# DESIGN FOR ADAPTATION

**Cumulus Conference Proceedings Detroit 2022** 





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# SYMMETRIC FUTURES: POSTHUMAN DESIGN AND ITS SHORTCOMINGS

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### **Abstract**

There has been a growth of philosophical debates around posthumanism which are currently seeking their space among the design community. Design researchers and practitioners have started to tackle and work with some of the ideas that stem from these debates, such as the need to decenter the human, acknowledge and work with non-Western epistemologies and aesthetics, or question notions of power, justice and agency in design. In this sense, the hegemony of human-centered design seems to be challenged, opening space for experimental posthumanist design practices. This is shaping many conversations around design research and design practices which will be addressed in this paper. Walter Mignolo (2011), who has written extensively about colonial legacies, has clearly shown how the European Enlightenment and modernity have a darker side that needs to be challenged. European modernity was sustained by a very limited epistemological framework – a closed civilizational ideal – and defined a liberal notion of subject that has been called into question (Rivera Cusicanqui, 2018).

We see how these debates are present in the design research context, for example, in the many calls and ideas surrounding the need to decolonize design and redress modernist ideas and aesthetics that have been naturalized in design practices (Prado & Oliveira, 2014). In this line of work, we can see the contributions of Arturo Escobar (2018) who, under the notion of *pluriversal* design, opens a debate around the need to incorporate non-European perspectives and aesthetics in design. In this sense, humanist traditions are being challenged, and this is giving place to a new set of posthumanist design research practices such as ontological design, medium design or *pluriversal* design that will be addressed in the following paper. Our aim in this paper is to show how these epistemic systems, humanism and posthumanism, can appear as contradictions or give rise to epistemic conflicts that need to be analyzed and taken into account. These paradigms need to be tackled symmetrically, and the notion of the designer sustained on a strong idea of self needs to be evaluated in order to go beyond discursive tropes and provide space for posthuman design practices to emerge.

### **Author Keywords**

Posthumanism; ontological design; anthropocentrism; interdependence; sustainable futures; epistemologies.

### Introduction

In the following paper, we will argue that some contemporary design practices are getting entangled between two different discursive and epistemic regimes, humanism and posthumanism, which is giving rise to contradictions and conceptual mistakes that need to be addressed if we are willing to strengthen this discipline called design research. We will do so by engaging with different strands of design theories and practices that are currently trying to overcome or amend some of the worst aspects of the humanist legacy. Humanism is an epistemic and social system that has been recently challenged and put into question by different philosophical and analytical trends that can be identified as posthumanist. In recent years, these debates around posthumanism (Morton, 2017; Braidotti, 2013, 2019; Hayles, 1999) are finding their space among the design community.

In the following paper, we will explore how some design practices, such as human-centered design and contemporary design research conceived as a discipline and epistemic space deeply embedded in a humanist tradition, are dealing with and integrating some of these posthumanist ideas. Our aim in this paper is to show how these epistemic systems, humanism and posthumanism, can appear as contradictions, or give rise to epistemic conflicts that need to be analyzed and taken into account. We will do so by interrogating some contemporary tendencies such as transition design, ontological design and medium design, and try to flag-up some of their shortcomings.

As the philosopher and key proponent of posthumanism Rosi Braidotti (2013) has clearly argued, we need to re-evaluate the notions of human and humanism that were built during modernity and challenge the Eurocentric visions they embody. As she argues, "as a civilizational ideal, Humanism fueled the imperial destinies of nineteenth-century Germany, France and, supremely, Great Britain" (p. 15). Humanism and imperialism are inextricably intertwined. The supposed universalist claims to knowledge that serve as a basis for the Enlightenment have also been called into question (Haraway, 1988). Similarly, the idea of progress as a straight and consistent path to follow, so central to the modern project, or the idea of the world as an inexhaustible resource to cover human needs, has been seriously contested in the context of global warming (Morton, 2021). Since the late 1960s, modern taxonomies, binarisms and other classifying tools that have served humanist knowledge creation have been under scrutiny as a whole (Foucault, 2009). There is a growing discomfort with the modern legacy and with humanism as the set of knowledge and academic disciplines that has validated and sustained many of these assumptions (Camps, 2020). In this sense, there is a need to understand how these problems should be addressed in contemporary design or pedagogy. Many of these ideas can be attractive in purely discursive terms, but difficult to transform into specific projects and practices.

The European Enlightenment has traditionally been considered a historical moment in which certain feudal regimes were dismantled, royal privileges transformed into human rights, the power of the church was challenged and the appearance of scientific rationality helped to limit the power of mythical accounts of reality and superstition. As Kant famously put it: "Enlightenment is man's emergence from his self-imposed nonage." There is no doubt that this movement improved the living conditions of a great part of the peasant population of Europe, introduced medical advances that improved human life, started a process of democratization of education and triggered the appearance of European democracies. Secularism and humanism are the intellectual legacies of this era and still

shape the ways we think and feel about the world (Taylor, 2018). But European Enlightenment also had a darker side that needs to be addressed.

Writing in the mid-twentieth century, scholars from the Frankfurt School started challenging the more optimistic views of the period, arguing we needed to take into account the negative effects it has had – mainly the growth of what they termed instrumental rationality (Adorno & Horkheimer, 2007). More recently Walter Mignolo (2011), who has written extensively about colonial legacies, has clearly shown how the European Enlightenment and modernity has a darker side that needs to be challenged. European modernity was sustained by a very limited epistemological framework – a closed civilizational ideal – and defined a liberal notion of the subject that has been called into question (Rivera Cusicanqui, 2018). Notions of development and progress have also been subjected to scrutiny (Braidotti, 2013) and a critique on how rationality has overwritten other epistemic regimes has also been established (Viveiros de Castro, 2010).

We see how these debates are present in the design research context, for example, in the many projects, calls and ideas surrounding the need to decolonize design and redress modernist ideas and aesthetics that have been naturalized in design practices (Prado & Oliveira, 2014). In this vein we can see the contributions of Arturo Escobar (2018) who, under the notion of pluriversal design, has opened a debate around the need to incorporate non-European perspectives and aesthetics in design. Transition design also has dealt with ideas of progress and evolution, looking at more subtle changes and ways design can trigger social transformation (Tonkinwise, 2015). These different debates and approaches are also finding their space in the academic context as conversations around the need to think and implement what has been called "Pluriversal Design Education" (Noel, 2020), or pedagogical experiments in which decolonial perspectives and non-Western epistemologies are taken into account (Mortensen & Tavares, 2021). There is also a questioning of how academic disciplines have shaped the expectations and aims of design research with a call to "undisciplined design" (Camps & Rowan, 2019) or to build experimental methodologies able to challenge modernist assumptions and entangle the creation of knowledge through design with different sensibilities and cosmovisions (Moscoso, 2021).

We can also see how these ideas are present in conversations around new materialisms and how to deal with material agencies in design practice and research (Rowan, 2016; Winner, 1986). The importance of non-human politics and ways of allowing the material agency of objects to speak is present in the works of Latour (1986) and Bennett (2010), opening a space also to discuss the morality of things and technology (Verbeek, 2011). Following Karen Barad's (2007) insights, this has opened a debate on how matter and meaning get entangled in design research projects. In this sense we could follow the

Invitation to take part and be able to contribute to the creation of mutually constitutive entangled agencies, in which matter, discourse and bodies occupy unexpected positions. What we have called "entanglements of material meaning" are areas of potential engagements with theory/practice that can lead to and shape performances, drawings, paintings, constellations of objects, sound-based projects, movement and body languages, interactive outputs, etc. (Camps & Rowan, 2021, p. 4708)

Many of these debates are present in specific design projects, but more importantly, are shaping specific design research perspectives that need to be interrogated.

# Ontological and Medium Design

Many of these conversations have shifted design from a practice aimed at dealing with briefings and providing solutions to specific problems to considering design as a world-making practice (de la Cadena & Blaser, 2018). With this displacement, we see that the weight is no longer placed on the semiotics of what is communicated, on the aesthetics of what is created or on the effectiveness of the results obtained, but rather the question arises as to which worlds are desirable to create. This idea occupies a central place in the article "Ontological Designing" in which Anne-Marie Willis (2006) proposes the need for and importance of approaching design as an ontological practice. With this, the author stresses that it is important to understand design as a material practice rooted in very specific socio-historical and material conditions, and "ontological designing is a way of characterizing the relation between human beings and lifeworld's" (Willis, 2006, p. 70). There is no design outside the world, that is to say that it necessarily always has consequences on the context in which it operates, but more importantly that it is always affected in turn by that same world. This introduces a posthumanist turn in design that forces us to rethink the centrality of the designer in design processes. These ideas have helped to shape some contemporary design practices such as transition design, which provides a conceptual and practical context in which design is considered a world-making practice. In this same context, we see design initiatives around design justice, pluriversal design or decolonial design practices becoming increasingly important to the field.

If we consider design as an ontological or world-making practice, we need to pay attention to the multiple agencies of the socio-material environment in which design operates. According to Willis (2006), "this adds up to a double movement – we design our world, while our world acts back on us and designs us" (p. 70). Those who design are also being designed. This challenges the idea of the designer being understood as a demiurge or god-like creator, and generates a context in which material and social agencies need to be taken into account in the design process. Understood from this perspective, and in line with design theorist Tony Fry (2010), design always has an implicit politics. Whoever designs must know and assume the consequences and impact of the artifacts introduced in the world that he or she is helping to create. Designers need to care about the world opens a material future in which that object is going to operate. Every decision on shape, material, color or size will have consequences that sometimes go beyond a human time scale.

Another current perspective that tries to engage with many of these issues described before is the so-called "medium design," put forward by Keller Easterling (2021). As she suggests, "Rather than prescribing solutions, like buildings, master plans, or algorithms, medium design works with protocols of interplay – not things, but parameters for how things interact with each other" (Easterling, 2021, p. 20). In this sense, it connects with notions of relational ontology put forward by Haraway or Puig de la Bellacasa or it resonates with actor-network theories developed primarily by Bruno Latour (2008). Again, in this context, the designer is no longer a demiurge but a modulator of semiotic and material flows. As Easterling (2021) put it, in medium design "the designer is then temporarily manipulating the chemistries of assemblages and networks" (p. 11). In this sense

there is a certain displacement, the designer's role is to reassemble, connect or cut short heterogeneous flows of ideas and materials. In the midst of complex social, economic or political problems, the designer is not so much a provider of solutions (as conceived in human-centered design), or a world-maker (as in ontological design), but an agent who taps and connects semiotic and material flows and rearticulates realities. In this sense, the medium designer is more of a broker than a demiurge.

With the shift towards relational ontologies, we see how certain ideas of the inherent existence of objects are called into question. Things are shaped and defined by the semiotic, energetic, material, political or aesthetic networks in which they become entangled. There is no being which is not part of a complex alliance of human and non-human elements. In this sense, "Medium designers move through the world constantly jostling its solids into more interdependent relationships" (Easterling, 2021, p. 39). This need to allow and shape connections and relationships resonates with the call for an "epistemic erotic," that is erotics understood as:

a way to get entangled by the links and bonds that ensemble humans and non-humans, subjects with objects, persons and things. We could define these erotics as the materialization of the bonds that make us part of the world. Erotics signals the subject that is fascinated by another subject, or by another object. It engages in the power of attraction. It casts light on the broken links that modern epistemic modes have enforced on our understanding of the material reality of which we are a part. (Rowan, 2021, p. 4611)

Understanding design through these lenses or perspectives opens up the possibility of thinking of design as an act of composition more than a work of creation. Designers compose worlds by allowing certain connections to happen, certain material alliances to take place. In this sense, there is a will to displace the role of the designer, allowing non-human entities and agencies to have a stronger voice and presence in design practices.

These different perspectives – ontological design, decolonial design, medium design, etc. – have led to what we could provisionally call a posthumanist design approach, or ways in which we can conceive worlds in which humans are not the central actors and in which notions of time, agency or politics need to be re-evaluated. An issue that needs to be addressed in this context stems from the idea of design as a world-making practice. When we talk about understanding the consequences of design or the transformations that derive from it, we do so with human-centric temporalities which generally are not capable of understanding or engaging with the non-human temporalities such of metals, plastics or certain forms of organic matter (Barry, 2010). In this sense, the idea of the designer as a world-maker in such posthumanist approaches retains clear modernist undertones typical of the humanist conception of design. If we assume a posthumanist perspective, we must take into account the multitude of agencies that intervene in the consolidation of new design artifacts and the worlds that unfold around them. The human will (of the designer) is going to become entangled with socio-technical systems, infrastructures, regulations, cadences of use, diverse materialities, propensities, collective imaginations and economic criteria. Material and semiotic systems. Human and non-human time scales. Arturo Escobar (2018) is aware of some of the modernist legacies which are still shaping contemporary design practices when he asks, "can design be extricated from its embeddedness in modernist unsustainable and defuturing practices and redirecting toward other ontological commitments, practices, narratives, and performances?" (p. 168). This focus on the ontological dimension of design also needs to be examined carefully. One of the most biased or problematic readings that could be derived from this idea of design as a world-making practice is to believe that individual action produces worlds. As the philosopher Timothy Morton reminds us, statistically there is no human action that has an impact of any kind when it comes to solving major problems such as the mass extinction of species due to global warming. No single person opens or transforms worlds. As feminist theories remind us (Serra et al., 2021), individual action does not create the conditions for the transformation of economic and power relations that have a structural nature. Humans can intervene and shape certain semiotic or material flows, but there is no individual design project that can change structural problems or inequalities. In this sense, we need to be able to evaluate whether effectively designing is a world-making practice; whether it contributes to changing power relations or by producing material artifacts, it helps to stabilize certain worldviews and the systems that sustain them.

The main contradiction to be addressed is the will to overcome humanist design traditions while still wanting to work from a strong notion of the importance of human agency and will. It appears that there is a will to discard humanism, but without discarding human privileges. Authors such as Timothy Morton (2018) have argued that the notion "human" should be, if not completely erased, at least faded down – this is a way to get out of "correlationism." As he argues:

Extreme postmodern thought argues that nothing exists because everything is a construct. This idea, now known as correlationism, has been popular in Western philosophy for about two centuries. We just encountered it in our exploration of different kinds of "realizer." Again, the idea is that things in themselves don't exist until they have been "realized." (Morton, 2018, p. 13)

He argues that we must start "fading down" the sound of the human in order to start hearing other agents and non-human entities. But how could this idea affect design research and practices in which the idea and the agency of the designer is still so strong?

## **Human Supremacy or Interdependence?**

Most of the cases seen above follow a humanist tradition in which the individual subject is always in a privileged position in relation to the community or non-human forms of life. This has been named as human supremacy or human exceptionalism, a term that "has been employed to designate those world-views or philosophies or systems of thought that characterize humanity as essentially and fundamentally different in kind from the rest of the natural order" (Tyler, 2021, p. 17). Therefore, it rests on the idea of an individual that exists above the world they inhabit. As Braidotti (2013) reminds us, "the humanistic ideal constituted, in fact the core of a liberal individualistic view of the subject, which defined perfectibility in terms of autonomy and self-determination" (p. 23). This autonomous subject, independent from other subjects and free to make decisions, seems to contradict the attempts to decenter the human in design as a very specific kind of human

seems to be central to all these actions: the designer herself. We still operate under a paradigm that considers each human to have an inherent self that drives and shapes their destiny. But this idea is confronting growing opposition. "The self is inextricably intertwined with, a part of, or in some sense identical with the rest of the world. In recent interdisciplinary work, this general idea has been described as the 'oneness hypothesis'" (Ivanhoe et al., 2018).

We are shifting towards more complex or interdependent notions of the self; an expansive conception of the self that can include other human and non-human agents. In this sense, we are escaping from notions of the self that are "strongly individualistic" or what can be called "the hyper individualistic conception of the self" (Ivanhoe et al., 2018, p. 3). There are many social, cultural and religious traditions that call the notion of the self into question. Also, there are many non-Western traditions in which the autonomous self with inherent existence has been called into question. As Philip J. Ivanhoe et al. (2018) argue, "Buddhism, a complex, venerable, and influential global religion, is well known for its view that there is no separate and enduring self, and that the delusion that such an enduring self exists is the source of all suffering" (p. 3). The notion that there is no autonomous self is prevalent in other cultural and religious traditions; see for example Daoism, which equates certain notions of the self to holding selfish views of the world.

Like Buddhists, Daoists do not deny the genuine and healthy everyday regard we have for our own interests; the object of their criticism is not so much a concern with the self but a mistaken conception of the self that leads to self-centeredness and even selfishness. (Ivanhoe et al., 2018, p. 4)

One of the key teachings of Buddhism is what is called emptiness, that is, the realization that "ourselves and all sentient beings and their suffering do not exist inherently, we are just designations" (Kelsang Gyatso, 2016, p. 94). In these spiritual and cultural traditions, meditating on emptiness allows the boundaries of the self to dissolve and generates an awareness of the interconnected nature of reality.

These cultural and religious traditions are far away from contemporary design debates but they help illustrate how in the claim to introduce non-European epistemic perspectives there is reluctance to endorse those who would challenge completely one of the central elements of the European Enlightenment: the individual and autonomous human subject. We need to ask ourselves if we can talk about posthuman design if we are unwilling to erase extremely strong notions of the self, subjectivity and the role of the designer as a world-maker. Are posthuman design practices just cherry-picking ideas and aesthetic tropes from non-European cultural traditions? Can we claim to be working on posthumanist design practices if we do not challenge the centrality of the Western ontology and its idea of being?

It is in this context that notions of interdependence have flourished, displacing the ontological question "what it is to be" with the question "with whom is being possible?" There is no autonomous disentangled self. No being can exist outside of a very specific material, semiotic, energetic or cultural entanglement. In this sense we need to understand and take into account the recognition that human beings are related in complex and intricate ways, not

only to other humans, but also to other non-human beings as well – human and non-human networks and entanglements that make the idea of an individual self-redundant. This implies understanding interdependence as a deep ontological but also political space, avoiding the belief that subjects or objects pre-exist their relations (Haraway, 2003). As Kriti Sharma (2015) reminds us, "by and large, we think that interdependence just means 'independent objects interacting'" (p. 2), but instead this notion implies the impossibility of an independent or inherent existence. Nothing is, everything is being. Nobody opens new worlds, as worlds are always embedded in a deep entanglement of modes of being.

The questioning of the modern European notion of self is not only happening in non-Western thought traditions. Recently the unitary self with inherent existence has been challenged from Western scientific perspectives such as neuroscience (Mcgilchrist, 2019; Niebauer, 2019), cognitive sciences (Noë, 2010), philosophy (Metzinger, 2018) or even from a biological perspective (Weber, 2017). The notion of the human as a self-encapsulated being has been called into question as there is no being that exists outside an ecological context which he or she helps to produce (Maturana & Varela, 1987). More extremely, from a biological perspective the human being is not a being at all as it is considered a holobiont, a being of beings, living in a symbiotic relation with its gut bacteria (Yong, 2017). There is no human being which is not part of a complex energetic and material network; that is, there is no self which is not interdependent from other human and non-human selves. Biologically, the possibility of an independent and autonomous self is technically impossible. Culturally, there is no self which is not part of a complex network of words, gestures and shared beliefs. And whilst the proof that the central agent of humanism, the human, does not exist, we still struggle to acknowledge this absence in posthumanist design research and practices. There is still a strong need for social validation, authority and branding individual practices that clearly clash with the theoretical claims that underline some of these practices.

In this sense we see the emergence of non-symmetric relations between the discourses established and the practices performed. Bruno Latour (1986) argues that in the midst of an epistemic or conceptual conflict, we must be able to ask the same questions to all sides involved. We are very quick to dismiss humanism but still timid in looking at the ways modern notions are deeply embedded in posthumanism. We are happy to critique the role human agency has in humanism but are still unable to engage with posthumanist design practices that are not deeply mediated by subjective and human agencies. We see practices that argue for non-human agencies but still seem to have a strong authorial voice and position. In this sense we see forms of posthuman design practices that are happy to not let human privileges become questioned or challenged. We read about human and non-human interdependence in heavily branded and authored essays, exhibitions and design practices. One of the clearest shortcomings to be addressed is that whilst striving for a posthumanist design practice, humans seem to be unwilling to decenter their names, subjectivities and brands from their practices.

### Conclusions

In this paper we have argued that some contemporary design practices are caught between two competing systems, two different ways of addressing and understanding design theories and practices. We have shown how these practices are currently diving into uncharted territories, that of posthumanist epistemologies and perspectives, although it still relies heavily on humanist conceptions and ways of doing. We aim to displace the human whilst publishing academic articles with clear human authors who claim to have original ideas; claiming to give voice to non-human agencies in design projects but becoming something more than a mere translator or mediator. Displacing the role of the human but re-centering the role of the designer.

Whilst challenging the modernist idea of the designer as a demiurge, the posthumanist notion of the designer as a world-maker retains clear modernist undertones typical of the humanist conception of design. These contradictions need to be explored and addressed if we are willing to displace humanist visions with posthumanist knowledge-producing practices, if we intend to replace modern epistemologies with world-making and agential approaches, or human concerns with more-than-human problems. For all these reasons, we maintain that design research needs to engage with these contradictions and acknowledge its role in reaffirming the world it wants to challenge.

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