

# Afterword

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The conceptual triad of *Design*, *Gestaltung*, *Formatività* describes a variety of simultaneous and nonsimultaneous genealogies, approaches, and positions associated with processes of making, crafting, inventing, shaping, planning, and modeling. In combination with *Gestaltung* and *Formatività*, *Design* frees itself from all shortcomings which connected it traditionally—in opposition to the autonomy of the liberal arts—to technique-related services, industrial shaping of commodities, and adaptive solutions for concrete problems. It emerges similar to *Gestalt* and *Forma*, creating a body of shaped elements like notes in a melody. Design thus returns to the concept of *disegno*, embracing all human activities included in *Gestaltung* and *Formatività*. Therefore, the triad addresses both the richness of different histories and the present urgency that brings them together for a theoretical as well as practical agenda.

In relations, design unfolds. The various contributions gathered in this anthology *Design, Gestaltung, Formatività: Philosophies of Making* vividly demonstrate that design cannot be reduced to *one* history, *one* concept, or *one* definition. Rather, it lives from the multiplicity and relationality of different ways of *doing* and *thinking*. Once more it has become apparent that design in practice and theory has grown in relation with and in between the disciplines. It has emerged both outside academia as a commercial, (post-)industrial practice and within it as a reflexive tool and research methodology. Presumably, it is this state of in-betweenness that gives design such promise for cross-disciplinary collaboration and for the realization of a practical philosophy.

*Design, Gestaltung, Formatività* opens up a productive dialogue that explores design in its manifold facets. There exist as many different ways to practice design as there are to think, research, and speak about and with design. The present anthology at the same time documents an important moment of exchange within

the more recent German-French history of design theory and practice. This postwar history obviously builds on the long tradition of the French *écoles d'art*. Design had no place in the traditional classification. In France it is to this day considered as an applied art, but not as “real” art, and, in Germany, as applied science, but not as “real” science. In this sense, the Ulm Hochschule für Gestaltung has played a significant role in establishing design as an essential field of research between art and science.<sup>1</sup> Important for a German-French axis of exchange represented in this book is above all the impact of the Ulm school, which served as a model not only for the Karlsruher Hochschule für Gestaltung founded by Heinrich Klotz but also for ENSCI-Les Ateliers, which was created in 1981 under the aegis of President François Mitterrand and the then French Minister of Culture, Jack Lang. The challenge of a close relationship between design and science in the industrial and postindustrial era has established the basis for the new role of design within basic interdisciplinary research as it is developed today in Berlin and Paris, e.g., at Humboldt University’s Cluster of Excellence »Matters of Activity«<sup>2</sup> and at the Paris-based Chaire Arts & Sciences.<sup>3</sup>

At the same time, design has gained increasing importance in recent years, beyond its traditional contexts of application, as a management, governance and policy-making strategy, as a generalist problem-solving principle, and a practice-based research methodology. Bruno Latour, the French philosopher of science and technology, has declared that “design is applicable to ever larger assemblages of production. The range of things that can be designed is far wider now than a limited list of ordinary or even luxury goods.”<sup>4</sup> He believes that “design,” as a visual-material practice of modest, careful optimization, has even the potential to overcome both the narratives of revolution and modernization, and to shift the attention from “matters of fact” to “matters of concern.”<sup>5</sup> One aspect that seems important to us in this regard is the question of relationality of and through design. How can design be understood as a recursive sociomaterial practice of world-making beyond traditional approaches of “human” ingenuity and promethean *hubris*? How can design critically question binary demarcations between nature and culture; how can it overcome the unsustainable chains of production and consumption; and how can the modernist design canon, which is anything but diverse, inclusive, and just, be unlearned? Design unfolds its potential, we believe, in the multiple interplays of human and nonhuman beings, nature-cultures, materials, tools, and environments. Design philosopher Donald Schön once described designing as “a conversation with the materials of a situation,” in which both the designers and the situation “talk back” to one another.<sup>6</sup> Design accordingly implies profound involvement with social realities and infrastructures, with cultural settings and biases, with economic and political constraints and, last but not least, it constantly interacts with images, spaces, and materials.

However, this involvement is neither unilateral nor uniquely human-centered. Design is world-making in a profoundly relational and ontological sense: the worlds we design shape us and our design abilities and potential.<sup>7</sup> World-making by design is thus a relational practice and a situated mode of knowledge production (Haraway) in which epistemology, ontology, and ethics are constantly interwoven. In this context, the intrinsic agency of materials, images, and spaces has increasingly moved into the focus of attention in recent years. Feminist new materialist scholar Karen Barad, for example, has coined the neologism *intra-agency*

- 1 Tomás Maldonado and Gui Bonsiepe, “Wissenschaft und Gestaltung,” *ulm: Zeitschrift der Hochschule für Gestaltung* 10, no. 11 (1964): 10–29.
- 2 One site that was crucial to the making of this anthology is the Cluster of Excellence »Matters of Activity. Image, Space, Material«, at Humboldt-Universität zu Berlin. »Matters of Activity« aims to create a basis for a new culture of materials. The central vision of the Cluster is to rediscover the analog in the activity of images, spaces and materials in the age of the digital. See: <https://www.matters-of-activity.de/en/> (accessed August 27, 2021).
- 3 The Chaire Arts & Sciences was founded in 2017 by the École polytechnique, the École nationale supérieure des Arts Décoratifs-PSL and the Daniel & Nina Carasso Foundation.
- 4 Bruno Latour, “A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk),” in *Networks of Design Proceedings of the 2008 Annual International Conference of the Design History Society University College Falmouth 3–6 September 2008*, ed. Fiona Hackney, Jonathan Glynn, and Viv Minton (Boca Raton: Universal-Publishers, 2009), 2–10.
- 5 Latour, “A Cautious Prometheus?,” 2.
- 6 Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983), 78–79.
- 7 See Anne-Marie Willis, “Ontological Designing,” *Design Philosophy Papers* 4, no. 2 (2006): 69–92.

to emphasize that agency does not belong to humans alone, but is a relational process, a web of influences and effects that arise in relation between human and nonhuman beings.<sup>8</sup> Accordingly, matter is not a “thing,” but a “*substance in its intra-active becoming*,” “*a doing, a congealing of agency*.”<sup>9</sup>

Taking the active properties of matter seriously implies to rethink design and making, too, as suggested by the interdisciplinary research cluster »Matters of Activity. Image Space Material«: “Recognizing the inherent active structures in the creation of artifacts will completely change design processes [...]. The new strategies of engineering and *Gestaltung* no longer prescribe and anticipate intended forms, but develop active design processes that are able to react to their environment.”<sup>10</sup> Rethinking design and making in the context of active matter also leads to novel interdisciplinary constellations between the sciences and humanities, design, architecture and engineering, and it sharpens the focus on elementary practices, such as weaving, filtering, and cutting.

Considering design as a practice beyond the dichotomy of culture and nature opens up a huge research field. A focus on the practice of weaving reveals that this technique is by no means performed solely by humans. Rather it can be a collaborative activity of “world-making” that mutually “weaves” together practitioners, fibers, cells, and bacteria. The microbiologist Regine Hengge and the literary scholar Karin Krauthausen emphasize that the weaver “is not an active subject [...] shaping a passive material into an equally passive finished product here; instead, the material and the structures that define it are involved in making decisions by simultaneously enabling and limiting possibilities to which the weaver responds creatively. In nature, too, thread-like base elements are spun into fibers, fibrils and filaments on all scales, which, in turn, are woven into three-dimensional structures. All life on our planet is based on thread-like macromolecules, which are the fundamental components of all cells, regardless of whether or not these are single bacterial cells or human cells.”<sup>11</sup>

This insight has important consequences for the design process. This one example of fiber design operations alone—as a perspective for combining culture and nature in a nondestructive manner—shows the fundamental change in research necessary today. Beyond the hylomorphic dichotomy of matter and form, design can take the example of nature as its guiding principle. The examination of the inner architecture of biological materials shows how in nature growing is a highly adaptive and interactive process. Any process of natural design establishes a complex interplay with its environment and thus is not restricted to an isolated object. Design even in its most minimal mode is not limited to its intended place, object or scale; it invariably causes an uncontrollable impact beyond its preconceived objective or desired result. Design is always world-making, in the sense that any kind of design intervention entails an endless chain of consequences. Design approaches may also help to decipher the functionality of patterns that have appeared in the course of evolution in biological systems and thereby contribute to progress in natural science.

Considering the numerous mutually influencing manmade crises of our time, it seems indispensable to seek more sustainable ways of designing and making, to discover designs for human survival.<sup>12</sup> However, this implies acknowledging first that “design is immanent to crisis,”<sup>13</sup> as Adam Nocek and Tony Fry have stated:

- 8 Karen Barad, “Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter,” *Signs: Journal of Women in Culture and Society* 28, no. 3 (2003): 801–31.
- 9 Barad, “Posthumanist Performativity,” 822 (italics in the original).
- 10 Wolfgang Schäffner, “Full Proposal »Matters of Activity: Image Space Material«” (Berlin: Humboldt-Universität zu Berlin, 2018), 15.
- 11 Regine Hengge and Karin Krauthausen, “The Event of a Fibre,” *Gropius Bau Journal* (blog), 2021, <https://www.berlinerfestspiele.de/en/gropiusbau/programm/journal/2021/regine-hengge-karin-krauthausen-the-event-of-a-fibre.html>.
- 12 See Friedrich von Borries, *Weltentwerfen: Eine politische Designtheorie*, 2nd ed. (Berlin: Suhrkamp, 2017), 119–37.
- 13 Tony Fry and Adam Nocek, “Design in Crisis, Introducing a Problematic,” in *Design in Crisis: New Worlds, Philosophies and Practices*, ed. Tony Fry and Adam Nocek (London: Routledge, 2021), 4.

“modern design is at the ontological root of the universalisms responsible for the asymmetrical forms of violence that human and non-human life are facing today and in the future. What has yet to be determined is what it means to conceptualise design as this ontological negating force, and how to go about mitigating the ontological horizon of this practice without resorting to worn-out theoretical paradigms and meaningless slogans.”<sup>14</sup> Following this idea, it is all about un- and re-learning design: “Design must un-design its own designing, but in so doing, it cannot make this a design project. In short: design must become unrecognisable to itself.”<sup>15</sup>

It is high time to replace the image of the Promethean subject, exploiting the “web of life”<sup>16</sup> by means of design, with postheroic notions of distributive agency and pluriversal design politics.<sup>17</sup> To explore and acknowledge multiple and diversified approaches toward transitional, transformative, resilient, just, and posthumanist designs.<sup>18</sup> Finally, design needs and has already started to interlock with scientific and engineering efforts to ensure that the transformation of matter to materials and back again becomes more sustainable. In this sense the present anthology with all its contributions offers the possibility for a comparative analysis of design strategies that will allow their future shape to develop. In short: for a design that unfolds in relations.

<sup>14</sup> Ibid., 2.

<sup>15</sup> Ibid., 10; Madina Tlostanova, “Unlearning and Relearning Design,” in Fry and Nocek, *Design in Crisis*, 163–80.

<sup>16</sup> Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015).

<sup>17</sup> Arturo Escobar, *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds* (Durham: Duke University Press, 2018).

<sup>18</sup> Suggestions in this regard come, for example, from: Terry Irwin, “Transition Design: A Proposal for a New Area of Design Practice, Study, and Research,” *Design and Culture* 7, no. 2 (2015): 229–46; Wolfgang Jonas, Sarah Zerwas, and Kristof von Anshelm, eds., *Transformation Design: Perspectives on a New Design Attitude* (Basel: Birkhäuser, 2015); Alexandra Lee, *Resilience by Design* (Cham: Springer, 2018); Laura Forlano, “Posthumanism and Design,” *She Ji: The Journal of Design, Economics, and Innovation* 3, no. 1 (2017): 16–29; and Sasha Costanza-Chock, *Design Justice: Community-Led Practices to Build the World We Need* (Cambridge, MA: MIT Press, 2020).

