

Towards a Philosophy of Design



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With this volume we present 24 contributions to the philosophy of design. Design is an emerging topic in philosophy and not yet one on which work is shaped by a common set of questions or by an academically entrenched discipline of philosophy of design. We therefore consider it an effort in itself that we can present 24 contributions. Throughout the years we have approached in our careers design from our separate disciplinary perspectives and probed whether design was becoming a more general topic of philosophical reflection. One of us (Pieter) is working in a philosophy department and analyzed design as part of a larger project within the philosophy of technology. This has led to a predecessor volume on the philosophy of design (Vermaas et al. 2008), to analyses of design (Houkes and Vermaas 2010), to joint work with design researchers on the structure of design (e.g., Vermaas and Dorst 2007), and to the creation of the Design Research Foundations book series, in which this volume has appeared. The second of us (Stéphane) has worked first as a ‘philosophy applied to design’ teacher (Vial 2015c) and now is working in a design department and in a design research center. He analyzed design from a phenomenological perspective and contributed to developing the knowledge of design in France. These efforts led to a monograph about how to design affects, structures, and frames experience (Vial 2010) and to the founding of the French-speaking journal *Sciences du Design* edited by Stéphane (Vial 2017).¹

Our separate work may be taken as proof that design has found its way to philosophy, yet when teaming up we discovered a more substantial interest. A call for

¹ <http://www.sciences-du-design.org>

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contributions on the topic following a successful conference track on philosophy of design in the 2015 *11th European Academy of Design Conference* in Paris, France, produced close to a hundred reactions. The 24 contributions in this volume grew out of this large response. Still philosophy of design is at this moment not an entrenched discipline. The authors of the contributions to this volume are not working within a common discipline and are not drawing from shared earlier thinking or shared approaches and methods. Rather authors are originating from a spectrum of different disciplines, ranging from philosophy to design research, and from product design to architecture. This makes the current volume a diverse one presenting work on design from different perspectives, raising different issues about design, and having different expectations of what is to be achieved by a philosophy of design. Avoiding the trap to use our editorial roles for defining what true issues, methods and goals are for the discipline, we present the 24 contributions primarily in an open and constitutive way. The value of this volume lies in opening up the philosophy of design, and not in closing it down by announcing what its final structure will be. However, we will introduce the work included in the volume and say something about the different research traditions it originates from. And we can offer our personal perspectives and interests in the philosophy of design, for sharing our enthusiasm, and for opening the debate on what a philosophy of design can do and deliver. Our academic perspectives can be said to be grounded in philosophy (Pieter and Stéphane) but also physics (Pieter) and psychology (Stéphane).

1 From Philosophy and Physics to Design

The academic perspective that comes with physics includes a continuing urge to explore unknown phenomena and the belief that these unknown phenomena can eventually be captured, described, and understood. It also comes with a more traditional philosophy of science perspective on knowledge, on science, and on scientific progress. For instance, Pieter's PhD on the philosophy of the enigmatic physical theory of quantum mechanics (Vermaas 1999) was not aimed at emphasizing the enigma but at analyzing it and exploring ways to understand and describe the reality to which quantum mechanics may refer. And the assumption that this understanding and description is possible was beyond doubt.

When analyzing design with this physics mindset, claims in design research about its specificity become challenges rather than warnings that further analysis is spurious. Nigel Cross' (2006) claim that design defines a third culture separate to C.P. Snow's two cultures of the natural sciences and the arts, leads with this mindset to the task to characterize this specificity. The views that design expertise is close to a *sui generis* skill that people can acquire only through studio teaching and lots of practice, translates into attempts to understand this expertise. And taking up these challenges does not imply squeezing design into the mold of science or of art, but to looking in detail to how design researchers themselves describe design, through cases and through design methods. For, in fact, design researchers are already for

decades capturing the specificity of design problems and the specificity of the reasoning designers employ to address these problems. And the more recent *design thinking* movement may be seen as a movement that describes in detail (or in simplicity) how design reasoning works, for this movement includes an effort to scale design from a skill mastered by a few trained experts to an approach that can be employed by all, which in turn requires explaining design reasoning to all.

Similar challenges appear when considering design research itself. When Christopher Frayling (1993) claims that design enables a type of *research through design* that differs from more traditional forms of scientific research, the physics mindset drives towards the challenge of capturing this new way of doing research. Second, from a philosophy of science perspective questions can be raised about the epistemic value of design methods. Can these methods be validated for their claims about how design problems are to be addressed, and is there design specific research methodology needed for this validation? In design research the general view seems to be that the use of design methods by designers is too erratic for ever allowing systematic research on their effectiveness, yet some efforts are already made within design research towards taking up validation (e.g., Seepersad et al. 2006). Finally, when design researchers claim that research on design has quality indicators different to such indicators for scientific research, the challenge is to find those indicators. In architectural research this challenge has been addressed (Van der Hoeven 2011).

When Pieter took up a position in philosophy of technology at the Philosophy Department of Delft University of Technology, this physics perspective led to a first attempt to a generic characterization of design as the development of *use plans* for technical artefacts for realizing goals (Houkes and Vermaas 2010). Aligning with Herbert Simon's (1996, p. 111) general definition that "everyone designs who devises courses of action aimed at changing existing situations into preferred ones", this characterization puts emphasis on the teleology of designing, and sees the description of the artefact itself as a subsidiary activity in designing. This characterization was, however, neither meant as definite nor as complete, since it is also part and parcel of physics that a model or theory of a phenomenon is presented within the research community as a first effort rather than as the ultimate truth. Hence the characterization of design is available for improvement, yet meant as sufficiently detailed for addressing the set of questions in the philosophy of technology the Philosophy Department of Delft University of Technology was working on. The key observation underlying these questions was that technical artefacts are philosophically interesting entities since they have a *dual nature* by necessarily combining in their description structural and intentional concepts (Kroes and Meijers 2006). This dual nature defines the challenge to analyze how designers forge the relation between the structural and the intentional in technical artefacts. And the reasoning in design was taken to be a process by which designers realized this combination and bring teleology in the material world through translating goals of clients in descriptions of physical entities (Houkes and Vermaas 2010).

Design is increasingly taking center stage in the philosophy of technology. The emerging efforts to arrive at responsible innovation and at technologies that are respecting or even realizing our moral and societal values, advance design not only

as a process for translating goals of clients in physical entities, but also as a process for realizing moral and societal values, from privacy and transparency in ICT to the good life in architectural urban designs (Friedman et al. 2006; Van den Hoven et al. 2015). This design for values approach in philosophy of technology matches quite closely with the advancement in design research of design thinking and the emerging generalization of design from products to product-service systems. Again from a philosophy of science perspective questions do emerge. What is the structure of design methods for designing product-service systems and for designing for values? What is the specificity of these design methods as compared to methods in the sciences? How can these methods be validated, now not only from a research-methodological point of view but also from a societal one? In previous decades philosophy of technology has abounded in challenging the idea that humans can shape reality to their wishes by engineering design, leading to notions as a *technological fix* taken as an (ineffective) attempt to resolve a societal issue by technological means (Volti 1992) and the *design fallacy* as the (false) idea that designers can determine the use of the products they design (Ihde 2008). Contemporary design thinking is in that sense just a new form of an old modernist ideal, which requires a critical analysis in a philosophy of design.

2 From Philosophy and Psychology to Design

The academic perspective that comes with philosophy and psychodynamic psychology includes both a strong taste for concepts, for clear and distinct ideas, and the belief that secondary psychic processes (as judgment, reasoning, thinking, et cetera) are infiltrated by primary psychic processes (as wishes, anxiety, and fantasies). This is why it also comes with a more continental phenomenology perspective on subjectivity and human experience. For instance, Stéphane's PhD on the structure of the digital revolution (Vial 2012) was a philosophical inquiry into the technical structures of perception. It focused on how technical artefacts condition the way in which the world appears to us and in which phenomena are given to us, especially in an information age where the process of appearance is reshaped by digital technology. This approach can be characterized as a techno-transcendental phenomenology (Vial 2013) and marks a departure from postphenomenology (Ihde 1990; Verbeek 2005), which stipulates that technologies mediate our relationship to things. Techno-transcendental phenomenology instead seeks to render more perceptible the overall transcendental technical nature of appearance, as historically determined by an era's technical culture. Just as Jacob von Uexküll (1934) urged us to imagine each animal as surrounded by a sort of soap bubble that represents its milieu related to its biological circumstances, we must imagine human beings from a given historico-technical period as occupying a sort of phenomenological soap bubble, or techno-perceptual vessel, that is profoundly unique and determined by that period. For instance, being born and raised in the current digital "soap bubble" is phenomenologically different

from being born and raised in the mechanical “soap bubble” of the Nineteenth Century. This is the main idea of the “ontophany theory” as presented in (Vial 2013).

In such a perspective, design can be considered as a creative phenomenology or a phenomenology by practice: it produces unprecedented modes of appearance through various types of effects (Vial 2010; Vial 2015a). What is important in design is not how objects look but how they produce effects that condition experience.

The techno-transcendental phenomenological perspective on design was an attempt to define what design is from a ‘reception’ point of view, which is usually not so much considered by design researchers. The international design research movement traditionally restricts the scope of the design act to the “conception” part of it, which deals with the specific logics and processes that designers adopt when doing design. Kees Dorst noted that “within design research, the emphasis on the process of design is still overwhelming” (Dorst 2008). Alain Findeli (2010, p. 289) showed in a clear manner that “the ‘conception’ part is only one of the two main moments or constituents of a design project, the ‘reception’ part being the other one”; indeed, “the design act is incomplete if we do not address what happens to the project’s output once it starts its life in the social world”. From such a perspective, design as a topic for philosophy could be considered both as a *process* (conception) and an *experience* (reception). Design* – the star indicates the broadened meaning – is not only something we do, it is something we live. This is the angle that was adopted at the University of Nîmes, the university where Stéphane took up his current position, through the PROJEKT Design lab, a research center for design and social innovation.

This phenomenological perspective was in a natural way combined with the shared claim for the specificity of design, which in Nîmes is called the “epistemological originality of design” (Findeli 1998; Vial 2015b). The task to characterize this specificity does not only concern design as a *process* but also design as an *experience*. What is the specificity of a design experience? How to define it? In which way differentiates it from an art experience or a scientific experience? These are the kind of questions that must be addressed by a design phenomenology. A first conceptual attempt was developed with the notion of “effect of design” (Vial 2010; Vial 2015a), which was used as a tool to define three criteria to differentiate design and non-design from a reception point of view. This research would need more development in a global philosophy of design in order to elaborate more on what is design as an experience.

At the University of Nîmes, in the PROJEKT research center, we made the choice for a cross-disciplinary approach by building a team composed of philosophers, semioticians, ethnographers, sociologists, and communication experts, who also are for the most of them design practitioners or, at least, intimately connected with design practice and practitioners. Our angle is social design in a broad sense, ranging from service design to design for policy. This choice comes with a couple of questions. What is social design? Is design ‘social’ by nature? What does it mean for design to be ‘social’? How to define ‘social’? Is there in social design a philosophy of society and of social change? If yes, how is it different from how the social sciences approach society and social change? If yes, what kind of philosophy is it?

Is it about ontology, logics, ethics, or politics? Can social design be an applied philosophy or a realization of philosophy? And so on.

3 What Design and Philosophy of Design Can Do

The questions we discussed in the two previous sections are not defining an exhaustive list of issues that a philosophical reflection on design should focus on. These questions have their origin in the disciplines the two of us work in and the disciplines we come from, hence cover at most a part of this list. Design is an emerging topic for philosophy, and the time has come to let interested researchers set the agenda and let it evolve to a strong discipline of philosophy of design, as we have strong disciplines of philosophy of science, philosophy of art, and philosophy of technology. And for exploring the issues that a philosophy of design has to take up, we may draw from other philosophical disciplines as we do and as is done by the authors in this volume. Yet for avoiding possible biases, we propose to not consider philosophy of design as a branch of the philosophies of science, of art, or of technology, but approach it as a discipline of its own, with its own schools of thought, its major concepts, its controversies, and at one day, its own history.

An argument for propelling this development of a philosophy of design can be derived by comparing the questions we ended up with from our respective backgrounds. This argument fits the contemporary approach to evaluating academic research by its relevance to society, and concerns the possibility of addressing societal issues by design. Both the philosophy of technology and the phenomenological perspectives lead to efforts to actively address these issues by, respectively, design for values and social design. Yet from the philosophy of technology perspective one can also raise doubts about this possibility by referring to the earlier mentioned criticisms of the idea that humans can shape reality to their wishes by design. Hence, given that designers are currently embraced as the new innovators in technology and society, an analysis is needed of what design actually can do.

It may be argued that design for values and social design are not instances of a technological fix in the original sense (Weinberg 1966) since these new design approaches do not aim at solving societal problems with merely technological means. Design for values and social design may be taken as different by addressing societal problems with insights from ethics and the social sciences. Yet this does not yet establish that design for values and social design will always be successful. Even more traditional engineering design may fail in solving its problems (e.g., Petroski 1992). Hence, it may be expected that also design for values and social design can be unsuccessful, since societal issues are well-known as ‘wicked problems’ (Rittel and Webber 1973). Wicked problems are essentially unique problems for which: (i) there is no definite formulation (stakeholders cannot agree on the definition); (ii) solutions are not true-or-false, but better or worse; (iii) solutions are numerous and, when implemented, change the way to formulate the problem (Ritchey 2013). This possibility raises questions for a philosophy of design.

Research-methodological questions concern the effectiveness and efficiency of design for values and of social design. This involves developing the concepts and criteria to determine whether design projects in the societal realm are successful. And it involves developing research methods to assess how efficient methods for design for values and social design are (Vermaas 2016). Addressing such questions would require more empirical work about how often design for values and social design fail and a more transparent proposition to society about how successful such design may be taken to be.

With the expectation that design for values may fail, follow-up questions emerge ranging from epistemic to ethical ones. A first set of questions may concern determining conditions under which design for values and social design may be assumed to be (more) successful. A second set of questions is about the analysis of failures of such design, understanding whether factors that may lead to failures are related to the extension of design from the technical realm of engineering to the societal realm. A philosophy of design may also aim on this point at more constructive results, as means and suggestions for improving the effectiveness of methods for design for values and for social design.

A third set of questions concerns the epistemic and moral grounds to offering design for values and social design. Given that it may fail, what are factual and moral conditions that reasonably should be satisfied before design for values and social design can be offered for addressing societal problems? Also if it would be successful always, design for values and social design may mean that society is subjected to large scale experiments (Van de Poel 2013) in which social structures are modified. Specifically because design thinking methods allow challenging and changing the initial problem statements of clients through social and emphatic research methods and through reframing, doing design for values and doing social design may involve not delivering what clients initially aimed at. This means that society has to accept unexpected solutions, for instance when design is taking up wicked societal issues that may require to changing the problem definition while addressing it. Determining what the moral grounds for such experiments and changes are will be a challenge for a philosophy of design.

4 Overview

The 24 contributions to this volume include chapters that take up the question of what design can do, and these are brought together in the final part of the volume. Before giving an overview of the topics taken up in this volume, we draw attention to the methodological diversity of the different contributions. As we said, the authors of these contributions are originating from a spectrum of different disciplines, ranging from philosophy to design research, and from product design to architecture. And this diversity is reflected by the diversity in the methodology and argumentative styles used in the contributions. Drawing hard distinctions between the contributions by means of disciplinary background would amount to an unproductive typecasting

of authors, to ignoring that some authors are already combining approaches from both philosophy and design research, and to overlooking that some of the chapters are the result of collaborations between philosophers and design researchers. Still one can encounter in this volume chapters that are more pronouncedly philosophical and chapters that are more clearly design research, which may sometimes not be comfortable for the reader since we here are facing different intellectual traditions.

Chapters within philosophical traditions typically draw more extensively from philosophical resources and are in their use of resources of design research more selective, focusing on a few key texts rather than on the latest state of the art. Such chapters are moreover putting emphasis on the structure of the arguments that are advanced and typically describe and discuss cases of design in more cursory ways. Furthermore, philosophical chapters are generally more speculative, they build arguments on concepts and develop theoretical frameworks that can have an empirical side which is not always easily visible, or that are not directly related to a design practice. Such chapters can sometimes appear as somewhat abstract for readers accustomed to the intellectual traditions in design and design research. As Alfred North Whitehead used to say, philosophy is “the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted” (Whitehead 1978, p. 3). Building a system of general ideas in terms of which every element of design practice and experience could be interpreted is, to say it mildly, a difficult task and for sure a project that is still at the beginning. Nevertheless, Whitehead’s characterization of philosophy implies that philosophers working on design would benefit from being educated in design or from being simply acculturated to it. Reversely, it implies that designers and design researchers in philosophy of design would benefit from developing their ability and taste to speculative philosophy. “The study of philosophy is a voyage towards the larger generalities” (Whitehead 1978, p. 10). It requires us to accept changing our relation to language. “Every science must devise its own instruments. The tool required for philosophy is language. Thus philosophy redesigns language in the same way that, in a physical science, pre-existing appliances are redesigned” (Whitehead 1978, p. 11). This is why the technical language of philosophy is the basic component of all philosophical methods, which usually comes with conceptual abstraction.² By doing so, some chapters of this volume try to build contributions to philosophy of design either by philosophizing about design or philosophizing about concepts that can make sense for design.

Chapters following approaches from design research are instead regularly focusing on specific cases of designs or of design processes, and put emphasis on understanding the richness of such cases for deriving conclusions from this understanding. Instead of building a system of general ideas in terms of which every element of design practice could be interpreted, such chapters try to draw a general idea from a design practice case or set of cases. By doing so, these chapters contribute to philosophy of

²“The technical language of philosophy represents attempts of various schools of thought to obtain explicit expression of general ideas presupposed by the facts of experience” (Whitehead 1978, p. 12).

design either by exemplifying an idea through design projects or by reusing a philosophical idea in a design practice.

As there is no generally accepted methodology and writing style in philosophy, we anticipate that there will also not be one single argumentative approach emerging in the philosophy of design; rather we expect that design research will enrich the pluriformity of such approaches in the philosophy of design. Yet, when considering this volume, the reader may benefit from realizing that this pluriformity does exist.

The volume starts in a more basic manner with four contributions on design concepts. In Chapter “[A Philosophical Approach for Distinguishing “Green Design” from Environmental Art](#)”, *Sue Spaid* takes a look at how design’s outcomes differ from those of artistic actions by distinguishing “Green Design” from Environmental Art. In Chapter “[Scratching the Surface: “Appearance” as a Bridging Concept between Design Ontology and Design Aesthetics](#)”, *Annina Schnell* offers a conceptual essay about the special ingredient that makes an artefact a design object and asserts that any definition of design objects necessarily includes their appearance. In Chapter “[The Varieties of Good Design](#)”, *Salu Ylirisku* and *Mattias Arvola* adopt six senses of goodness as discerned by the logician Georg Henrik von Wright for analyzing the concept of good design. Finally Chapter “[Collisions, Design and The Swerve](#)” by *Jamie Brassett* and *John O’Reilly* is devoted to an examination of the role, value, and applicability of the concept of collision to design through The Swerve, Lucretius’s clinamen, and how it helps understanding design as a creative process.

The second part of the volume is about the thinking processes that constitute design. *Thomas Wendt* opens in Chapter “[Arational Design](#)” with a critical analysis of a construal of design thinking as rational thinking and argues for an arational understanding of design. Chapter “[A Case for Graphic Design Thinking](#)” by *Katherine Gillieson* and *Stephan Garneau* argues for a broad view of graphic design thinking as a distinct approach to problem-solving by presenting seven characteristics pertaining to graphic design thinking in particular. In Chapter “[The Role of Abduction in Production of New Ideas in Design](#)”, *Lauri Koskela*, *Sami Paavola*, and *Ehud Kroll* consider abduction in design, drawing from work by C.S. Peirce, in philosophy of science and in design research. Chapter “[Lively Objects: Designing Science Exhibits with John Dewey](#)” by *Kim Kullman* discusses John Dewey’s work on experience and experiment, and applies it for analyzing reasoning in the design of exhibitions at the Exploratorium science museum in San Francisco. Chapter “[Sketch Representation and Design as Generative Transformation](#)” by *James Andrew Self* and *Gabriela Goldschmidt* analyses design as a generative, transformative act and discusses the role of sketching during the conceptual ideation phase of design. And in Chapter “[Models in Engineering Design: Generative and Epistemic Function of Product Models](#)” *Claudia Eckert* and *Rafaela Hillerbrand* end this second part by considering the role of models in design and argue that this role is much broader than that of representation as is emphasized in the philosophy of science literature on models.

The third part of the volume brings together three chapters on design aesthetics and design phenomenology. *Virginia Tassinari* opens in Chapter “[Notes for an](#)

[Aesthetics of Social Innovation: A Reading through the Lenses of Jacques Rancière’s Philosophy](#)” with a reflection on how such a sustainable aesthetics, rooted in Jacques Rancière’s concept of partition of the sensible and in the DESIS network experience, could be considered as a driver of social and behavioral change. Chapter [“Conceptualizing Aesthetics in Design: A Phenomenological Framework”](#) by *Mads Nygaard Folkmann* analyses aesthetics as an approach to understand how design frames experience and enlarges aesthetics beyond the classical limited sensual dimension by including also experiential and cultural aspects. Chapter [“Phenomenology in Spatial Design Disciplines: Could it offer a bridge to sustainability?”](#) by *Emina Kristina Petrović, Bruno Marques, Natasha Perkins, and Guy Marriage* ends this third part: it proposes that the philosophy of phenomenology is both applicable and necessary for a deeper and more integrated approach to spatial design disciplines in a world that aspire to be sustainable.

The fourth part is on design research and design epistemology. It starts with Chapter [“The Specificity of Design Research: How practice-based design knowledge can enter the Great Archive of Science”](#) by *Paolo Volonté, Lucia Rampino, and Sara Colombo*, which is an inquiry on the specific nature of design research considered as research-through-design. In Chapter [“Design Research as a Meta-Discipline”](#) *Anne Caplan* analyses research enabled through design projects using Henri Lefebvre’s notion of meta-philosophy. *Dingmar van Eck* relates in Chapter [“On Testing Engineering Design Methods: Explanation, Reverse Engineering, and Constitutive Relevance”](#) work in philosophy of science on mechanistic explanations with design methods for reverse engineering and design optimization, and argues that this relation provides a constraint for assessing these design methods. In Chapter [“Research in Interior Architecture: Interdisciplinary Viewpoints and Research Approaches”](#) *Ann Petermans, Jan Vanrie, and Kris Pint* consider interior architecture and argue that the diversity of bodies of knowledge used in this discipline calls for a similar diversity in approaches to studying it. The interdisciplinary nature of current design resurfaces in Chapter [“The Philosophical Underpinnings of Design Theory”](#) where *Anne-Françoise Schmid* analyses more generally the philosophical and epistemological frameworks needed for understanding design.

The fifth part is on sustainability and ecology in design. In Chapter [“Effects of Design and Sustainable Design of Technical Artefacts”](#), *Karina Vissonova* proposes to form a consistent understanding of what should fall under the ‘sustainable design’ kind and what should not. Chapter [“Ecological Design as an Ecology of Love: Epistemological and Ethical Implications”](#) by *Gonzalo Salazar and Seaton Baxter* is an attempt to synthesize a new epistemology of design called an ‘ecology of design’ and argues that design become ecological only when its praxis is mainly commanded by the emotion and ecology of love. Finally, Chapter [“Scales of Design: Ecodesign and the Anthropocene”](#) by *Victor Petit and Bertrand Guillaume* offers an essay on the encounter between design and the global environment in the Anthropocene and more particularly look at the issue of scales in the context of the ecological crisis.

The final part of the volume on design, politics, and society brings us back to our question of what design can do. Chapter [“Governmentality, Technologies, & Truth](#)

Effects in Communication Design” by *Katherine Hepworth* argues that communication design knowledge and artefacts are inherently governmental through Foucault’s theories of discursive technologies, truth effects, and governmentality. In Chapter **“The Black Book: Emilio Ambasz’s University of Design”** *Matthew Holt* describes a proposal in the 1970s by the architect and product designer Emilio Ambasz to establish a new research institution that puts design center stage to our understanding of our human made reality, and analyzes the responses these efforts elicited in academia. Finally *Paul A. Rodgers* and *Craig Bremner* end in Chapter **“The Design of Nothing: A Working Philosophy”** with a sharp critique of what design actually has brought and can bring to humanity.

We hope that together these 24 contributions may give the reader a rich source to the emergent discipline of philosophy of design. Still, as we said, this philosophy is not yet an entrenched discipline with a shared basis or common approaches and methods. The contributions therefore do not make up a coherent contribution to the philosophy of design, but may better be seen as a substantial effort of exploring and trailblazing the scope of the discipline and demonstrating its richness and broadness. The contributions moreover cannot be taken as exhausting the scope of the philosophy of design; topics as the ethics of design and the ontology of the designed world are not or under-represented. Hence, in addition to offering 24 contributions to the philosophy of design, we hope this volume will be a basis for further work towards establishing a flourishing, rich, and more coherent and complete discipline of philosophy of design.

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