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Written Assignment 4

# Modern Design for a Modern World

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Our modern world is in crisis. Our system of production is literally burying us in goods and waste that do not have significant consumer value. We are destroying our environment, ignoring the plight of billions, and reducing our quality of life. Our designers must change their way of looking at the world and embrace the idea of lightness in order to fix a flawed system and restore a balance of social responsibility, sustainability, humanity, and desirability to the world of design.

## The Modern Design World

It is impossible to make the claim that our world is not in the midst of rapid, dramatic change. Just two decades ago the Internet age was just dawning, its promises and implications just hints at what might become. Only a century ago mass communication on a modern scale was inconceivable. This same rapid shift in information and communication has likewise been reflected in the economy and design and production of goods throughout the world. Unfortunately this kind of rapid change has overloaded the system and the business as usual model of life is increasingly being rendered impossible. There are too many people, too many products, too much waste, and too much demand weighing on the world creating problems, which must be addressed quickly via a rapid shift in our collective ideology. We must begin to look at our world and the systems within it in different ways in order to find solutions to the problems that were created due to past design choices. Designers have the capability of changing the world and serving as facilitators of change in order to lighten the load our current systems place on individuals as well as to solve important socio-cultural issues.

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# Thinking Light

The first step towards changing the way design functions in the modern world is for designers to begin to embrace John Thackara's ideas of lightness and design mindfulness. Thackara argues that modern design of products and the systems through which they are delivered are taking an enormous toll on individuals. There is more of almost everything overwhelming our world overtaxing systems, resources, and what people are able to physically and psychologically handle. We are literally destroying ourselves, and our planet in a deluge of production. This is largely a result of the mindset of modern populations. We focus only on the end product and take for granted the process and materials, which go into the production. Even now as we make an effort to lighten our load through the green movement we still only see the end result. We try to change the products, alter them to function better, to last longer, or to pollute less, but that simply isn't enough to significantly lighten our load and ease the impacts of production. In order to do that we need to make changes. We need to think like Italo Calvino (2005) and believe that, "Whenever humanity seems condemned to heaviness, I think I should fly like Perseus into a different space. I don't mean escaping into dreams or into the irrational. I mean I have to change my approach, look at the world from a different perspective, with a different logic, and with fresh methods of cognition and verification," (p. 27).

So the question then must be asked, how do we alter systems and mindsets that have been in place for centuries. The answer is that we look elsewhere for our design ideas. We stop thinking in terms of production and money and start looking at how to get back to a sustainable

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model that is also socially acceptable. We need to reintroduce humanity to design in order to lighten our world. We need to shift to a system of design mindfulness instead of being simply mindful of design for aesthetic function. This means that now designers need to start thinking more about the implications of their work, and not just in terms of how the design may benefit consumers, but also in terms of the impact of the production system on the environment, how the consumer will interact with the product, what the consumers needs really are, and how the product will ultimately be disposed of when it has outlived its purpose. Designers also need to consider the flow of materials and energies in their systems and make sure to focus more on humans as a priority and ensure that they deliver value to humanity. Finally designers need to start thinking about different elements that impact their designs such as difficult places, time limitations, and cultural differences as positive values by focusing on the unique services they can deliver rather than consider these particular values as obstacles to overcome. As a result, these elements should be incorporated into the design work since individual needs should drive design. Most importantly however, we have to start understanding that, "Ethics and responsibility can inform design decisions without constraining social and technical innovation," (p. 10). In this way by embracing the idea of lightness with regards to design, we can not only improve the planet by creating sustainable systems, but we can also bind humanity together and change our perspective to better serve the needs of the global community as well. An excellent place to start is by looking at how design can generate innovative solutions at affordable prices with negligible environmental impact when a select group of designers began to think outside the box.

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# Designing for Humanity

When someone mentions the word ‘design’ what does the majority of the population picture? Some people might think about large-scale designs such as innovative architecture, or sleek automobiles. Other people might think about design in terms of visual aspects such as interior design, or fashion design. Still others will immediately think about the design of simple products consumers use on a daily basis: dishes, decorations, and toys. This is because the assumed definition of ‘design’ as according Barbara Blomink in Design for the Other 90% (2007) is, “Based on how an object or concept balances three attributes: Aesthetic, function, and cost,” (p. 1). Nearly 95% of designers function within these parameters spending their time and effort working for the richest 10% of the world’s population, people who can afford to purchase designs based off of their desires and not necessarily their needs. Very rarely will anyone ever think about a second definition of design as, “intentional problem solving,” (p. 2). That is, that designers operating under this definition of design work to alleviate human suffering for people that simply cannot afford even the necessities in life such as food, water, or basic health care. This is designing for the other 90%.

So how exactly does designing this way tie into Thardara’s idea of lightness? The answer is that designing for the other 90% of the world’s population forces designers to think in different ways and to consider the consequences of their work, consider the human element, and look at the designs as a whole in order to ensure affordability. For example, look at Paul Polak’s work

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with drip irrigation systems in India. Poor farmers in Maharastra, India needed an innovative and affordable form of irrigation in order to be able to product crops in the dry season. Modern design had produced a solution, wells, but that proved to be inefficient for the majority of the population who simply couldn't afford the $2000 price tag with their usual dry season income of only $150. Designers had to rethink the current solution keeping an eye on the human aspect and incorporating challenges as guiding principles that could add value to their designs, particularly with regards to price. The team constrained themselves to producing a workable 'dam' that would be affordable to a population that only makes around $300 a year and that would be able to recoup its losses in a year. The resulting idea was to find some way to create a 10,000-liter non-evaporating tank that would only cost $40 to install. The end result was a ten-meter long double-walled plastic cylinder that would be supported by an earthen trench, which cut down on the cost of creating a support system. This solution was exactly what the consumers needed and fit into exactly what they could afford.

Another human-centric and outside the box design solution was used to create an affordable drip-irrigation system for rural farmers. The design was yet again considered with regards to the entire process, not just the end product. The designer also made the product more human centric and saved energy and materials by allowing for mobility. Polak's team yet again took an existing irrigation design from the modern world and rethought it through the lens of lightness and sought to make it more efficient and valuable to the consumer. As a result they simplified it and removed any unnecessary parts that while making the product more effective for those who could afford it, made the western irrigation drip system impossibly expensive for

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the rest of the world. These features were not really necessary and as a result did not deliver any real value to the consumer. Next the design team used smaller tubes, which made the product more affordable and valuable to them, even if it shortened the hose's lifetime. Finally, by making the hoses mobile it allowed for poor farmers to be able to purchase less hoses and still be able to cover the same amount of area. The product has proven so successful that one farmer was able to earn $1000 in the dry season as opposed to their usual income of only $150. This streamlining, optimization of resources, and consumer focus epitomizes the idea of lightness and serves as a great example of what could be.

However, simplifying products is not the only way lightness can be used to optimize design. Many of the designs for the world's poor utilize the idea of demand responsive services which work to connect people, resources, and services in an affordable way by allowing people to share resources in order to all have access to something they need. Architecture for Humanity utilized this idea when they created the mobile AIDS unit, a medical vehicle that grants communities access to health care professionals without needing to absorb the huge cost of physically constructing a hospital, something that simple is not feasible for most of the world's poor. Similar systems also work to provide valuable health care for people that could have never afforded the quality of care they can now receive. For example, Operation Village Health connects populations in remote Cambodian villages access to highly educated medical professionals. Twice a month a truck is driven into the villages and a nurse examines and photographs potential patients. These photos are then sent via satellite to doctors at the

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Massachusetts General Hospital on the other side of the world. These doctors are then able to advise patients on the best course of treatment and save lives.

Even systems as simple as education can now be shared. The rural poor of the world are largely illiterate and as a result are not able to connect to the world in ways that are necessary for the advancement of a culture. As a result, teaching them to read is imperative to their quality of life, but building a school or buying books is simply not cost effective or reasonable for a population that can barely afford to feed themselves. A demand-response service is the only possible way this population could ever have a chance to learn. Thus come the nearly 200 collaborators working with a Kinkajou Microfilm Project and Portable Library with the goal of improving literacy in West Africa where nearly 75% of the people are illiterate. Even this simple solution, an LED projector running on AA batteries, has served nearly half a million people and changed lives.

## The Design Future

These designs have the possibly of significantly changing the world of design for the better by embracing the ideas of lightness. This consumer focus, an emphasis on design from start to finish, and a sustainable model can revolutionize the world if designers can embrace the principles and apply them to everything they do.

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