Introduction

The products created through the *craft of design* and the *art of design* thinking range from the most mundane items of everyday existence to the most consequential interactions, services, and systems that influence and sometimes shape our lives. They are all embedded in human stories, and it is the telling of those stories—clearly and insightfully—that is the challenge of design history, criticism, and theory. The stories we present in Design Issues typically weave together memories of the past, perceptions of the present, and intuitions or intellective perceptions of the future—the commonplaces of history, criticism, and theory. But it is important to observe that some of the stories are actually stories about the way we tell stories. Every issue of the journal offers a lens for perception—sensitive and intellective. The lens of this issue is the commonplace of narrative and argument. It is worth noting, however, that narrative and argument are interdependent: the narrative of a useful product depends on a sound argument, and a strong argument similarly depends on a compelling narrative from which it arises.

Person-Centered Care (PCC) and Shared Decision Making (SDM) are the themes of the first article in this issue. Kathrina Dankl and Canan Akoglu observe that over time "technology, policies, and techniques have shaped how clinicians and patients have been able to interact. However, just as medical diagnoses have improved under the paradigm of a participatory democracy, the relationship between doctor and patient is also a target for change." Their article, "Tangible Care: Design as a Vehicle for Materializing Shifting Relationships Between Clinicians and Patients," presents a brief but interesting history of this subject—including the role of the trusty and iconic stethoscope—but focuses primarily on a design project in the Danish healthcare system—a collaboration between a design university and a center for SDM. The place of design in healthcare reminds us of the work of Bruce Archer in this area and the more recent work of Ian Hargraves at the Mayo Clinic—see Ian Hargraves, "Care and Capacities of Human-Centered Design," Design Issues 34, no. 3 (Summer 2018).

Shared decision making is the story of the interaction between doctors and patients, but there is another complex interaction story about the way we tell stories . . . in the life sciences. The next article by Diana Crisóbal Olave, "Design for Biological Research: Upjohn, Will Burtin, and the Cell," focuses on what the author calls

"the ambiguous territories between biology and design, making and knowing, experimentation and manufacture." The subject is German designer Will Burtin's creation of a "monumental" model of the cell for the 1958 American Medical Association Convention in San Francisco. Olave points out that the sparse historical accounts of "The Cell" treat it as a form of mass communication, serving the pharmaceutical company Upjohn for the general purpose of sharing scientific content with a general audience. Instead, she discusses the interdisciplinary exchanges that models, such as The Cell and other large scientific models, have triggered between designers, biologists, doctors, and the general public. What follows is an illuminating exploration of the design and intellectual challenges that were addressed by Burtin and his design team. The article concludes with a useful discussion of the role of model making in interdisciplinary research, the idea of "boundary objects," and the ideas of Bruno Latour in the sharing of scientific knowledge.

The practice of design depends heavily on the devices of invention and discovery that have unfolded over the centuries from the ancient world to the present—through exploration of the rhetorical concepts of "topics" and "commonplaces." Little attention is given to this subject in design theory and the philosophy of design, but the tools of invention are evident everywhere, including a subject as contemporary as video gaming. Veli-Matti Karhulahti and Pawel Grabarczyk discuss the evolution of videogame production, with special attention to two game design patterns: the commonplace of "collaboration" and "competition." The article, "Split-Screen: Videogame History Through Local Multiplayer Design," describes video game design across three periods: arcades (1970-1980s), home computers (1980-1990s), and internet-connected machines (1990-2000s). The overall theme of two design patterns and the technological and economic "vectors" make for interesting reading. So, too, are the connections to Christopher Alexander and John Langrish. Perhaps one of the lessons to take away is simply as the authors express: "even when players compete against each other, a level of cooperation is necessary for the game to function: The players want to win, but they also wish to prolong the pleasure of play."

The philosophy of culture that has emerged in our time helps us to recognize that we work in the heritage . . . no, legacy . . . no, residue . . . of systems of thought from the past. We do not need the words of William Faulkner to know that the past is never dead. It lives on in classifications that persist in the mind and in the library, in government inventories of programs, and in what we politely call "mental models," budgeting schemes, decision-making authority, cultural and intellectual status, and general appreciation for what is surely now the emerging liberal art of technological culture. Only

the naïve would say that the question of classification is unimportant. This is the condition in which we find design and design discourse. How do we classify design in the library or in the mind? This is a question addressed by Rachel Ivy Clarke and Katerina Lynn Stanton in "One Domain Divided in Twain: Ontological Perspectives of Design Expressed via Classification." The article explores the Dewey Decimal System of library classification as well as the classification in the Library of Congress. What makes this article even more valuable is a discussion of the implications of such classifications. In the end, the authors observe that the old classifications "risk perpetuating outdated perspectives and stifling new innovations, as well as preventing designers and other interested parties from connecting with a diverse range of information."

A sign of the changing position of design is found in the next article by Andy Dong, Maaike Kleinsmann, and Dirk Snelders, "The Design of Firms: Part 1 – Theory of the Firm." One of the important issues in management is centered on questions about the Theory of the Firm—what is an organization? The current article seeks to identify some of the essential ideas that one may theorize to provide an explanation of the economic organization of firms. The literature review is useful for designers and design scholars who want to clarify the value and place of design—though much has been written about this in popular literature. While design is virtually institutionalized in modern culture, directly or indirectly present in many discussions of organizational culture, there is an ongoing need for management theory to include design as a significant feature of business and industry.

The final article by Brian Dixon is a philosophical argument: "Scoping a Justificatory Narrative for Design Practice in Research: Some Epistemological Intersections in Dewey, Wittgenstein, and Heidegger." The claim is modest. As the author says, it "is best seen as an early attempt to draw out some links which can be identified in relation to their treatment of particular themes relevant to design research." It is enough of a disclaimer to encourage a reader to move ahead with the text, looking for themes and connections among these philosophers and the work of design research. While the author is cautious in discussing philosophical aspects of design and design research, concerned that some design researchers may be dismissive of philosophical issues, the caution is mistaken. Philosophical issues are central in all aspects of design practice and design research, sometimes overlooked but always present.

In addition to the main articles, there are three reviews. The first is by Nick Bell, with an extensive review of a conference held at the Design Museum in London, *Design Research for Change (DR4C)* 2019 *Symposium*. He provides an interesting account, observing the

changed agenda of design research evident in the 20 conference papers. Enya Moore reviews another conference, *Museum Exhibition Design: Histories and Futures* held at Brighton University in September, 2020. It was an extensive conference, with 58 papers and more than 14 panels. Finally, D Wood reviews a republication of Tony Fry's *Defuturing: A New Design Philosophy.* This was originally published in 1999, so there are few topical references or examples, but the argument presses on with the issues of sustainability.

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