WHAT DO WE CREATE IN A RESPONSIBLE WORKSHOP IN 2030?

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ABSTRACT

What should design students learn, not to lose hope, but be able to design in the current dire climate, energy and health situation? What can we design and still stay on track with the Sustainable Development Goals (SDG) in 2030? What can we design in the long run, not worsening critical human and non-human systems? In the paper we question "good intentions" and business-as-usual approaches, to challenges facing many of our most existential systems. We suggest changes to the Design field's understanding of the SDG's. Further, we suggest focusing on several solutions at the same time, in local communities, with collaboration with others and design educations. The paper argues that a holistic and systemic view is required that rather focuses on root-problems, than the symptoms these problems cause. Based on a multidisciplinary selection of scientific literature, the paper shows how acclaimed systemic approaches often harm the health of both human and non-human systems. In addition, the paper argues that these acclaimed systemic approaches tend to suggest "solutions" that stand in the way of more realistic solutions emerging from supportive and social environments. One of the insights from the literature, is how individuals by reconnecting to community- and practice-based activities strengthen hope of better futures. In the paper we argue how designers and design educations, can act multidisciplinary, with others, to become agents towards the kind of holistically, community-based, and radical changes required to heal all broken systems. We suggest how designers can situate themselves in the responsible workshop of 2030.

Keywords: Design workshop, health promotion, SDG, systemic thinking, local community

1   INTRODUCTION

1.1 Current sustainability goals for economic growth

This decade is considered the last we have to get our act together and heal what a small part of humanity has broken during, especially, the last half-century [1]. To stay on the track established by the "Paris Agreement" [2], we know that global emissions must be halved by 2030 and reach net zero by 2050 to avoid climate catastrophe. However, this decade is also the last for its year mate, the 17 Sustainable Development Goals – the SDGs – that was launched 2015 [3], to be achieved according to its own schedule. Despite that, the first challenge – climate change – is arguably an existential deadline, and the latter – the SDGs – tends to be more of a set of goals to stretch for; they are not only intimately interconnected, but they also share many features, approaches, mindsets, failures, and critiques. For this paper, we will content ourselves by initially, as a mere backdrop, point out that neither the current climate policies nor the SDGs question the current system's fundaments, e.g., clearly illustrated in the criticised SDG8. Both sets of goals seem, so far, to fail [4, 5]. Or in other, more specific words, they both state specific metrics to be met to achieve their goals but arguably avoid questioning the systemic roots of the problems it tries to solve. One way of understanding this consistent but puzzling pattern is to learn from the late system thinker Stafford Beer *"The purpose of a system is what it does. This is a basic dictum. It stands for a bald fact, which makes a better starting point in seeking understanding than the familiar attributions of good intentions, prejudices about expectations, moral judgments, or sheer ignorance of circumstances."* [6].

1.2 Sense making through system thinking

The significance of Beer's insight becomes evident if one applies it to findings one can find in a recent Oxfam report [7] that claims that the *"10 richest men in the world own more than the bottom 3.1 billion people"* and that the *"twenty of the richest billionaires [each] are estimated, on average, to be emitting as much as 8000 times more carbon than the billion poorest people [do together]"*. The relation between development and climate breakdown and the fact that a few that live far beyond the means, force many more to live far below what ethically would be their fair share of available resources, is further underpinned by Figure 1 [8].
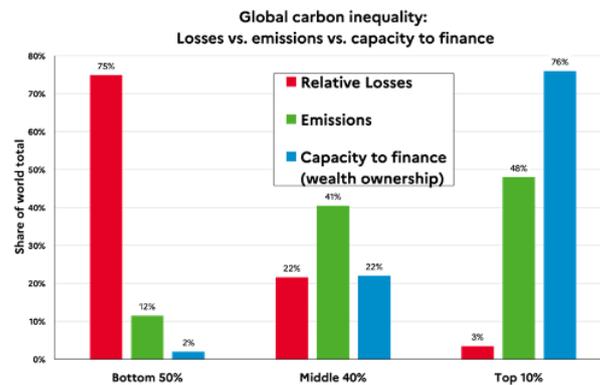
Figure 1. From the climate inequality report 2023 [8]

The brief introduction above is meant to introduce established Systems Theory as a tool for sense-making. In section 2 we illuminate broken and intricate system connections between humans and non-humans. Based on these explorations focusing on Health in section 2, we discuss in section 3 how this relates to Design and its education. Finally, in section 4 we end with a discussion about the kinds of radical changes we believe are required to make a difference that makes a difference [9].

2   HEALTH & THE BROKEN CONNECTION – HUMANS AND NON-HUMANS

Health is arguably a human right and number 3 of the 17 Sustainability Development Goals [3]. Health is defined in diverse traditions [10]. Mainstream *biomedical* health that you get from your local MD, large hospitals and drugstores, focuses on medical treatment of *symptoms* of illness, or *Pathogenesis*. See 2nd column on Biomedical Health (table 1.). It is run by pharmaceutical companies, mainly driven by demands of economic growth. Digital health services, welfare and assistive technologies, sensing and monitoring elderly persons when falling at home and automating the care, are thought to solve the demographic challenges with more elderly persons and fewer health personnel. A critique of biomedical health is that it is breaking many of the since long developed networks of relations, *assemblage* [27], by prioritizing only relations that increase revenue for the shareholders, whether it is the relatively simple monitoring of blood levels with new wearable sensors, or administering off-the-shelf cholesterol lowering medicine for people that eat junk food rich of fat and sugar. Under this reasoning we like to point out two different nested models of thinking, described in table 1: The first model is "Growth, Ecology part of Economy" (column 1), based on growth, where *Economy* always is prioritized over ecology. The second model is "Holistic, humans and Economy part of Nature", (column 3), based on holism, where *Ecology* is prioritized and economy, technology, design and humans are subordinated. We argue for the importance that designers recognise these different nested models of thinking. Otherwise, the risk is that we are solving the wrong problem. The current administration of medication against cholesterol might be more inclined to merely keep you alive than having any real incitements to heal you completely. Similarly, it is possible to generate revenue from designing symbolic greenwashing products with *good intentions* rather than solving the root-problem defined in the SDG [3]. A counter reaction in health care systems focuses on that every human has Positive, or *Salutogenic resources* [11] (see 4th column in table 1.). Even if a person does not see very well, he or she can still communicate by talking and touching. Resource-orientation is being used in elderly care and rehabilitation, together with strategies such as person-centric health care and public health in whole societies and the local community.

Table 1. From Economy-Driven Growth models for SDG, nature and health, to Holistic models for nature and health: radical changes in design disciplines and design educations

From: *Economy-Driven Growth models for SDG, Nature and Health*		To: *Holistic models for Nature and Health*	
Sustainability (SDG 2030)	**Biomedical Health**	**Non-human Health, Nature**	**Human Health**
Growth, Ecology part of Economy	Medical industry, increase revenue	Holistic, humans and Economy part of Nature	Health Promoting (WHO)
Business-as-usual, Global economy	Pathogenic/ illness	Community driven, Local economy	Salutogenic/resources of wellbeing
Climate above 1.5-2 degrees	Hostile environment, bacteria,fungus,virus	CO_2 neutral cyclic local energy, food production	Supportive Environments (WHO), assemblage of humans/nature
"Good intentions"	Symptoms treatment	Real existential	Preventive, social relations

2.1 Health promoting supportive environments

Health Promotion [11] was defined by the World Health Organization's in 1986. It is a holistic definition of health, strengthening community actions and with the goal to engage persons in policy making, design and experience of health and wellbeing. To be Health Promoting, we argue, a service, product and activity needs to create networks, or *assemblage* [27] between humans and things/non-humans/nature in what is called *Supportive Environments* [11] (see 4th column in table 1.). In the environment, ecological, physical, psychic, social and aesthetic aspects are influencing a person's or a society's health. These can all be positive, or *Salutogenic* health resources for a person that is in treatment. Examples of Health Promoting activities prescribed by local medical doctors are hiking in nature, Garden Therapy for persons with burn-out-syndrome, and everyday Music and Health sessions. Music played or sung during the day in elderly care centres [12], is helping elderly with severe dementia to uphold their identity and to remember their past through the music that they know and have a relation to. Norwegian initiative such as the "NaKuHel" (Nature, Culture and Health) [13] is an organisation with a farm with evening courses, conferences, social and leisure programmes with a café for local citizens, elderly persons and children in outdoor kindergarten and hiking tracks outside of Oslo. NaKuHel is a Supportive Environment [11], run based on Health Promotion and with public health goals of strengthening the local community and the society.

2.2 Non-human health

Based on a holistic worldview, we like to see similarities and create relations between health and the environment. None-human health can be viewed as a holistic ecological system.

Regardless of one's own stance it helps, as suggested by the famous scientist James Lovelock, to think of nature's all sub-ecologies as parts of a giant global self-regulating system or even as an organism in its own right; an organism Lovelock coined the Gaia [14]. The scientific warnings for just a few degrees increase in average temperature, then make so much more sense. *Gaia is then about to run a serious fever* [15] leading to unpredictable conditions caused by the gigantic increase of energy running our climate systems and by that threaten many of its important subsystems [16]. The health situation is already very serious at some parts of its body and if no remedy is found the disease will most certainly seriously affect its whole body and eventually lead to global ecological collapses. Collapses, or "*tipping points*", where we reach a trajectory of no return and whatever we then do will be in vain. In a narrative like this, a small part of humanity has turned into a malevolent bacterium that does not seem to understand that its selfish parasitic actions endanger everyone's existence, including their own.

Despite that the leading scientific authority, IPCC, whose consensus-based legacy is to lean toward the more conservative side [4], the fifth IPCC assessment in 2021 issued a blunt message; *"Due to the carbon already released by human activities, it warned, major climate changes are inevitable and irreversible on the scale of human lifetime. Furthermore, in the absence of immediate, rapid, and large scale reductions in emissions, limiting the global average temperature rise, since [preindustrial] time, to 1,5°C or even 2°C would be impossible"* [Ibid p.13].

This arguably render the simple question; **should we believe in science or not?** The stance of this paper is that we should trust what science tells us [17], acknowledging the immense consensus about the causes [18], and based on that information making us more immune to the influential and ubiquitously present disinformation we all are affected by and telling us to do the opposite [19], [20]. But perhaps most important, act accordingly!

To conclude this section, we argue that that Gaia's health is, to paraphrase the first sentence in David Wallace-Wells' seminal book The Uninhabitable Earth: life after warming: *"it is worse, much worse, than [we] think"* [21] and therefore requires urgent actions that's far more radical than the kind of remedies employed today. Remedies, we argue, only try to address symptoms without touching the cause, an approach that so far, unsurprisingly, proven completely insufficient. In fact, it has been far more talk and "good intentions", than serious action with real positive changes (compare 1st and 3rd column in table 1.). Or as Bill McGuire [4:10], so to the point, phrase it: *"To say that the formulation of such policies has taken place in a snail's phase would – in all honesty – be insulting to molluscs"*. We need to seriously ask ourselves: Why?

2.3 Healing as reconnecting to hope

We argue that an aspect of understanding Health and Health Promotion, between Humans and Non-Humans/nature, is to understand the transition of *healing*, in the meaning of getting "*whole*". It is the same word as in *holistic*, meaning to see the sum of the whole, rather than the individual parts, the network or assemblage of possible relations. Johann Hari describes how poor (mental) health is a process of losing connection to oneself, other people, work, nature, and how healing that, is to design strategies to reconnect it all again [22].

3 DESIGN AND DESIGN EDUCATION

Designer Enzio Manzini founder of Social Design Labs all over the world (DESIS Lab) and professor at ELISAVA School of Design and Engineering in Barcelona, makes the statement: *"design capability is human capability"*. He defines what we consider to be "design's DNA", as the combination of three very human gifts: 1) to be critical of the state of things around us; 2) to be creative, imagining something different from the present state of things; 3) to use our practical sense to understand if what we have imagined is viable or not. [23].

We see that many design students have *lost hope for the future*, lost connection [22], and have given up hope that anything could be any different. Where are we? We believe that, if the next generation of designers is not *imagining* futures with climate and holistic health promoting technologies in mind; we probably are in deep trouble.

3.1 Design's current systemic role

A system's view reveals that most design disciplines are "kids of their time", typically emerging as a response to what the system needed most at that specific time. Here are some brief snapshots of the history that have to suffice [24]. With the *specialisation* during the *industrial society*, we could see how the craftsmen diverged into *workers* on the one hand and "*specifiers*" like industrial designers and engineers on the other. In the last half-century, the speed of change has accelerated, first with the so-called *information society*, with a need to increase the market potential of the, at the time, very cumbersome digital systems by making them more user-friendly. This gave birth to Human-Computer Interaction and Interaction Design. The information society was soon followed by the so-called *Service Society* and a system that needed further commodification of what until then had remained in the non-commercial private sphere, which arguably gave birth to Service Design. More recently, *System Theory* entered the sphere of design [25], being what we here try to use as a tool to understand the mess we designers (and engineers) have been so instrumental in the creation of.

The point to *take home* here is the narratives we tell, regarding *whose interests* we as designers and developers really are advocating. Compare 1st and 2nd column in table 2. It is challenging to realize

that the current economic system gets primacy whenever its "*existential needs*" do not resonate with design's "*good intentions*" (cp. Beer above) [7] and our profound belief that we are the users' advocates. Despite that, the system's existential needs then, in turn, jeopardize everyone's most existential needs.

3.2 Potential new roles for design

What should design students learn, not to lose hope, but be able to design in the current dire climate, energy and health situation? What can we design and still stay on track with the Sustainable Development Goals (SDG) to be realised by 2030? What can we design in the long run, not worsening critical human and non-human systems?

Considering these pertinent questions, what role(s) should design have in the future? What does it mean, that we should take the climate and energy challenges of the future seriously in the design concepts, user-insight and development work we do? Or should we re-educate ourselves in a more fundamental way? Should the Interaction Designer and Industrial Designer of 2023 become community workers, facilitators and co-designers of group work, coordinating different crafting capabilities to understand and hack electronics, solar cells, farming and health and sustainability? Or should we become policy makers designing political campaigns and action plans for local communities to deal with crises and lost connections [22]?

Table 2. Community Futures design workshop. From: traditional Design, form and individual user. To: radical changes through community and system thinking in design educations

From: *Traditional design, form, individual user*	**To:** *Community design and system thinking*
Designer as user's advocate, "good intentions"	**Co-Designer, multidisciplinary facilitator**
Economic growth, with "good intentions" for climate and health	System thinking, nested complex system
Attention economy, UX, next kick	Relational, Community-driven
Design as form-follow-function	Re-Futuring, Radical change
Upholding carbon-based economy	Design for diversity, value-driven

4   DISCUSSIONS

We argue that one of the most important skills to learn and practice in the future responsible workshop in 2030, is to be able to analyse the narratives and underlying multidisciplinary models. First, then, can we situate ourselves as designers and contribute with effective and sustainable solutions. In table 1. we describe the current broken system, on the left. The Sustainable Design Goals in column 1 are based on a model of economic growth. Biomedical Health in column 2, also builds on growth, but in a Pathogenic illness-focused health paradigm. Neither of them prioritise nature, nor health, but the Economy. Until now the design practices (table 2) have at best focused on being ethical "good", arguing that taking the user's perspective (1st column) is a "good" act. This is not necessarily true. More commonly, design has been, and still is, introvertly focused on form-follow-function. Again, this is based on what is economically viable. Based on this analysis, what changes should we prioritise (see 2nd column of table 2), and how would it be possible to introduce them? Our suggestion is to move from teaching Sustainability based on economic growth to *non-human health that is holistic and based on Health Promotion and System Thinking*. One set of bottom-up methods we have argued for in the paper is to work with others, *listening* and *co-designing* in local communities. Working with local energy and food production will hopefully bring us closer to *real existential challenges*. We believe it will give us a chance to address what gives a community hope, and how the community master *real skills,* not good intentions. The more we have worked with the combination of Non-Humans and Humans, the harder it has become to separate between them and to uphold binary division between nature and humans. We

found it useful to be able to work with, visualise and share more complex models that make it possible to draw and map relational networks of all actors, humans and non-humans involved. There are also intentional overlaps between models in the different fields of Design, Health and Sustainability that showed to be fruitful and should be explored more closer in practical workshops. Health Promotion have coined the term Supportive Environments [11], which overlap with physical environments in ecological and social sustainability. It does also overlap with co-design processes of idea creation and Re-Futuring [26] in the design field. Common for all three fields are abilities to listen, communicate, situate oneself around emotions, technologies, theories, visualisations, imagination, and hope for the future.

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