What this means for a journal such as *Design Issues* is that any Table of Contents can be puzzling, if not downright disconcerting, to a casual reader who is looking for the solid middle of what is clearly a central art of the new technological culture of our new world culture. Instead of being solid, the middle of design is a molten middle in a constant state of transformation, evolution, and becoming. A discerning reader, however, discovers in the variety of articles in any issue of the journal the fluid nature of design: the ability of the design community to pursue what is "emergent" in understanding and practice. So it is with this issue of the journal: a series of articles carefully chosen to bring to light the working of design.

In the first article, "Real Imagined Communities: National Narratives and the Globalization of Design History," Kjetil Fallan and Grace Lees-Maffei seek a new balance in design history between national narratives and the complexity of production and consumption that depends on the simultaneous context of local, regional, and global relationships. They seek to highlight the diverse strategies of historians who are working to understand the globalizing history of design without neglecting "the importance of the national in design." From this discussion, we turn immediately to a national context in which the profession of industrial design is emerging in Turkey, striving for the recognition that is common in other countries. This is an article by Ali O. Ilhan and H. Alpay Er, "Existential Antagonisms: Boundary Work and the Professional Ideology of Turkish Industrial Designers." Their account of "boundary work" and the formation of "professional ideology" is a study in the sociology of professions. Its careful argument about the establishment of a positive ideology for industrial design points out the role of ideologically negative "others" in antagonists that are familiar in many other countries: industry, the general public, and the engineer. If Turkey has witnessed the formation of a new profession of industrial design, Eduardo Castillo's "The School of Arts and Trades in Santiago (EAO), 1849-1977" traces the formation of a special school in Chile over the course of a hundred years that has encouraged a "civic sense" in generations of students and helped "to play a role in the country's construction and its future."

The next article likely will be controversial among design theorists. Odette da Silva, Nathan Crilly, and Paul Hekkert give us "Maximum Effect for Minimum Means: The Aesthetics of Efficiency." They make an unusual claim: "Existing design theory does not provide the concepts required for describing this aspect of aesthetic appreciation . . ." Their interest is the relationship between a product and its purpose (function or effect). Whether one agrees with their claim about design theory, the article is useful in the way it continues and highlights a long tradition of discussion around the nature and role of aesthetics in the products around us. In contrast, Ezio Manzini's "Design Culture and Dialogic Design" focuses on the issues that characterize new design practices in what has sometimes been called "fourth order design," where culture, dialectic (i.e., for Manzini, the dialogic), and co-designing or participatory issues emerge as a new challenge for designers. Manzini carries forward an interesting variation of the Italian concern for "design culture" a long-standing concern for the cultural dimension of design—and offers a framework for design and design practice in our contemporary context. Though the article is brief, it is a useful addition to our discussion of the new forms of design that we see around us in many places, for example in discussions of social innovation.

As if to say that not all design practice today yields to a single theory, the next article presents an important account of designing uniforms—in Denmark. Fashion design or clothing design is an area that we have long wanted to see represented in Design Issues, and this article, "Pockets, Buttons and Hangers: Designing a New Uniform for Health Care Professionals," by Trine Brun Petersen and Vibeke Riisberg serves very well to suggest one approach that reveals the substance behind what is sometimes regarded merely as a highly ephemeral branch of design. The article draws on Actor-Network Theory to explore the design of a new uniform for healthcare (health care) professionals in Denmark. The authors discuss the wide range of influences in a large-scale system that led to the final design—and they point out that Actor-Network Theory has been explored by a number of scholars in relation to design, citing a special issue of *Design Issues* from 2004 on Science and Technology as only one example. There are many themes in this article that should draw attention, not the least of which is the relationship between fashion design and industrial design and the idea of design as "micro-politics." The authors write: "In common discourse, fashion is often presented as whimsical and fleeting, but as this study shows, fashion design—at least in institutional settings shares many concerns with industrial design. Like other designers, the fashion designer must be able to navigate in the complex technological and politically charged processes that may be inherent in such large-scale clothing design projects." There could not be a better addition to design research in the area of fashion design than this article.

When the Harvard Business Review (September 2015) and The Chronicle of Higher Education (March 26, 2015) both find it useful and expedient to publish articles on "Design Thinking," then they must believe that the concept has entered the mainstream. After all, neither publication presents cutting-edge work, only publishing on topical themes after they have entered wide consciousness. (Not to make too fine a point of it, but readers will remember that the argument for design thinking first appeared in this journal in the issue of Spring 1992, Volume VIII, No. 2.) This brings us to the final article in this issue of the journal, Barry Wylant's "Design and Thoughtfulness." Wylant offers an alternative way of focusing on design thinking: he seeks the "atom of thoughtfulness" that begins design work. His article is an extended reflection, a musing on the earliest moments of a design idea and the progression toward a design solution. Though he writes of the atom of thoughtfulness, he actually appreciates the importance of wholeness and the Gestalt understanding of wholeness. He writes: "To perceive things within a figure/ground framework also requires a capacity for abstraction—to see beyond noisy detail and, more importantly, to perceive with seemingly insufficient detail the underlying relationship of a form against ground. The Gestalt notion of emergence precisely theorizes this phenomenon, holding that 'we perceive objects in

an image not by recognizing the object parts, but as a whole, all at once." This is an unusual article that is both insightful and suggestive.

From time to time, *Design Issues* includes "Reflections," a category of writing that allows for the expression of thoughts and ideas and themes that may be pointed and argued somewhat differently than most of the articles in the journal. In this issue, we have a reflection by Victor Margolin, a man of a certain age—no, the English does not translate the French nuance of "d'un certain age" very well—as he encounters a person of a certain gender and the technology that makes this possible. The reflection is titled "There is No There There."

Well planned by the editors, we also have a short visual essay to follow Victor Margolin's reflection. This is "The Collection of Technical Toys in the Deutsches Museum, Munich" by Artemis Yagou. It speaks for itself, but is also delightful. In addition, we also have three book reviews: John Fass reviews *Collaborative Media: Production, Consumption, and Design Interventions* by Jonas Löwgren and Bo Reimer; Gideon Kossoff reviews *Automony: The Cover Designs of Anarchy, 1961–1970* edited by Daniel Poyner; and Tom Lee reviews *You Must Change Your Life* by Peter Sloterdijk, translated by Wieland Hoban. Finally, we have an exhibition review that will be of general interest. Teal Triggs reviews the exhibition *Ivan Chermayeff: Cut and Paste,* at the De La Warr Pavilion, Bexhill-on-Sea, UK.

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