Design Anthropology and the Next Evolution of the Design Process

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ABSTRACT

As design theory and practice evolve, understanding the impact(s) that a designer's choices will have on the larger community are more important than ever. While designers have always sought to shape the world around us, and (for the most part) serve as a positive force in improving people's lives, designers today are reckoning with the unintended and unforeseen consequences of poor decision making, and the poor understanding of culture of past designers. Looking into various definitions of design, past movements that sought to alter the design process, and their effectiveness and criticisms, we can start to understand the need for a new form kind of design practice. The biggest issue has been a lack of understanding of local culture(s), and especially of value systems, as part of the design process. This has led to designers working off perceptions of what people value, rather than understanding those value systems before intervening. Here the relatively new field of design anthropology holds promise, as it provides a new approach to design; one that does not look to create for a universal ideal, but instead infuses design with the perspective of multiplicity. Through a review of existing literature, this paper explores the evolution of Design Anthropology, dissects the similarities and differences between design and anthropology and looks at ways in which this new field can influence traditional a design processes and practices. The goal is to create a design process that seeks to understand and empathize with the culture and value systems of a community, rather than just disrupt, or supersede them.

Keywords: Anthropology, Ethnography, Material-culture, Pluriversal

THE MURKY DEFINITIONS OF DESIGN

Perhaps the most referenced definition of design comes from Herbert Simon [The Sciences of the Artificial, 1969]: *"Everyone designs who devises courses of action aimed at changing existing situations into preferred ones."* While this definition is perfectly apt to describe the goals of design, it is incredibly broad. Keeping the definition of design so broad becomes problematic when it comes to defining who is and isn't a "designer", an even more problematic when looking at who gets paid "to design".

Colonization, globalization and industrialization in the 19th and 20th centuries brought forward the idea of western civilizations being more culturally advanced, and therefore the designs, design processes, and cultural artifacts of western civilizations being more advanced [Huppatz, D. J. 2015]. This became an issue as formal education around design was often centered

around European schools such as the Bauhaus or Ulm [Escobar 2018]. While, technically speaking, everyone designed, those who were paid to design, those were referred to as "designers", and those that taught and defined "good design" were almost exclusively working from a Euro- centric context and working towards western ideals.

As we began to formally define the design process, and in turn, "the designer", we began to intentionally exclude those who have traditionally practiced design. This is often reflected in descriptions of different design activities. The traditional design techniques and methods are now described as a simple "trade activity", while design itself is seen as a "new liberal art of technological culture" [Buchanan 1992]. For this reason, most definitions of design tend to focus on the post- industrialization period [Heskett 1963]. Design historians certainly prefer to focus on design from the late 19th century onwards. The practice of design history itself is relatively new, and has problems of its own. As Victor Margolin explains, a large number of design historians and design educators come from a background in practice, and direct their teachings to future practitioners. This leads to narratives that limit the field of design history, rather than broaden it. It also limits design history's involvement with historians outside these narratives [Margolin 2009]. This begins to centre "design" as a modern, western derived practice, that erases the history and relevance of anything that came before it, or anything that grew outside of that sphere of influence.

To make matters worse, the narrow lens of what is considered "design practice" is itself constantly changing. The goal of design is no longer to create simple, meaningful objects and experiences, but to solve "Wicked Problems" and sway socio-cultural and economic systems. [Buchanan], expanding the scope of design, but narrowing the lens of "designers". Buchanan divides design into four orders based on the scale of their resulting outputs. The first order refers to "Symbolic and Visual Communications", or what was originally thought of as graphic design, but has since grown to include film, television and digital media. The Visual Order so to speak. The second order encompasses material objects that surround us in our everyday lives, including clothing, tools, and vehicles. The Material Order. The third order covers logistics and instrumentalities. The Organizational Order. The fourth order, then, encompasses all the previous orders, but incorporates elements of social engineering and social planning into the design process.

Attempts at tackling "Wicked Problems" and implementing Fourth Order design have been problematic, especially as they are centered around a western, often euro-centric perspective. Here designers look at problems around the world and attempt to create solutions they feel will instantly remedy decades or even centuries of systemic issues. With little understanding of the local cultures and constraints, and the systemic issues that cause these problems, they often apply a seemingly novel or technology-centric solution. This is often backed by venture capital funding that is ostensibly going to "help people in need".

One needs to only look at the impact of projects such as the Roundabout PlayPump and One-Laptop-Per-Child, and more importantly the criticisms of these projects, to see why such ideas can turn problematic. [Morgan G. Ames - The Charisma Machine]. Attempts to expand beyond

the realms of traditional design are often plagued by a lack of understanding of local societies, cultures and value systems, which can lead to problematic implementation of design interventions, or worse, blaming of local cultures for what is essentially poor design.

Such criticism of the design process has been around since at least 1971, when Victor Papanek published his seminal work, "Design for the Real World", where he proclaimed that "There are professions more harmful than industrial design, but only a very few of them." Papanek's major issue with design was that it failed to truly understand and represent the social context within which the newly designed objects would live. He points to the destructive effects of design interventions, such as the numerous deaths resulting from car crashes, or "permanent garbage that clutters the landscape", as the outcomes of design. While these may not be the "preferred outcomes" the designers of those objects sought, they are very much an outcome of the process of design.

As early as 1979, designers were seeking remedies. The very first issue of Design Studies includes an article on the importance of participation in design, and decentralizing decision making to local community groups. [J. Johnson, 1979]. This was born out of the ideals of Co- operative Design which was a growing field in Scandinavia in the 1960's and 1970's, and which heavily influenced the participatory design methods we see today. [Bodker 1996] This led to a slew of new design approaches that attempted to change the purpose of design: User Centered Design sought to refocus design on the needs of customers rather than the capabilities of the designer (or the organisations they were working for). [Kling, R. 1977] Democratic Design sought to make high quality design available to the masses through the use of mass production and improved access to "designer" goods. [Saward, Michael. 2021] Value Sensitive Design is a theoretically grounded approach to the design of technology that accounts for human values in a principled and comprehensive manner. [Friedman, B., Kahn, P., & Borning, A. 2002]

None of these processes were perfect, but they showed that design could start to reflect on its abilities to shape the world and become more conscious of what "preferred outcomes" meant. But, instead of a building upon the participatory and social conscious approaches of designers like Papanek and Johnson, in the 1980's design started to become hyper-commercialized. These approaches were seen as being out of sync with design's potential to create wealth. In turn, design became fully integrated into the neo-liberal model of capitalism that emerged during that era. [Dunne & Raby, 2013]. This approach meant that design was used at a superficial level to add economic value, but lacked deeper understanding of the broader systems it influenced, and more importantly the longer-term impact of design decisions and interventions.

Today, more than ever, designers are facing the implications of their actions. The influence of design has expanded far beyond the realms of traditional first and second order design, especially with the emergence of the digital era. Design interventions can make or break entire economies, and design has unprecedented impact on people's everyday lives. The designs of today, either physical or digital, are created around ideals of utilitarianism, and are intended to be ephemeral, quickly replaced by next

year's newer better model. They lack any significant personal connection or long-term meaning beyond their utility as an appliance. The "perpetual beta" state of contemporary design is in some ways the end state of contemporary modernism; objects and interactions created by a vast global network of corporations, with little relation to the time and place of their design or birth.

EXPANDING THE DEFINITION OF DESIGN

What if we were to expand the definition of design beyond Heskett and Buchanan, and include objects produced pre-industrialization? These objects, by their nature, meet all aspects of "being designed", and yet are often considered "folk" or "tribal" in nature. They were by Herbert's definition still considered to be "design" but fall outside the definition of Buchanan and other commercially minded designers.

It becomes easier to confine the design process to the making of prospective descriptive artifacts, i.e., "descriptions for how things ought to be." [Mattozzi 2020] This neatly situates design as the planning and making stage of the process, with all that follows fitting into the implementation stage.

Looking back thousands of years, knapped flint stones could be the first real descriptive artifacts that humans produced. They were certainly technologically advanced, allowed for activities that wouldn't have otherwise been possible, and could be used as prospective descriptive objects, in that they could be used as patterns to create new versions of the same object. Their creating also led to large scale socio-cultural change. This could also expand to include cave paintings, and plenty of other objects and artifacts even from the pre-historic era, all of which fit neatly into Mattozzi's definition of prospective descriptive artifacts.

Narrowing our focus to the modern age, and to commercial, mass-produced goods, some of the most enduring artifacts were born not in a design studio, but in through necessity and utility. From blue jeans to basketball shoes, objects that were designed for a purely utilitarian function have become ubiquitous in society. And in the cases of both, have been co-opted by the design community to create objects that are coveted, but far removed from their original utility. These are no longer the product of a single designer but have been shaped by society as a collective.

OBJECT CULTURE AS A MEANS TO UNDERSTAND IMPACT

Csikszentmihalyi and Rochberg-Galton expanded on such concepts in their work, The Meaning of Things [1981]. In the book they studied the significance of material possessions in (then) contemporary urban (American) life; drawing on surveys of eighty families living in Chicago. One of the most surprising conclusions (and most relevant in this context) is that "Almost anything can be made to represent a set of meanings" They show that often the connections to events or to people that are (or were) significant in a person's life add value to objects beyond their intended function or utility. The

physical characteristics of an object or the symbolic conventions that a culture has around a certain object can have some influence on the meanings that can be conveyed through an object, but don't eliminate the possibility that a person can create their own interpretation of what an object means, or the value that it can have in their lives.

The issue is that designers often tend to conflate usability with meaning and value. Much of the modern design method is built on improving usability and removing friction from the process. This is often seen as what is "preferred" by the user, and forms the basis of user research, and of testing.

But as explained by Csikszentmihalyi and Rochberg-Galton, and demonstrated by the examples listed, "meaning" and "value" are incredibly contextual, and can be derived or created long after the design stage of the object's life-cycle.

What design needs is a new way to understand and interpret "value", in order to better understand the gap between "existing" and "preferred".

DESIGN ANTHROPOLOGY

The issue with most contemporary approaches to design is the way in which the value of design is measured. Most approaches to design have had a clear idea of what the "preferred outcomes" are, even before the design research process begins. Even processes such as "User- Centered Design" have often been co-opted by corporations to mean "better profits through better user experience".

What if the ideal design process, or the end state of any design, is to allow people to design on their own, based on their own value systems and interpretations of "preferred outcomes"? This will of course require new ways of measuring the value and effectiveness of design, and in-turn, a new process for designing. If the goal is to allow people to share in the design process, the traditional metrics by which design is measured are no longer valid, as the process itself is the outcome of the design; and the goal is to allow for the creation of new artifacts or economies.

The have been movements to rectify some of these criticisms in contemporary design methods. Friedman and Hendry for example, have evolved the Value Sensitive Design approach to include the heuristics of human well-being, justice and dignity [2019]. But the constantly shifting goalposts of "what is valuable" are, in some way representative of the traditional approach to design.

The (relatively) new field of Design Anthropology holds promise in that regard. The goal is to create a field that is as interested in understanding social contexts (as derived from anthropology) as it is in intervening and changing them (as design has done for so long).

There are of course significant differences between design and anthropology, as described by Gunn, Otto and Smith [Design Anthropology, 2013]. The first is that design is almost always future oriented. It is almost always measured by the relevance and change it can make on people's lives. And while anthropology has an interest in social change, it still lacks the tools to involve people in the process. The second is that anthropology is

often thought of as an observation, study or interpretation, and anthropologists often strive to minimize their impact on the people whom they are studying, while design is almost always concerned with intervention and changing outcomes. The third is that design is usually a process of collaboration between multiple entities and stakeholders. Anthropology, for the most part, remains a traditional, and in some ways, isolated, discipline in that regard.

In Tunstall's view [PINC Conference 2011], the still nascent practice of design anthropology has gone through 3 major phases:

- In the first phase, design anthropology was about researchers as interpretive experts, delivering and recommendations to design teams and others.
- In the 1990s this evolved toward Participatory Design in which interdisciplinary teams participated in observations and defining insights. Insights are delivered in the form of experience models and personas. Researchers become facilitators with multiple, complex stakeholders involved.
- Tunstall proposes that the next phase of Design Anthropology will establish the academic foundation of this practice. With that will come a focus on social issues and an understanding of how objects affect the people around them. Designs are disruptions to the people in a culture and those disruptions should be studied. This study of objects and processes define what it means to be human. Design can seek to close the gap between the disruption and the ideal experience.

Building on the work on Tunstall, and Gunn, Otto and Smith, Arturo Escobar [2018] posits that there are three ways in which Design and Anthropology currently overlap (and proposes a fourth as well):

The first is of course Design Anthropology, i.e., the use of anthropological concepts and methods in design. This is often the kind of ethnographic research that has become common amongst design researchers.

The second is Ethnography and Design, i.e., Bringing design insights into anthropology. Or "the anthropology of the contemporary". Contemporary design can in many ways shape anthropology, creating new tools and practices that anthropologists can incorporate into their work. This is obviously seen in the new ways that designers have found to conduct research, such as the study of online communities and how ideas proliferate. In this way, design can begin contributing back to anthropology.

The third interaction is The Anthropology of Design: i.e., Applying critical social theory to design practice. This involves a critical look at the process of design, and how these are (or aren't) influenced by social constructs such as class, gender, race, and coloniality, as well as design's dependence on capitalism.

The fourth version that Escobar proposes is the pluriversal design process, one that involves re-orienting the design process on the basis of anthropological concerns, i.e., infusing design with the perspective of multiplicity. Designers need to fundamentally let go of the idea of creating a universal "ideal" design, and instead focus on the unique aspects of the community they are designing for.

Looking at the overall process of design (i.e., every process that goes into the creation of an object, artifact, service or experience), we can generate 3 ways in which anthropology can be incorporated.

Ethnographic Research

The first, (and perhaps the one that's already most adopted by designers) is Ethnographic Research. Here, designers use tools derived from anthropology to work out the needs of "users". Tools such as contextual inquiries, journey maps and auto-ethnographic user diaries have already successfully made their way into the design studio, supplementing or in some cases even replacing traditional market research tools such as customer personas and market segmentation. This is derived from the Centered Design approach, and ties in neatly to previous techniques used in the design process, such as task analysis, time and motion studies, and ergonomics.

While this method does shift the needle towards a more pluriversal standard of design, it does come with its own share of flaws. The first is the impact it has had on the field of design itself. While it may seem to be ideal to have a single set of designers manage the entire process from research through to implementation, that calls for a wide, interdisciplinary set of skills, that designers often lack. Instead, it is easier to bring in researchers from other fields, or to train people specifically in design research methods. This has led to the separation of research from the actual act of designing (i.e., the actual creation of artifacts), and shows in the multitude of jobs with titles such as UX Researcher. This separation means that often, those doing the research lack an understanding of the technical constraints of a possible design intervention. And when the inevitable hand-off occurs, when this research is transferred to another party to design, prototype and implement, the insights gleaned from ethnographic research are often discarded to achieve technical feasibility.

It also leads to a lack of research into the actual processes and mechanisms that go into the creation of an object. The researcher is only focused on who products are sold to, and rarely on who has to create, maintain and dispose of the objects, or deal with the unintended consequences. Due to globalization, these people may be a world away from the design studio and are left of bear the brunt of poor design decisions, creating new problems before the artifact can solve old ones.

Designers have maintained a laser focus on the needs of the user, often to the detriment of others around them. This is perhaps what led to the promise of design as being the solution to "wicked problems", which in turn led to what Dunne and Raby describe as the integration of design into the neo-liberal model of capitalism. These impacts were seen all the way back in the 1970's by Papanek, and yet there has been little commercial value in deviating from the norm. Systemic impacts are often only felt long after the design stage.

This is not to say that this form of ethnographic research is without merit in the world of design. On the contrary, it has plenty of value. But the design process needs to be centered around it, rather than it merely being used as a "value-add" to the design process. This form of Ethnographic research also

needs to tie into the other 2 methods, described below, to offset some of the problems that it creates.

Participatory Design

Ethnography doesn't have to stop during the design process, but can continue through the design and prototyping stages, and even after interventions have been deployed. Here, the goal is to ensure that all stakeholders are involved throughout the process, to help ensure the outcomes meet their needs.

As mentioned earlier, these participatory methods are not new, and have been evolving since their initiation in Scandinavia in the 1960's. Christopher Alexander mentioned many of these methods in his book, The Oregon Experiment [1975]. The design of the campus of the University of Oregon was an experiment on community involvement. "All decisions about what to build, and how to build it, will be in the hands of the users" wrote Alexander. The students, faculty and staff destined to use a new building would design it themselves, with the help of architect-facilitators.

These methods of course mean that designers need a new set of skills. Instead of designing from the comfort of their studios, they need to be able to effectively engage with the stakeholders, facilitate interaction, and ensure that everyone is working towards a solution that is equitable for all.

But using these methods shouldn't mean that the role of the designer is now solely to be a facilitator. The designer must still possess two other important skills: the ability to think in systems and the ability to solve technical challenges.

By utilizing a systems thinking approach, designers can look at, and understand the bigger picture, the power dynamics at play and the leverage points to best intervene. They can also see how changes to the system will affect other aspects of the system and decide on what will have the most positive impact on the overall system (or the least negative impact).

The technical skills of designers are also required; the skills that are most often associated with traditional design methods, such as sketching, prototyping, and design- for-manufacture. While they might be dismissed as trade-activities, these will be vital as design moves towards facilitation rather than prescriptive object creation. The ability to translate words into quick descriptive sketches, mood-boards, story- boards and prototypes is essential to iterate with large groups of people and to do so quickly and collaboratively. And prospective descriptive artifacts can do just that: they can show and describe possibilities in a tangible manner, which can then spark discussions and conversations around an artifact, an outcome (preferred or otherwise) or a possible future.

Being able to take that design and convert it into something that can meet the technical requirements put forth by a group is also important. In Alexander's case, he provided a set of "patterns" that allowed the community to effectively discuss and work on architecture, without being trained in the subject.

Being able to create flexible designs that can change and adapt to multiple users' needs, or be customized by them is of-course, ideal. This is often the

case with software design and development, where communities often vote on, and influence the creation of, new features. In the case of the Oregon Experiment, the goal was to review the impacts every year, and look at what changes could be made for the next.

Reflective Ethnography

If design is cyclical and iterative, and value systems are dynamic, then ethnography and anthropology shouldn't be limited to the initial research stages of design. The study of the impacts of any design intervention need to continue long past the initial deployment of the intervention. Even in the case of the Oregon Experiment for example, many of the community driven approaches were quickly abandoned within a few decades of the experiment. It had eventually receded back to the traditional approach of community planning and development. In this case, the reflective ethnography was left to the stakeholders, and not undertaken by the designers.

The traditional anthropological techniques associated with object and material culture can play a major role in reflective ethnography. Studying the cultural impact of an intervention, the adoption (or lack thereof), and the appropriation and adaptation of an object can provide rich insights that couldn't otherwise be gleaned from traditional ethnographic research. This also works to test designers' hypotheses, and bring up biases or assumptions, things that are often ignored in the churn of constant creation. Studying the failures or criticisms of past objects (the PlayPump, for example), can give designers insights into what brings value to a culture, and if the design process was apt or needs improvement.

Using Escobar's description, this form of reflection can also allow us to take a "critical look at the process of design, and how these are influenced by social constructs such as class, gender, race, and coloniality, as well as design's dependence on capitalism". No design process can be free from bias, and the design process can never be perfect. But in the way that designers are constantly trying to improve the utility of objects, they can work to improve the design process.

Changing the Definition of Design(ers)

As shown through this paper, the value of an object comes not just from the actual design process, but also through the creation, deployment and appropriation and adaptation of those objects into society. All these activities can add or remove value in some way, and by the traditional definitions of design, play a part in the design process.

Does this mean that the role of a designer encompasses all these activities? Or that everyone that engages in these activities becomes a designer?

There needs to be a change in the definition and goals of a designer. The next evolution of design, and in turn designers, is to act a facilitator between communities and corporations. Designers can use their expertise to help both users and producers create objects that bring value, rather than disrupt existing value systems. In a way, help people design for themselves. But at the same time, utilizing their knowledge of larger systems and value webs,

designers can also predict the consequences of any design decision or intervention. The knock-on effects that are often ignored with the user- centered design process, which has in turn led to many of the disruptive effects of the modern design practice.

Here, using a pluriversal, as opposed to a universal approach to design means that designers are facilitators, enabling communities to design for themselves, as opposed to "colonizers" that impose their ideals on the world. Changing the approach of designers from being the "arbiters of what is good", to being anthropologists that seek to understand what "good" means, or can mean, for a society are essential in ensuring that designers are working for the betterment of society, rather than purely for capital gains.

At the 2nd Istanbul Design Biennial, curator Zoe Ryan used the phrase "Design is Future Archaeology". This way of thinking about design ties in well with the anthropological driven approach to the design process detailed earlier and will elicit more reflection in all stages of the design process. At the research stage, to understand the complex system into which any design intervention will be inserted. At the design and development stage, to understand what brings value. And finally, once an object is created and distributed, or once a design intervention is deployed, to understand if the intentions were met, and if it continues (or can continue) to provide value in the long term. Reflection should, in this way, become as much as part of design process as creation.

Perhaps in thinking of design in this way, the design practice can evolve to better bridge the gap between the disruptive effects of any design intervention and the ideal experience that is sought by creating that disruption in the first place.

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