FROM ETHICS TO POLITICS: IF DESIGN IS PROBLEM SOLVING, WHAT THEN ARE THE PROBLEMS?

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ABSTRACT

The great design movements in design history were, for the most part, guided by utopian, political, or at least reformist aims. They combined the question of what today is called 'material culture' with the more general question of how we want to live. Today, faced with the global challenge of creating sustainable economies and societies, design has rediscovered its ethical, social and critical tradition. However, due to their global nature, today's problems have reached an unprecedented level of complexity and inertia. These problems are deeply ingrained into global policies – and the chances to face them are the highest when employing political means. As a consequence, if design aims to contribute in these challenging domains, it has to conceive itself as political.

Keywords: Political design, politics, ethics, sustainability, problem solving.

1   INTRODUCTION

Design has become a discipline that does not set out merely to shape our material culture. Advanced design today explicitly addresses *social* rather than corporate change, measuring its success by its impact on society, as opposed to sales or turnover. Confronting the continuous grow of fossil fuel consumption that has taken place over the last thirty years [1] and the persistent economic divide that is more than likely to be aggravated by the effects of climate change; ecological and social questions have quite rightly regained momentum in the design discourse. The conception of design as a social agent builds on the tradition of integrating sustainability issues and participatory processes, which have been discussed in the design community since the 1970s. A deeper look into design history reveals that social questions have actually been an integral part of the design discourse right from the beginning of industrialisation. [2] In this paper I wish to argue that design's aspirations to become an agent of substantial societal change, cannot be adequately discussed without considering design's relation to the *political*. Early design movements tackled the specific pressing *problems of their times*. In no way did they conceive political aspects of their work as some kind of 'extra', but as something at the heart and core of their mission. Today's major problems are indeed global and deeply rooted in the domains of world trade, finance, transport, industrial and agricultural technology, and energy consumption – problems with complex systemic implications far beyond the challenges faced in the 1920s or 1950s. It is a most regrettable fact that the design profession has to carry part of the blame, as it has encouraged unsustainable consumerism over the last few decades. Nonetheless, design expertise and its power to change behaviour could as well be implemented in dealing with these global challenges. In order to develop a realistic view on what design can achieve – and to discover at what point design starts to stretch its limits – it is necessary to look into what exactly frames the conditions of design.

2   POLITICS IN DESIGN HISTORY

Pioneering design schools and movements mostly had social or even political agendas. These ranged from reformist approaches, explicitly revolutionary politics, to utopian visions of a future society. [2] By contrast, the design community and even today's protagonists of the discourse on 'social design' widely avoid disclosing any explicit political position and attitude: design today is considered political only in terms of it making tiny changes from the *bottom up*. Whereas institutionalized politics (i.e. government, parties) are perceived as a fully separate system implementing a *top down* approach.

2.1 Arts and Crafts

The Arts and Crafts movement is traditionally considered as one of the first precursors of modern design, although it agitated *against* industrialisation. The movement reacted against the technological and societal changes industrialisation had caused: poor product quality, impoverishment of workers, and their alienation by the division of labour. In this sense, both, their external motivation as well as their aims, were clearly social and political. [2] Moreover, William Morris was a professed communist, advocating a 'proletarian world revolution'. However, his desire to reverse (technological) history by restoring the pre-industrial ways of production was obviously incompatible with orthodox Marxism, which is grounded in industrialisation – just like capitalism. [3]

2.2 De Stijl

In contrast to Morris, the De Stijl group did not follow any given political manifesto, although some had been members of Netherland's communist party for a period [4]. Instead, they created their own speculative visions of future living. [5] Doesberg predicted 'the end of art' and that art will make way for what we today call 'design': 'the development of real life is nowadays hampered by art. […] Men do still exist, who are capable of making beautiful things without art. These are the progressive minds.' and 'There will be no longer any need, in a collective culture, for this licentiousness of sentiment. On a higher level of culture, free painting and sculpture will simply cease to exist.' [6]

2.3 Bauhaus

The 1919 founding manifesto of the Bauhaus revealed an eclectic mix of arts-and-crafts-inspired 'gothic revival', and visions of an artistic 'new building of the future' – in a quite bombastic and esoteric form. In the years following, the Bauhaus moved away from expressionist and metaphysical approaches towards more rational approaches, embracing mass production. After Hannes Meyer's curricular reforms in 1928, the Bauhaus adopted a strong socio-political policy, grounding design ('Gestaltung') in the sciences rather than art. The individual artistic 'genius' approach was entirely abandoned in favour of rational and cooperative design methods. Its guiding principle became 'Volksbedarf statt Luxusbedarf' [people's needs instead of luxury needs], one of its primary goals being affordable housing, germinating the first attempts at serial building. [7]

2.4 Ulm School of Design

Planned shortly after the Second World War, the Ulm School was initially conceived as a school for holistic, yet predominantly *political* education. This was regarded correctly as one of the most urgent necessities of its time, in view of the fact that young adults of the late 1940s had been indoctrinated in a fascist educational system. To that end, an adult education centre was set up in 1946. In the period up to the opening of the 'Hochschule für Gestaltung' [school of design] in 1953, the concept had been extended towards design and architecture, for the purpose of also materially rebuilding the country. [8] The aftermath of high-tech war and industrialized death, compelled most German intellectuals to think of technology as either harmful or irrelevant for studies in the field of humanities. In stark contrast, the Ulm School took on the pre-war Bauhaus tradition and its idea of technology as an integral part of culture and as an agent for societal change. [9]

2.5 First Ecological and Participatory Approaches in the 1970s

The long-known publications 'Limits of Growth' [10] and 'Design for the Real World' [11] were published in the early 1970s. The 1973 oil crisis and increasingly saturated markets encouraged some designers to get involved into 'eco-friendly' product development, largely focusing on low-tech solutions and the reuse of material [11] – while the professional mainstream turned towards unsustainable sales-oriented product differentiation. The seeds of Participatory Design were also sown in the 1970s. These stemmed from the claim of Scandinavian trade unions to involve employees in planning and design of their working environment and software applications. The idea was to let 'the people destined to *use* the system' also 'play a critical role in *designing* it' [12] This meant shifting at least some power from conventional 'decision makers' – politicians, management, and design specialists – to the workers and employees who would actually be directly affected. Hence, Participatory Design was an explicitly political movement. However, its societal impact of course is commensurate with the scale of the projects: an urban planning project is bound to affect more people than say, custom-made office management software designed for one small business.

2.6 1980s and 1990s: Design – a distracted discipline

In the 1980s design went through immense popularisation, often associated with ironic and artistic aspects, but in the end boiled down to a largely superficial lifestyle context. In the 1990s, the design community (this author included) was predominantly busy discussing digitalization and dealing with the emerging domains of interface and interaction design. This also shifted the focus from social, ecological, and political questions, as digitalization – like many new technologies – became overloaded with a promise of salvation. Books such as 'Being Digital' declared a turn towards an economy of 'bits', instead of 'atoms' [13]. Due to this 'immateriality', the whole digital domain was considered a 'green' technology. Any realistic consideration of the mass manufacture of computers or the power consumption of server farms was widely suppressed. In real terms, digitalization did not in any way *replace* classic resource-intensive industry – it simply came out *on top*. It also did not, for instance, lead to the predicted decrease in transportation [13] – quite the contrary, digital communication and production technology led to an unseen acceleration, engendering faster production cycles and the globalization of markets, finance, and production.

3   WHAT PROBLEMS CAN OR SHOULD BE ADDRESSED BY DESIGN?

Herbert Simon's famous, 'transferring existing situations into preferred ones', [14] is probably the widest present definition of design. This definition has been quoted readily – although it is actually contrary to most quite narrowly defined study programs and to what professional designers actually practice. The world is in a situation today that clearly demands things of a far more 'preferable' nature. In Simon's terms, transferring the world into a 'preferred' world, is *a design job* – a design job that has now been pending for several decades. There is a simple answer to why it has been left undone: The underlying cultural structures (and I understand politics, legislation, economy, and technology as part of culture) are too often perceived as *constraints* that are not subject to change by design. This often leads to a 'there's nothing we can do about it' attitude of designers – a form of internalized self-censorship [15] that occurs when concepts conflict too much with current market constraints, and therefore are presumed to become failures. Hence, a closer look at the concept of 'constraints' appears to be necessary.

3.1 Scope and Constraints of the Design Problem Space

'Constraints are decided, selected, and self-imposed, and not implied, derived or logical necessities. Every constraint is something the designer does not want to change.' [16] Horst Rittel illustrates this quote with a simple example: negotiating an exception rather than accepting the Building Code as an 'immutable given', has a huge effect on the solution space – to extend it further, one might even try to start an initiative for changing building legislation. He comes to the conclusion that 'learning what the problem is *is* the problem', and since the problem definition often bears the risk of a solution already being implied by the problem formulation [17], one of the decisive aspects is 'the division of phenomena into changeables and invariants.' [16] Too much accepting of the alleged constraints as given, is therefore a common design flaw. Furthermore Lucius Burkhardt suggests, that designers all too frequently accept systemic constraints: 'when they design a tin can opener, [they accept] the configuration of the can. The tin can designer in turn, accepts the configuration of the can opener. This is a constraint.' [18] Constraints like this often dissolve when zooming out to a systemic level. Instead of designing a new can opener, a novel way of food preservation, storage, distribution, or even different eating habits may be more desirable, all these could be alternative design goals. Of course by doing so, the level of complexity is greatly increased.

However, today's urgent problems cannot be addressed without accepting that the demarcation line between traditional design space and its constricting circumstances is self-imposed at a contingent position in problem space. Figure 1 shows a traditional, affirmative design space (dotted line). The greater the distance from the centre the more difficult it is to change, due to higher complexity – and the greater the designer's responsibility becomes, because decisions may affect a more general public. However, the only factually unchangeable constraints are the *laws of physics* and *limited resources*, as well as some biological, physiological and cognitive aspects – the rest is human-made and therefore subject to change – be it by design, evolution, revolution, or disaster.
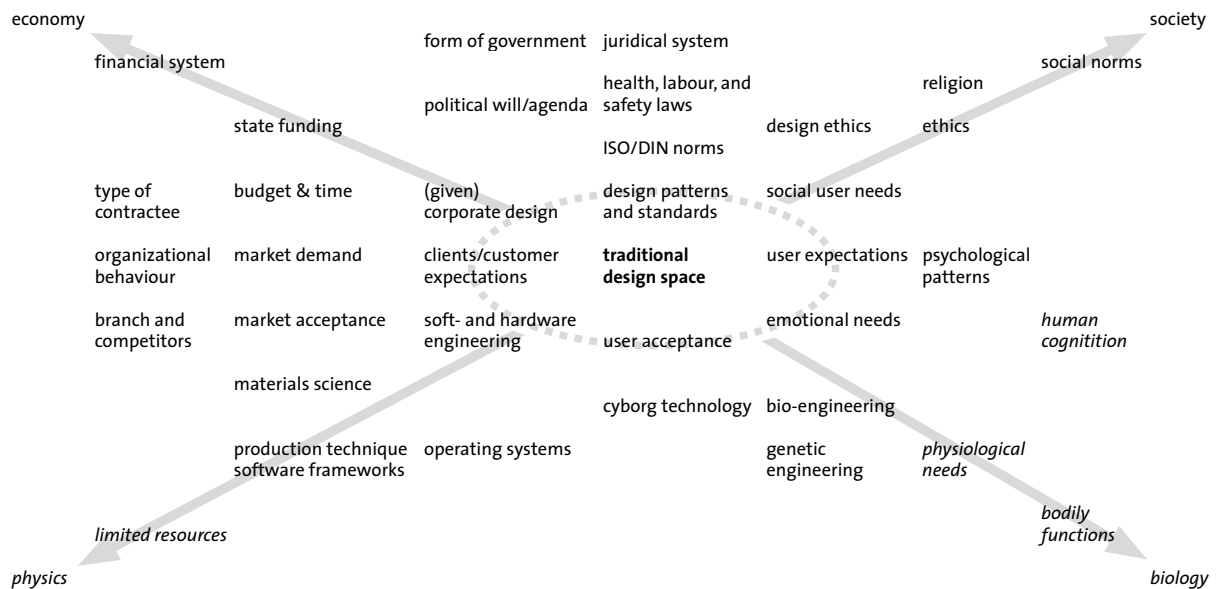
economy

society

financial system

form of government juridical system

social norms

political will/agenda health, labour, and safety laws

religion

state funding

design ethics ethics

ISO/DIN norms

type of contractee budget & time (given) corporate design design patterns and standards social user needs

organizational behaviour market demand clients/customer expectations **traditional design space** user expectations psychological patterns

branch and competitors market acceptance soft- and hardware engineering user acceptance emotional needs *human cognition*

materials science

cyborg technology bio-engineering

production technique software frameworks operating systems genetic engineering *physiological needs*

bodily functions

limited resources

physics *biology*

Figure 1. Example of a traditional design space with 'constraints' around it

3.2 Specificity of Design vs. Universality

Any ambitions to get involved in large-scale global problems raise the question to what extent *universally valid* design can be? Traditionally, design, as a 'problem solver', is regarded as providing *specific* solutions to specific problems (specific clients, users, and markets in specific historical, societal, and geographical contexts). Science, by contrast, is traditionally associated with the aim to develop knowledge, models, and theories with as much universal validity as possible. The German Council of Science and Humanities even claims that 'the validity of scientific statements is invariable in exchange between persons, as well as in space and in time' [19] – a somewhat dated conception that denies possible falsifications [20] and ignores constructivist doubts about 'objectivity'. Bearing these stereotypical differences in mind, it is surprising that the term 'Gestaltung' [design in a broad sense] can be found in German handbooks on scientific writing [21, 22]. In [21] a taxonomy of scientific question types can be found, with 'Gestaltung', i.e. design, actually at the very top of the scale:
1. Description: What is the case? What is the reality?
2. Explanation: Why is this the case, why is reality like this?
3. Prognosis: In considering the description and the explanation, how will reality develop in future?
4. Design [Gestaltung]: What measures can be taken to influence future development?

This list is sorted by how demanding and complex the questions are, with the 'design' questions being the most ambitious scientific challenge, suitable only for a doctorate or professorial thesis [22]. This appears to be contradictory, as design is usually not even considered a science in any strict sense at all. However, in this case, 'to design' is indeed the greatest scientific challenge if, and only if, it simultaneously aims at a universal validity of its results. This applies to when we design a rule, a law, or monopolistic services, systems, and products. Scientists who discover and describe rules of nature, or describe behavioural patterns in culture, do not 'design' in a strict sense. Laws of nature can, by definition, not be created or designed. They can only be discovered and described. This is true, even if we consider the description, i.e. the explanatory model, a contingent 'design product' that might be falsified some time. In contrast, politicians create, develop, or define norms for human behaviour and they 'design' laws to make these norms universally binding. The critical step from 'prognosis' to 'design' is based on assessment and on *judgement,* which is a subjective process. As designers we are forced to decide which 'measures' to take. By choosing the constraints by which we limit these measures, we manifest our political stance – and the chances to be evolutionary, revolutionary or a disaster.

4 RECENT APROACHES TOWARDS SOCIAL AND POLITICAL DESIGN

After addressing the challenges of broadening design into the alleged 'unchangeables', a critical look can be taken at recent design approaches that address ecology, society and human behaviour, or consider themselves to be critical or political in the sense of a non-institutional societal agent.

4.1 Persuasive Media and 'Nudge'

The persuasive media approach [23] intends to use the rhetorical power of media technology to change user behaviour for their good, and for the benefit of society and ecology. It is undeniable that this approach works. It may lead to a healthier, more conscious, and active life. It may also contribute to lowering one's carbon footprint. However, the recent spread of self-optimization apps comes with heavy side effects. Their optimisation and performance logic is deeply rooted in the logic of usefulness and competition. Rather than addressing the framing conditions for well-being, it affirms and even augments the needs to excel in a performance-oriented world. [24]

The younger 'nudge' principle [25] is a very similar approach. In brief, the idea is that a lot of small changes add up to bigger changes. At its core it is a reformist concept rooted in liberal economics. When confronting problems that are caused, or at least reinforced, by liberal economics, it is questionable whether treating consumers with small 'nudges' can compete with the mighty economic 'nudges' global finance and cheap labour and transport provide for the industries.

4.2 Critical and Speculative Design

Critical and Speculative Design have their merits in pointing to relevant problems and posing the right questions. It criticises traditional design for being affirmative, uncritical and only in the service of industry – instead of society. In the 'critical design manifesto' the problem-solving goal is rejected. Instead, the authors are content with *finding* problems and asking questions – and to design for debate – which are rather artistic than design strategies. Consequently, the authors of the manifesto describe critical design as 'applied art' [26] – a concept that reverses in time to the 1920s, before the emancipation of design as a discipline in its own right began. As a form of art, critical design projects are mainly presented at galleries or media art festivals, perceived only by a small in-crowd. Without getting involved in the decisive systems of economy, technology, and politics, these primarily artistic strategies often lack effectiveness and impact, even if they do actually pose the right questions.

4.3 Design as Politics

In his book 'design as politics' [27] Tony Fry invites designers to move into the domain of the political – and fight against what he calls 'structural unsustainability'. Fry comes to the conclusion that (liberal) democracy has proved incapable of providing 'Sustainment'. As a consequence he calls for a 'dictatorship of the imperative of Sustainment'. In the corresponding discussion he largely refers to Nietzsche's concept of the 'Übermensch' [the superhuman], Heidegger's reflections on technology, and first and foremost to the political and legal theory of Carl Schmitt – all three of whom became either implicated or actually collaborated in the establishment of Nazi Germany. Nietzsche as the unwitting provider of (horribly misunderstood) ideas, Heidegger as willing Nazi rector of Freiburg University, and Schmitt for his juridical justification of the Nazi dictatorship and the offensive war. [27] This gives some idea of what we might get if the choice is reduced to 'extinction of humankind' or 'dictatorship of sustainment'. Hans Jonas, who is sadly absent from Fry's references, postulated as early as 1978: if we do not force ourselves voluntarily to live in a sustainable way, we might be forced sometime. [28] Fry concludes that now is the time to be forced. Perhaps Fry's suggestions can serve as the impetus to scare and motivate us to engage against both: the unsustainable *and* dictatorship.

5 CONCLUSION

The aim of this argument is not to replace design ethics by design politics, but to extend ethics by a discussion on where the personal demarcation line is, between bogus constraints and factual constraints. The answers will differ individually, as they do in ethics [29]. There obviously is no objectively correct amount of systemic aggressiveness that should be implemented to indoctrinate students. However, if we claim critical thinking as a goal in design education, we need critical design teachers. And if we want our alumni to have an impact on global problems, we need to foster systemic and political reflection – for instance by encouraging students to use the following routines:

– Make a *conscious* decision about how broadly the problem-space is defined and what will be considered as given circumstantial constraints.
– Actively and *routinely* seek possible problem sources at a higher systemic level. Reformulate problems accordingly. Propose alternative solutions.
– Anticipate potentially undesirable side and after effects – at different systemic levels in the near and distant future. [30]

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