Designing the Past

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ABSTRACT

This paper challenges the position that design is a future oriented discipline, and rather turns an eye to the past as potential material for re-design. We claim that what we call 'the past' is far from static, monolithic, immutable, and is rather subjective, fluid, and constantly renegotiated. People constantly engage in re-designing the past by re-elaborating, reckoning, and plainly forgetting. The rewriting of the past, such as in historical revisionism, is often seen as an attempt to wipe-out, and hence re-inscribe and perpetuate, injustice, oppression, and even genocide. With this paper we call for more courage to take ownership of the past as something malleable, to take responsibility for it, and in so doing to open up design opportunities to a plurality of voices.

KEYWORDS

Design; Pasts; Futures; Post-colonial; Post-humanist; Feminist; Theory.

But it is easy to understand that when you say that something has been "designed", you are not only authorized but forced to ask whether it has been well or badly designed. The spread of design to the inner definitions of things carries with it, not only meaning and hermeneutics, but also morality. More exactly, it is as if materiality and morality were finally coalescing. This is of great importance because if you begin to redesign cities, landscapes, natural parks, societies, as well as genes, brains and chips, no designer will be allowed to hide behind the old protection of matters of fact. No designer will be able to claim: "I am just stating what exists", or "I am simply drawing the consequences of the laws of nature", or "I am simply reading the bottom line".

Bruno Latour [25]

INTRODUCTION

A famous quote attributed to Sir Winston Churchill goes: "History will be kind to me, for I intend to write it." Our understanding of the past rests on 'facts' that, when considered within their broader social, cultural, and political context, tend to open up to negotiations, interpretations, omissions, or plain and simple manipulation. Does design have a role, for better or worse, in these processes? The concept that design is a future oriented discipline is so entrenched in the design research literature that its potential to deal with a fleeting present and (seemingly) immutable past almost passes unnoticed. Designers produce "visions of better futures and make those things happen" [24] or also "imagine that-which-does-not-yet-exist, to make it appear" [26]. In this paper we take the concept of future orientation embroidered in most definitions of design as a springboard to ask an intentionally provocative question, or to challenge the reader to a mental experiment, if we like. More specifically, we elaborate on Latour's critique of the ever expanding comprehension and extension of the design discipline [25], so that the range of issues that are viable subjects of design comes to include more and more things that were previously taken as matter of fact. According to Latour, one consequence of this broadened scope is that designers need to take responsibility for those issues, to face the "ethical dimension which is tied into the obvious question of good versus bad design" [25]. In this respect, the future orientation of the design discipline seems to establish a limited liability of sorts: whether we recognise the errors of the past, or are nostalgic about its glories, the past in the design process is generally conceived more as context than as subject.

Hence our question: *Is the scope of design limited to future things, or can the past be designed as well?*

In the following sections we set out to discuss that the past is a human made thing, and a flexible one for that matter. Reasons for changing the past abound, some more worthy than others, and people engage with re-designing the past, accidentally or intentionally, at every moment of their life. This paper offers a call to engage more consciously with the past as something malleable. This has three main implications: firstly, a past that is designed and designable involves greater responsibilities than one that is immutable and taken for granted; secondly, insofar as possible futures rest on existing past conditions, a designable past opens up further possibilities for design; thirdly, a past that is open for design and re-design is, by extension, open for appropriation by a plurality of voices that otherwise would have fewer, if any, chances of being heard.

THE PAST

For being a future oriented discipline design is rather attuned to exploring and considering the past. At the very least, it is clear that good design research should be framed against the previous art (and its historical contingencies) so as to highlight the novelty of an intervention, its scope and limits, and with these the contribution to knowledge of the research. Wyche and colleagues discussed how historical

analysis can inform design in ways that enrich and complement ethnographically inspired methods, e.g. by making evident the errors of the past, defamiliarising the present, and exploring the social and cultural implications of different design decisions [38]. Yet, they seem to conceive of the past as crystallised in documents and precedent designs, distinct from personal experience, or its recollection, that is elicited and gathered separately to "breathe life and personal meaning into the historical data" [38]. The difficulty of conceiving the past as fluid relates in part with how we experience time and causality (the so called *psychological arrow of time*) and in part with a distinctly humanist worldview that assigns a privileged viewpoint to the human observer of any given happening. In such worldview facts are one thing, distinct from the (human) memory of them, and while memory can fade, attention can lapse, perception can fail us, the facts must intuitively rest untouched, unchangeable: if we drop a glass of wine that shatters, no amount of re-design will matter for that one broken glass.

On a more personal level, however, something less tangible , (perhaps the circumstances in which the glass broke, or where the glass was purchased?), makes this one broken glass important and memorable over infinite other events, and in different ways for different observers. Facts, as they happen, become part of our consciousness only through situated experience and interpretation as we encounter them through the lenses of the personal, social, and cultural contexts in which we are embedded. As we go about our daily lives, for example when we attend a conference, what we internalise during the event and subsequently carry forward reflects the configurations of our inner world and preoccupations of the present, as well as those of other delegates that we meet.

We might bring to a conference our current research interests and programs of work, questions and problems with which we are grappling, and ideas about what we want to do next. The formal paper presentations and informal encounters from the conference that resonate with us and inspire us are those ones that might confirm, extend, or confront these preoccupations. These are the things that we invite into our inner world and carry on into the future, while other details fade into obscurity. People can have different experiences and memories of the same event, and the same person could have experienced the same thing differently. If we were to have encountered the same conference with a different set of preoccupations, an alternative state of mind would have led us to differently constructing our past memory of it. When we later relate these facts and impressions, they change, as our memory and experience of them changes. From one narration to another, events change shape, acquire new significance, or can be relegated to the margins if their relevance to our present life becomes less obvious.

Memory is not a passive container [2] and the process of forgetting and renegotiating the memories of the past is key to remembering. As knowledge is made, shared, and passed on, from person to person, or from generation to generation, facts, memories and interpretations are continuously evolved in a process better understood as practice and performance, than as content and data. And each performance is always unique to a context, regardless of its supposed fidelity to some (past) original.

[…] through Geschichte, Heidegger has in mind a notion of history that is presently influential, a history that forms the basis for certain possibilities in a given moment. […] Heidegger urges that we not conceive of time as a series of 'nows' that string together the past, present, and future. Instead, he posits that one's involvements are always characterized by duration. In other words, we do not live in a series of present moments disappearing into the next; rather, we live across a time span that is constituted by an overlapping of the past and the future in the present moment. In a sense, there is no present, only the interplay of past and future. […] The past orients our perceptions, and is revealed in its significance as we take up opportunities toward specific ends.
Randall Teal [35]

A book reading, a movie projection, a dance, are never the same, because the performers and the audience and the context, social, cultural, political, are always different. Written accounts (e.g. a book, as different from our reading) are equally fluid and negotiable, not only because they stem from the same situated and subjective experiences, but more in general because their meaning, beyond the raw signs, remains open to hermeneutical debate. Books are subject to (re-)interpretation based on new understandings of the authors' overall body of work, on the rediscovery of first drafts, on the revision of parts previously redacted in a process of editing or censorship. Documentary evidence takes on new significance as the authors' intent becomes apparent. To see different conceptualisations of the past it is useful to turn to sibling disciplines of design, for example to architecture. Architectural design practice tends to engage deeply with the past, possibly due to its long standing tradition, with a literature dating back to the first century BC ('De Architectura' by the Roman architect Vitruvius) and with buildings still standing from as far back as the 4th millennium BC [31]. A 7000 year old building questions the relevance of our 'present' as a privileged viewpoint, and puts into perspective the human lifespan. Moreover, the design for a new building or infrastructure will always emerge in conversation with what exists already, seen not just as 'previous art' to improve and supersede, but rather as interdependent elements of a bigger (and longer lasting) picture. Teal discussed the interplay of history, theory, and practice in architectural education [35]. He notes that "good design emerges when one recognizes that all aspects of the project are co-evolving and co-informing", a concept that resonates with best design practice in HCI. Teal however includes within these 'aspects' a fluid conception of history that he calls 'dynamic temporality' a concept that he describes in relation to Martin Heidegger's Geschichte: "a notion of history that is presently influential, a history that forms the basis for certain possibilities" [35]. According to Teal, since our apprehension of the significance of the past is what truly matters, the fact that this is constantly evolving indicates that "[…] the past has changed, and perhaps more importantly, that the past *can* change" [35].

The concept of dynamic temporality is key to our vision of designing the past, as we will discuss in greater detail below. For now, if we accept that the only 'past' that matters is the one that is still effective, through memory, evidence, or artefacts, we should by extension recognise that the past is human made, and as such it can be designed and re-designed. The anthropologist and filmmaker Ton Otto explored this malleable nature of the past in design, by reflecting on his involvement in the co-creation of cultural performances with three different communities in Northern Europe, Papua New Guinea, and Northern Australia. Otto suggests that the design process consists in weaving connections between desired futures and the pasts that make those futures possible [28]: "designing and planning for change involves the simultaneous conceptualization of a past that makes the desired future possible. A possible future needs a possible past to match". In this paper our goal (admittedly, quite bold) is to operationalise these ideas, and see through their consequences. We offer examples of ways in which designers can creatively engage with the past in ways that can, and will, change it,

to open up possibilities for preferred presents and futures. We should emphasise here that we use the term "Designing the Past" figuratively, but recognise that pasts are multiple and subjective. We finally reflect on the opportunities and responsibilities emerging from accepting the past not as given, static, monolithic, immutable, but rather as subjective, fluid, performed, and constantly renegotiated.

RE-DESIGNING THE PAST

One fundamental way that researchers and designers work to imagine the future is to survey works of the past, to identify a gap in, or a new framing of, what has been seen, to marry it with a current context, and to use it to inspire questions about possible futures. This way of proceeding moves according to a certain conceptualisation of time (unidirectional, asymmetrical) that anchors the designer's viewpoint to a present point in time, drifting from past to future. We discuss next ways to take different paths; We will discuss how the ideas of "what is" and of "what will be" telescope into design a taken for granted notion of "what was" when in fact these are open for renegotiation with respect to each other. We discuss three aspects of the design process that lend themselves to new understandings of how design can engage with multiple pasts: design as *dialogue*, design as *storytelling*, and design as *critique*.

Dialogues with the Past

The idea of design as "initiating change" [23] suggests a discontinuity between pasts and futures, and between before and after the design effort. While there is also agreement that design is (or includes) a process (and theorists, e.g. Latour [25], and educators, e.g. Leifer [11], often remark that 'all design is redesign', even in those extreme cases of 'radical break' [16]), still a somewhat creationist language emerges frequently, in terms such as 'ideas generation', 'innovation', and of course the beating heart of design, 'creativity'. What didn't exist before, a mobile phone, an App, an idea, a mass destruction weapon, suddenly appears and changes the world irreversibly.

Such discontinuity may draw attention from the fact that designing the future is also inherently about designing the (soon to be) past. More crucially, designing for a preferred future implies designing a range of potential pasts that we will have to deal with. So, for example, we never intentionally design futures in which humans no longer exist; yet, those futures, by our own making, are today very much possible. In 1955, in a climate of "titanic struggle between Communism and anti-Communism" and shortly after the tests of the first thermonuclear fusion bombs, the Russel-Einstein manifesto [17] invited to reflect: "Shall we put an end to the human race; or shall mankind renounce war?" At the moment of writing, neither one of these futures has materialised, yet, a large part of the political discourse ever since has been shaped by the theoretical possibility of both. One productive way to move past the 'invention' discontinuity is to embrace Teal's concept of 'dynamic temporality' [35], and see a design situation as an overlapping of mutable futures and pasts that shape each other as the

Whatever agreements not to use H-bombs had been reached in time of peace, they would no longer be considered binding in time of war, and both sides would set to work to manufacture H-bombs as soon as war broke out, for, if one side manufactured the bombs and the other did not, the side that manufactured them would inevitably be victorious
The Russell-Einstein Manifesto [17]

design evolves. Schön described designers as facilitators and design as a 'reflective conversation' [29] with the constraints and materials of a particular design situation. As designers engage in a series of intervention attempts and reflections, or see-move-see, each step re-configures not only the designers' understanding of the solution, but also their understanding and posing of the actual design problem [30]. Problem and solution co-evolve and influence each other, living in always renewing designed worlds based on changes that were introduced at each one step.

But as the designer understanding of the problem, and the nature of the problem itself, evolves, so does the knowledge of its scope and limits, as well as the attitudes towards the design space. Technologies that were not appealing suddenly become necessary; research avenues that seemed unproductive suddenly become full of opportunities. The act of seeing, moving and seeing then, develops a design through continuous renegotiation of the past (what exists) with the present, the vision in the mind's eye and on the page that develop in a constant conversation [18].

Similarly to what Dourish noted about context [14], conceptualising the past as a static and monolithic backdrop against which the present (or action) happens, fails to capture its dynamic and performed nature. If the past only exists through our memory and understanding of it, we need to acknowledge that, like memory, the past is continually performed, rehearsed or renegotiated. This renegotiation includes the new understandings that emerge from a design intervention as designers interrogate the present through the lens of the past in order to prepare for the future.

Designers as Storytellers

Blythe noted that design is always understood in the context of a narrative, to the point that the narrative, sometimes can render the design (or prototype) redundant [7]. Designers engage in story-telling, shaping the narrative of possible futures, just as much as in actual making or prototyping. Here we suggest that narratives can do more than envisioning near futures[19]. Narratives centred on (not necessarily) near pasts could serve the same purpose of de-familiarising the present and inviting speculation. The cyberpunk novels of William Gibson are often cited as examples of design fictions. Here we suggest that other genres could serve the purpose of opening up the possibilities for design just as well. Two examples are the *steampunk* genre, that speculates on alternative pasts by placing modern technologies in the Victorian age, and the imaginary worlds created by the Japanese animator and filmmaker Hayao Miyazaki, that explore themes of pacifism and environmentalism. Another example can be found in the visual narratives created by the Australian Aboriginal artist Michael Cook. In his work 'Majority Rule' he asks "What if Indigenous people were 96 percent of the Australian population and non-Indigenous people defined as the four percent?" [12] Each one of his carefully choreographed pictures shows the same Aboriginal man repeated again and again, in static poses and identical business clothing, driving attention to issues of diversity, oppression, and discrimination. Narratives, however broad or narrow in scope, contribute to change our understanding

The belief in the link between industrial development and social progress was strong. Social problems could be solved with scientific rationality. Salubrious and functional apartments, clothes and everyday objects for the masses were to be produced industrially.
Liam Bannon & Pelle Ehn [3]

Authoritative knowledge refers to those ways of knowing that are taken to be legitimate, consequential, worthy of discussion, and useful for justifying actions by people engaged in accomplishing some concerted task. As it turns out, there is an intimate relationship between the materialities of human activity - settings, artifacts, and technologies - and the politics of authoritative knowledge. Technological change can therefore be an occasion for either the expansion of existing forms of authoritative knowledge, or for their transformation.
Lucy Suchman [33]

and memory of the past by foregrounding certain themes over others, and can interrogate the ways in which the past is always encountered as located within particular social projects and cultural settings. In our previous research we have explored designs to reconcile 'modern' lifestyles with 'traditional' rituals and values, and engage people over distance and across generations. In this context, fears about the future manifest in certain prejudices about old age [26], resulting in turn in a dominant narrative of ageing as physical and mental decline, and of technological ineptitude [32]. On the other hand, reminiscences of our past can shape how we imagine our future, and vice versa our current experience can invest with new value the memories of past rituals that once we used to take for granted. Past shared experiences of a cup of tea can be reimagined into a new context in which child and parent who used to share tea after school and work are now adult child and older parent living in different parts of the world, but still seeking to connect through a familiar and habitual medium [10]. A technological intervention then can endow of new meaning the past, and through it the present and future. Designs conceived under these terms can be conducive of change and renovation, not just in technology, but in people's ways of being [1].

Designers as Critics

Modern professional design developed in the aftermath of WWI, as a response to its horrors and a promising look into a future of social change reached through a marriage of art and technology [3], a vision clearly rooted in a modernist brand of humanism, one that seeks to establish human dominion over nature through scientific progress, technology, and industrialisation [20]. As such it inherits a troubled relationship with those whom for various reasons have a less central role in science, technology, and development (often obfuscated behind anonymous labels: 'users', 'recipients', 'informants'). As Rosi Braidotti points out: "the women's rights movement, the anti-racism and de-colonization movements, the anti-nuclear and pro-environment movements are the voices of the structural Others of modernity" (p.37) [8]. These voices come to design in the shape of speculative design [15], feminist HCI [4, 5], post-colonial computing [21], experimental design [22], adversarial design [13], and more. These works act on at least two levels. On the one hand these designs "hold up a mirror on society and challenge it" [3] to look outside of mainstream consumerist and capitalist framings. On the other hand they invite academics to reconsider established ethical, epistemological, and methodological positions [9, 36]. Here one more paradox about designing the future emerges when future technology ends up re-inscribing and even reinforcing existing divides, injustice, and inequalities, or simply ignoring existing skilled practice when these do not legitimate a novel design (i.e., make the designer indispensable [33]). Bell and Dourish evidenced this aspect in their critique of the future orientation of much Ubicomp research: "the centrality of ubiquitous computing's "proximate future" continually places its achievements out of reach, while simultaneously blinding us to current practice" [6]. Yet, a vision of what we can do, as distinct from our idea of what we should do, what
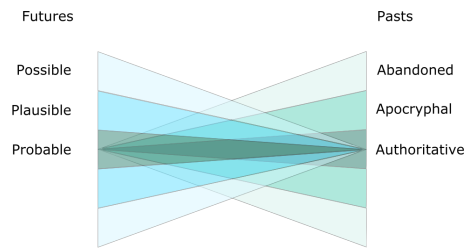
we think is right, what a vision of a better world is like, is based on reflecting on what we have done before, individually, as a design community, and as a society. Design can show, if not necessarily rectify, the many ways in which history has been written to silence some voices or to amplify others. For example, one key legacy of the colonial effort across the world is the renaming of places and landmarks [36]. Erasing the names of the places and replacing them with foreign toponymies meant that cultures whose heritage was largely embodied in narratives rooted in Country and land would see their connection to language, histories, and knowledge, fatally weakened. Other examples include the misattribution of technical innovations from female inventors to their male co-workers (see e.g. [37]) or the systematic denial of scientific advances by non-Western civilisations (see e.g. [20]) bordering sometimes in risible hypotheses of extraterrestrial designs, that sadly continue to have some traction. Designs can embody ideas about mistakes in the past that we do not want to replicate, defining moments of progress that we want to advance or reproduce, ways of thinking and theories that we want to perpetuate or challenge. Technologies can reinvent the past by embodying pluralist views, rather than translating between them; can revitalise ways of making and sharing knowledge that in the past have been marginalised. And empowered by these epistemologies can reclaim names, languages, voices and histories that have been silenced. This may involve turning a possibly insolent look at the "authoritative knowledge" (see [33]) of the pasts as material for design.

CONCLUSION

To conclude this paper, we wish to propose as a framework of sorts our personal re-elaboration of the taxonomy of futures described by Dunne and Raby in their book 'Speculative Everything' [15]. The framework is presented in Fig 1; with respect to Dunne and Raby's, our framework is flipped, so that the futures face left, or backwards, to also question the assumption of the future as something laying ahead, and of the past as something left behind (see for example [27, 34]). Inspired by Teal's 'dynamic temporality' [35], there is no defined 'present' but only an interplay of futures and pasts. In our framework, the first cone is that of the *authoritative pasts* that inform the probable futures; as Dunne and Rabi note, this is where most designers operate [15]. Because authoritative pasts are in high demand, they are a scarce resource: there are a relatively small number of authoritative pasts. They also come with ideological assumptions that underpin the legitimacy of their use in design. Like that which Suchman calls 'authoritative knowledge' [33], authoritative pasts can be challenged and transformed through design. The next cone delimits the space of *apocryphal pasts*, the pasts of alternative narratives, unofficial accounts, tamed provinces, and rebel prophets. The heroes of the apocryphal pasts don't get a chapter in the history books, and when they do, their name is misspelled. If authoritative pasts are scarce, apocryphal pasts are plenty, and can inform a multitude of plausible futures. Finally, there comes the cone of the *abandoned pasts*. These are the stories that are not told anymore, as they have been evicted, forsaken, silenced, or plainly forgotten. These are the pasts that

Figure 1: A taxonomy of pasts and futures, derived from Dunne and Raby's PPPP framework of Probable, Plausible, Possible, Preferable futures [15].

are too painful to live with, too dangerous to narrate, too unpopular, too controversial, or perhaps simply inconsequential. These pasts are intimate, blurred, plural, troubled, and variable. These are the pasts that make the possible futures, the almost possible, and the not-quite-yet-possible. In this paper we have tried to stimulate debate around the possibility for design interventions, not only to shape the future, but also to shape the past.

To paraphrase William Gibson, The past is still here - it's just not very evenly distributed. With our call we seek not to propose a revisionist agenda, one that erases the errors of the past to replace it with a more tolerable one. Plainly, we believe that the range of possible pasts is just as rich and open as the landscape of PPPP futures offered by Dunne and Raby. We argue that the past offers an equally rich variety of possibilities, which include authoritative, apocryphal, abandoned, but also reclaimable, resilient, contested, and certainly many more. Design practice and design research are in an ideal position to channel controlled collisions between this infinite range of pasts and futures.

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