What are the politics
of ontological design?

A critical reflection
on the mutual
becoming of «the human»
and «the world»

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At least since the third Istanbul Design Biennial in 2016 the impact that design objects have on the self-conception of humans has moved into the focus of theoretical investigations within the discipline of design and beyond. By stating that «Design is what makes the human» (Colomina/Wigley 2016: 12), curators Beatriz Colomina and Mark Wigley popularized an investigation into the nature of design which they no longer conceive as serving human needs; instead, they think of design as a practice that cannot be disentangled from what «we» understand as «the human». Centuries of designing not only brought forward objects but these objects, in turn, also affected the development of the human. Their approach can be seen in continuation with a constant broadening of the concept of design taking place since the second half of the last century, – from the crafting of an object, to the design of processes, systems and alternative futures, to the agency of the designed (see Krippendorff 2005). To the same effect that design gains more and more scope, it is assumed that, by means of design, «existing situations» can be turned into «preferred ones» (Simon 1996: 111) – a more comfortable chair, a more inclusive education system, a new human. However, what is preferred and by whom is usually assessed by the designer(s), thus carrying an implicit political statement which only becomes reinforced through the design output and thus should be treated with caution. In this chapter I intend to challenge the unspoken political assumptions that come with an exclusively evolutionary reading of design. The way design is shaped and shapes – its political agency – requires further analysis.

In the publication accompanying the Biennial titled *Are We Human? Notes on an Archaeology of Design* (2016), Colomina and Wigley compare design to evolution, utilizing Darwin's example of the stone tool which has, as anthropologists recently suggested (Lycett/Key 2011), affected the evolution of the hand. Accordingly, the development of cutting utensils coincides with the evolution of the hand from locomotion to alternative functions, such as cutting (see Leroi-Gourhan 1993). Taking this example as a starting point, they continue their investigation by assigning the mutual becoming of humans and objects to modern design practices, such as architecture and product design, with the attempt not only to claim that design defines «the human» but also to indicate that «we» can redesign ourselves:

The human is inseparable from the artifacts that it produces, with the human body having the extended shape of all the artifacts it has made and each artifact being an intimate part of its biology and brain. But also, and more important, the human emerges in the redefinition of capacity provided by the

artifacts. In a sense, the artifacts are more human than the human. Artifacts are therefore never simply the representatives of human intentions and abilities. They are also openings, possibilities of something new in the human, even a new human. (Colomina / Wigley 2016: 24)

The search for the human here becomes a design inquiry, something that is constantly redefined through design practice and therefore, as indicated in the quote, can be willingly redirected. The capacity for the human to become, as provided by the artefact, is an interesting aspect which unfortunately is not further elaborated. Notably, Colomina and Wigley, when they talk about «the human», never specify which humanity they address. However, the examples they use are mainly related to the Bauhaus movement, and thus tend to favour modern architecture and design history and its almost exclusively male protagonists (Le Corbusier, Gropius, Loos and Mies van der Rohe are among the architects discussed). Whether one lives in one of the Bauhaus villas or works at a sand mine where the sand for the construction of such a Bauhaus villa is mined changes capacity drastically. It appears that in their ontological equation the figure of the human relates to what John Law calls the «one-world world» (Law 2011) – the gesture of modernity to ignore parallel histories and worldviews which carry alternative self-images. An abstraction and generalization of design, as implied in this gesture, thus runs the risk of obscuring the infrastructures on which it is based:

Without the technological advancements linked to the industrialisation of Europe which occurred due to the wealth of the colonial economies; without massive extraction of mineral resources from colonies needed to create new building materials and techniques; and without colonies as sites of experimentation, «modernist architecture» would not have occurred. (Gillett / Pereira 2014: 112)

If the design artefacts Colomina and Wigley are talking about are indeed irreducibly human, then they are human to such an extent that they reflect a historically specific humanism, namely that of the human sciences. And if this is, in fact, connected to biological and cognitive capacities, then with every new design artefact separation and negative capacity on the side of those who are excluded is reinforced. Their description allows the authors to stretch an allegedly timeless argument from stone tools to modernist architecture to smart phones. Whereas the example of the co-evolution of stone tool and hand refers to research in evolutionary biology, transferring a similar logic onto a system of global mass-produced artefacts which

are developed by a privileged few at the expense of a majority of the world's population leaves out other forces at play that led to the proliferation of design in the first place. In the same manner as evolution is a process implicated with the violence of extinction, design cannot be separated from the exploitative and extractivist structures on which it is based, thus drastically limiting or opening possibilities depending on who is considered human.

Even though it is briefly acknowledged by the authors that design and the distribution of inequality go hand in hand, this logic does not become further entangled and instead appears to be an absolute term: «It is not that there is a privileged world of design and an unprivileged world outside design. Design is not simply concentrated where wealth is concentrated. Rather it is everywhere, and it engineers concentrations of wealth and privilege» (Colomina/Wigley 2016: 70–71).

Towards the end of their book Colomina and Wigley introduce the iPhone and social media as the biggest and most invasive design projects, the ultimate tools for «self-design» (Colomina/Wigley 2016: 239–273). They are describing how everyone is glued to the phone, depicting an image of a family of colour looking after a herd of cows while checking the screen next to a white couple lying in bed with one partner staring at his device. The description reads: «The cell phone provides new senses of both protection and vulnerability to rich and poor alike» (Colomina/Wigley 2016: 243). Not addressed here is the huge discrepancy between the worldview promoted by brands such as Apple or Facebook and the kind of struggles in other parts of the world and how they are occupied by Western design fantasies. A design project like the iPhone not only creates new cognitive behaviour – Colomina and Wigley emphasize nomophobia (no-mobile-phone phobia) as a newly developed human response – but at the same time reinforces exploitative structures.

Claims towards an ontological design

Even though Colomina and Wigley do not explicitly mention *ontological design*, there are many parallels to the concept first brought up by Fernando Flores and Terry Winograd in 1986 and later popularized by design theorists Tony Fry (2012) and Anne-Marie Willis (2006). Ontological design is based on the definition of design as prefiguration: the unique human capacity to prefigure the outcome of an action before taking it is what separates the human from other species and as such grants a unique relation to the artifice. As he frames it in *Becoming Human by Design* (2012), for Fry, this relationship is called design. In continuation, the relationship between human and the

artificial is a co-evolutionary process in which both «human» and «thing» are shaped in their interaction with one another. This reading is related to Heidegger's phenomenology according to which knowledge about a thing (Heidegger's famous example is the hammer) does not result from the description of its properties, such as weight or composition, but in the use of the thing (see Heidegger 1962). Thus, humans do not encounter something *in itself* but in how it acts in the world. And in this encounter, it is the thing which acts back, changing the capacity of the one who interacts with it. Being, therefore, should be regarded as relational, for it is made sense of through interaction. In Fry's and Willis' interpretation of Heidegger, it is not only tools, such as the hammer, that become a way of mediating between humans and the world, but the design of systems and organizations as well, making design the discipline of correspondence (Fry 2012; Willis 2006). Willis concisely describes design as a double movement: «[W]e design our world, while our world acts back on us and designs us» (Willis 2006: 70). Within ontological design «neither object, process nor agent is granted primacy» (Willis 2006: 86), shifting agency away from the designer and promoting a mutual process of becoming. Based on a summary of her work with Fry, she deducts three meta-categories of design (Fig. 4.1) which she describes as interrelated: design object, design process and, referring to ontological design, design agency. She sees ontological design as a vehicle to move beyond object and process of design and to take a closer look at the conditions in which design takes place or those that design brings about.

However, I argue that too flat an ontology of «design designs» tends to eradicate difference where, in fact, an unequal distribution of power is constantly re-engineered. Although there are instances of acknowledging inequality in the work of the authors mentioned, unpacking these dynamics is not part of the project of ontological design. For instance, in *Design in the Borderlands*, Fry and Kalantidou reflect on the colonial matrix (Mignolo 2011) as an «ontologically designing instrument» (Fry / Kalantidou 2014: 186). Still, they do not challenge design's own entanglements with establishing and enforcing colonialism, thus «designing» the colonial matrix which then subsequently designs inequality. Whereas it is interesting to think of the agency of the designed as something that is shaped and shapes back, and thus adding a new layer of reflection to objects and processes of design, neglecting how relationships between different humans and objects are preconditioned ignores the politics of designing. Within ontological design (as within Heidegger's work) the terms «human» and «world» do not seem to need any further explication in favour of making an ontological argument. But what might hold on a phenomenological level cannot easily be scaled up without taking into consid-

Fig. 4.1 Meta-categories of design.*

*According to Willis' reading of Fry design comprises of three meta-categories which cannot be thought of in exclusion of one another (Willis 2006: 85).

eration social, cultural and economic processes. It then happens that design extends to all human activity and leads to statements such as «we are all designers» (Fry 2012: 42). The result is both a generalization and mitigation of the extractive dimensions of design, putting everyone and everything on one level with design as a neutral facilitator of interaction.

Without referring to Heidegger, Colomina and Wigley put it similarly by stating:

It is precisely the lack of a clear line between human and world that provokes or energizes design as the attempt to draw such a line, our forever incomplete attempt to fashion a self-image and the forever unsatisfying attempt to come to terms with what we see in this continually reconstructed mirror. (Colomina / Wigley 2016: 25)

The category of the human in this constellation seems open-ended and stripped bare of any social, material or political dimensions so

that design as an abstract negotiator can give shape. It stays open who the «we» is that designs and in which world this design plays out, but it is implicitly suggested that there are no constraints from both sides. In reality, however, those who have the power to design and shape this ideal of the human are in the minority, with the majority of people being left out of the equation.

The evolutionary impetus that drives *Are We Human?* can also be found in Fry's writings. Whereas once there was enough time for biological adaptation, with the rapid rate of today's change we are only left with adaptation by artificial means. According to Fry, this includes not only biosocial engineering but also the reframing of «our» ontological relationship to the artificial. Animating the same example of the stone tool, in *Becoming Human by Design* (2012) Fry spans an overarching argument from the Stone Age to contemporary post-human discourses:

Not only is the lineage of ontological designing of the human unbroken from the age of stone tools to the present, but to understand this is to realize that human being, nonhuman being and the being of inanimate things are all relationally bound in (our) Being. We are of the stones, the animal and the human. (Fry 2012: 105)

Fry's line of thinking seems to resonate with the current more-than-human discourse which challenges the centrality of human agency. In the face of the environmental crisis, human-centred design, as it has been proclaimed widely by design thinking, seems to have reached its limitations. To the same affect that Fry acknowledges design's complicity in the ecological crisis, he believes that a re-directive (ontological) design practice can move beyond unsustainability and towards what he calls *sustainment*. This argumentation for an ontological design eventually leads to a call for social change because «[d]esigning with knowledge of the thinging of things will be qualitatively different from any kind of design which doesn't know this. Thus, a move can be made from ontological designing as the naming of something to ontological design as practice» (Willis 2006: 82). What this practice could look like is unfortunately not specified; thus ontological design stays largely in the realm of the abstract.

Describing design not by its processes and objects but the way it acts in the world is crucial for understanding design's entanglements with other spheres. The work of Fry and Willis has been fundamental to widening the understanding of what can be considered designed. What has not been addressed so far are the specifics of how these activities unfold, how they are informed by and address different bodies differently. Ontological design carries a certain

baggage that cannot be resolved on the level of theory but requires a radical anthropological, cultural and historical reframing of design as an inquiry into the manifold instances and temporalities that shape human–material relationships. My main observation is that there seems to be a particular reading of «the human» underlying the ontological argument which does not account for different life worlds. When reflecting on the concept of the human within anthropology, Tobias Rees summarizes concisely the problematic use of a universal concept of the human:

the general, abstract concept of «the human,» understood as a category under which all humans of all times and places could be subsumed as if they were members of a single collective – «humanity» – can hardly be taken for granted. «The human» – just as well as the category of «humanity» – is not a universal, a timeless ontological category that has always existed. Instead it is a recently invented concept that emerged in Europe about 250 years ago and that became subsequently universalized. (Rees 2018: 40)

A cultural study of design therefore should not only analyse how design objects act in the world but at the same time challenge the assumptions that are at the basis of a design and thus enable particular ways of acting over others. In *Designs for the Pluriverse* Arturo Escobar (2018) tries to shift design towards sustainment, taking his clues from ontological design and transition design (Irwin et al. 2015) while being well aware of design's modernist baggage. What he labels *autonomous design* is «a design praxis with communities that has the goal of contributing to their realization as the kinds of entities they are» (Escobar 2018: 184). His theory is grounded on community-building examples from Colombia which describe non-liberal forms of politics and social organization, such as commoning and community economies. Central to his argument is the concept of autonomy – that is, the capacity for self-creation. In his view, indigenous communal forms of living offer alternatives to capitalist economy. He conceptualizes the different forms of economic, democratic and cultural organization as autonomous design while acknowledging that it is a specific political ontology – that is, «capitalism, corporate coalitions, expert institutions, repressive and police states, and dualist rationalities» – which defines the negative space these communities occupy. It is not until the conclusion of the book, and despite his attempt at the possibility of an autonomous design, that he wonders whether it is not that design designs ways of being but design itself is an expression and proliferation of *one* particular way of being: «In other words, is *nondualist design* not an oxymoron, for is design not always about

human projects and goal-oriented change, about an analytics and ethics of improvement and an inescapable ideology of the *novum*, that is, of development, progress, and the new?» (Escobar 2018: 213; original emphasis) Escobar's example shows that it is not that easy to imagine sustainment, to create other frameworks for design to unfold, without paying attention to its inner logics which tie design to neoliberalism (see Julier 2017).

Against the backdrop of Escobar's concern, ontological claims made in the works of Fry, Willis, Colomina and Wigley, and their respective call to action, it becomes even more crucial to untangle how design is implicated in systems of power and how these implications in turn shape the possible relations different people can have with objects and environments. Because the agency to design and thus to change is distributed unequally to begin with, the acclaimed universalism that humans design and are designed by the designed will show very different means and capacities once brought into action. The generalizing truth of an ontological design clashes with the material reality of design in which the relationships between humans and objects are messy rather than straightforward. Thus, how design designs can only be understood by untangling its «onto-epistemic formations» (Escobar 2018: 54) – that is, the situated and specific entanglements that unfold around a design object and defy any generalization.

Design politics as what pervades object, process and agency

Whereas ontological design provides a framework to reflect on the agency of the designed, it either tends to reproduce one-world worlds, as in the case of *Are We Human?*, reinforcing the dominant Western mode of thinking and acting, or remains opaque due to an alleged flatness which produces dehistoricized and depoliticized subjects. In order to make ontological claims applicable, the politics of design requires further attention. I argue that design is already always political since it demarcates who is considered to be its subject and what a preferred situation looks like. By designing an object, the designer intentionally but often unconsciously draws on labour and resources from elsewhere. How these resources were made available, e.g. through extraction of resources and exploitation of labour, thus is an integral part of designing. Already a separation happens here between who designs and who and what provides the support for these design activities. These asymmetries then are further enforced and carried along with the design objects, thus

defining who and what has agency to interact and how this interaction is shaped.

The three meta-categories introduced earlier thus require to be framed and extended by another category: design politics (see Keshavarz 2016). Design politics refers to the epistemological violence ingrained in the object, process and agency of design. It makes visible the sociomaterial conditions that bring about design and further proliferate upon and within it (Fig. 4.2).

Fig. 4.2 Adapted version of meta-categories of design.

In the following I introduce two examples which address design politics. The first is the work of Mahmoud Keshavarz (2016), who analyses design politics through an inquiry into passports, camps and borders. Keshavarz, who is also part of the Decolonising Design platform, is interested in untangling the politics of *undocumentedness*, the condition «in which certain bodies are deprived of specific political rights due to the lack of recognition within the current dominant nation-state regime» (Keshavarz 2016: 24). In his research he frames the passport as an object that is designed to facilitate both mobility and immobility by indicating who has the right to access and who does not. Above

this, and through the process of forgery, the passport, or rather passport making, can become a critical design practice by which current modes of belonging are challenged. What becomes apparent, especially through the appropriation of the passport by those who are oppressed through its mobilizing / immobilizing agency, is how design articulates relations. In Keshavarz's words: «these material articulations are not the mere outcomes of either design or politics, but rather a part of the complex relationships brought into being by how design and politics are always already interconnected» (Keshavarz 2016: 361). Here the focus lies not only on the external relations that the designed objects facilitate (e.g. a passport grants access) but how the internal relations of design itself are always implicated with its political agency (e.g. a passport separates bodies into citizens / non-citizens in the name of a state authority). In his investigation, which draws on anthropological work with the undocumented and passport brokers alike, Keshavarz reveals the messy reality that ontological design leaves untouched. Contradictory structural conditions are more often the norm than they are the exception. The design of the passport is a materialization of unequal distribution of power and the critical design practice of forgery reveals this disposition.

Resonating with Keshavarz's line of thinking, I suggest that design politics is engaged with revealing the articulations that design materializes, the way it organizes bodies, spaces and capital. Instead of assigning universalist or neutral claims to design, the example of the forged passport shows that in the situated and specific one can trace how design politics unfold. Mobility / immobility becomes a matter of design and vice versa, with the passport as a materialization of this conflict.

In my ongoing PhD research, to mention a second example, I am analysing design through the lens of human-material relationships, specifically through those unfolding around sand. Sand is one of the five resources with the highest global demand, being in the centre stage of political, economic and ecological warfare. In the form of quartz and silica, it is essential to the technological infrastructures shaping our everyday lives; as cement and steel it acts as the literal building block of modernity; in the form of land mass it demarcates the poor and the rich – those who mine and export land and those who import and «recover». My fieldwork-based approach traces sand in places where it is transformed the most: Singapore and the Netherlands. By applying an *interscalar* perspective (Hecht 2018) my work registers the various entanglements between different bodies and sand: from the mine worker to the engineer; from those who lost their homes because of erosion as a consequence of heavy dredging to those enjoying a newly renaturalized beach; from the granular

nature of the material to geological rifts caused by large-scale infrastructure design. The manifold life worlds, places and temporalities become part of the same planetary design project: the commodification of matter into material and thus the subsumption of «nature» into the logistics of capital. Decontextualization and dehistoricization of sand violently reorganize both organic and non-organic life in order to press it into the generic form of global logistics or concrete-based skylines – from Rotterdam to Singapore, artificial land is strategic land housing container ports, petrochemical industries or business units. Whereas design in my observations emerges as a neoliberal structuring element of human–material relations, it unfolds differently in the different contexts. In Singapore, the design of the territory follows an ambitious plan to locate the nation state at the economic forefront of Southeast Asia. In a *tabula rasa* manner, not just Singapore but Southeast Asia were transformed in order to meet its material needs. Singapore’s urbanization and thus its need for sand stretches far beyond its boundaries, affecting Malaysia, Vietnam, Cambodia and Indonesia, to mention just a few. Because of geopolitical tensions, both illegal mining activities and the stockpiling of sand emerge in the shadow of largely restricted trade relationships, leading to ever more violence.

In the Netherlands, however, the design of new land follows an ambivalent relationship of denaturalization and renaturalization under the guise of sustainable design. While matter is initially transformed into fungible units of material, once remade into artificial land the greening of this land should compensate for the loss. The subsequent attempts to «restore» nature by no means challenge the capitalist logic that precedes it, inevitably linking design to its extractivist origin. What comes to the fore when taking a material-based view on design are the unspoken politics implicated in design and the unequal distribution of agency, human and other, that comes with it.

In both examples presented, it is not the design object, process or agency that are in the focus of the investigation but what pervades them. The examples introduced help to understand how design is entangled with exploitative structures, how it is never just universal or neutral. They also show that there is a specificity to each local context and that design politics show different proliferations in different places and with different bodies involved. In the face of a constant widening of scope of design and with many well-intended attempts to overcome design dualisms, it is crucial for designers and others to understand the politics ingrained in design.

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