# **FUTURES**

# SPECULATIONS ON TIME, DESIGN AND THINKING

ARTICULATION, PROJECTIONS

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Deposit for plastic waste, Faarbæk, Denmark, photo by the author

### **ABSTRACT**

Currently both design thinking and critical social science experience an increased interest in speculating in alternative future scenarios. This interest is not least related to the challenges issues of global sustainability present for politics, ethics and design. This paper explores the potentials of speculative thinking in relation to design and social and cultural studies, arguing that both offer valuable insights for creating a speculative space for new emergent criticalities challenging current assumptions of the relations between power and

design. It does so by tracing out discussions of 'futurity' and 'futuring' in design as well as social and cultural studies. Firstly, by discussing futurist and speculative approaches in design thinking; secondly by engaging with ideas of scenario thinking and utopianism in current social and cultural studies; and thirdly by showing how the articulation of speculative fictions may produce alternative 'realities' to be explored and imaginably inhabited as alternatives to the present and as propositions for projections of potential futures.

#### INTRODUCTION: DESIGN FUTURING

"Who owns the future?" Jaron Lanier (2014) asks. As an insider in the IT Design Industry and a pioneer in the development of Virtual Reality, Lanier knows how networks of power develop and unfold based on technological designs inscrutable for most people. For Lanier the mainstream conception of technological change as an inevitable and autonomous evolution on which humans depend upon, illustrates how "a tiny subculture has blossomed dominant interpretation of computation and software-mediated society" (2014: 10). It also shows how this has left all other concerns than the pace of technological growth irrelevant to utopian as well as dystopian imaginations, thereby robbing humanity of its ability to search for alternatives to the disastrous trajectory of contemporary global civilization. For Lanier the key to understanding and counteracting this, is to acknowledge, that "the problem is not technology, but the way we think of technology" (ibid. p 11). And power. And Design. And the future.

Lanier's story is not only illustrative of the power of technological determinism promoted as the provider of all possible solutions to the challenges of postindustrial development. It also encapsulates what Augé has called "the ideology of the present" (Augé 2014: 3); a conception of time that estranges us from our ownership of the future. To counteract this, he argues, we must confront the bipolar imaginations that accompanies this prison of the mind, acknowledging that we are "beings already engaged with time, young or old: expectation, hope, impatience, desire and fear" (2014: 19). In order to do this, we have to engage in utopianism as a way of ritualizing new beginnings as well as getting rid of the past. In this ritualization of hope, Augé contends that academia should play a central hope by offering an 'educational utopia' able at transforming current hope-lessness into a a future perspective where "something could start to take shape tomorrow." (ibid. p 86).

The image of academia as a (potential) transformative agent is not alien to design thinking either. As Fry argues all design education and research is "ontologically, phenomenologically, and as a professional practice - [is] indivisibly generative of futuring and defuturing" (2015: 420). This is, however, also the downside of current academic interests in creativity, creation and design as it epitomizes the "fundamental flaw in the very conduct of humanity: its insatiable drive to make and accumulate." And he goes on:

Effectively, we humans are out of control. This trajectory commences soon after the arrival of our species *Homo Sapiens*, some 160.000 years ago as we became animal *laborans*. Unlike any other species, we unwittingly created the unrestrained means to create more, by more things, by ever more people. (Fry 2015: 417-18).

Living in the shadow of uncontrolled material and population growth "such behavior spells disaster" (op. cit), and this is what makes the issues of futuring and defuturing practices the 'imperative' question for design research and education. Design is, from this perspective, intrinsically related linked up with normative and ethical choices and priorities; a medium for generating redirective practices and futures (see also Fry 2009).

Conceiving of design as a futuring practice is widespread in design thinking. Drawing on speculative design (Dunne and Raby 2013), design methodologies are utilized as a means to problematize and explore technologically mediated futures and nows (Dunne and Raby 2007, 2013), exploring new forms of (non-representational) social critique (Lenskjold 2016) and as seeds for transformative and utopian and practices (Haldrup et al 2015). It is also found in the history of design and design activism (Fuad-Luke 2009) as well as more recent contributions the role of design as a future oriented or making tool (Ehn, Nilsson and Topgaard 2014: Halse, Brandt and Binder 2010); as creation of 'microutopias', that can be used as repositories for critique (Wood 2007); or exercises in compromise through constructing 'pragmatic utopias', (Ingels 2009). The interest in speculative frameworks for design futuring is not limited to critical design but have also found its way into mainstream design thinking. Also global technological corporations make use of such scenarios to explore technological futures. This is demonstrated by Intel futurist Brian Johnson proposal for using SF scenario thinking as, "a procedure in which material designs are viewed as prototypical futures" enabling us "to start a conversation about technology and the future" (Johnson 2011: 3).

A common denominator here, is a conception of design as experimental intervention with a focus on the performative effects produced rather than the specific conceptualizations and solutions. Hence, Dunne and Raby have characterized their work as a deliberate attempt to "create of glitches" (2007: 595) in order to generate reflection on the tension between possible and preferable future scenarios. Starting off from the question "what if...?" and using this as an impetus for shaping technological products with odd, fuzzy and complex effects design becomes medium for reflection rather than end-product (Dunne and Raby 2013). However, as Gonzatto et al observes:

Design Fictions articulates desires for new futures of the everyday life; but their fictional status bring forth desires that bear no accountability in the present. The technology of the future is shown as the product of current desires, as it would be unlikely to change the desires in the future. (2013: 36)

This projection of current desires onto a blank space also runs the danger of what Appadurai calls "the metatrap of trajectorism" (2013: 223, cf Auge's "ideology of the present" discussed above). However, as Appadurai also notes, design thinking contains a potential for unsettling new meanings "by generating real and possible relationships and intended and unintended effects for viewers and users." (2014a: 264). This is what makes design, "the naturally ally of futurity". An ally that can provoke speculation about alternative realities:

[D]esign and temporality can be seen as coproductive, and design can re-open the dialogue between memory, futurity, and newness, rather than serving as a mere mirror of commodified duration. (Appadurai 2013: 9-10).

I will argue that also design thinking would benefit from such an alliance, and that the notion of 'futurity' may help us reconsider the relation between speculation and realism when thinking about potential futures. In the next section I will discuss three different modes of 'futurity' in social and cultural studies before returning to the speculative realism of design fictions and consider how these may help us to speculate and reflect on the inhabitability of potential futures.

# TIME, SOCIETY & UTOPIA

Scenarios

In his posthumously published book *What is the Future?* British sociologist John Urry observes that futurity has been strangely absent from post-WW2 sociology. According to Urry the discipline has turned away from critically engaging with the future, partly because of its (historically) negative experiences with prediction, projection and utopian thinking. However, the price of this 'flight from the future' in social theory, has been that

[the] studies of alternative futures that emerged over the past seventy years were mainly developed outside social science (...) "developed as a specialized and increasingly professionalized discipline, generating its own journals, key books, iconic figures, global bodies (...), professional organizations (...) and founding texts. (2016: 6).

Thereby 'futurism' became a political-ideological enterprise cutting itself loose from the everyday battle fields of people's lives. Hence, Urry argues, futurism needs to be 'mainstreamed', and "the terrain of future studies should be reclaimed for social science and, in a way, for people in their day-to-day lives" (2016: 7). Parallel to Appadurai's observation, that the future is "a cultural fact" (2013) present in the everyday life of all people and with strong performative powers over their lives, he shows the power of SF imaginaries, corporation financed future studies, technological forecasting and so on on political decision making and everyday lives. Visions of the future are not innocent but reflects and regulates thought and action in the present. Urry explicitly rejects utopian thinking on the grounds that "it has not been well regarded into social science" (Urry 2011: 139, see discussion in Levitas 2013: 148-9) in favor of a scenario-building approach based on the extrapolation of existing megatrends (Birtchnell and Urry 2016). This is a choice explicitly made to avoid ungrounded imagination and to fix the gaze on the gap between the possible and the preferable instead of speculating about the future as a horizon of radical openness. However, it also runs the danger of simply projecting existing trends onto a blank space, thereby falling into the trap of 'trajectorism' (see above), blocking the view for potential radically alternative futures. The question is whether utopian thinking inevitably leads to ungrounded speculations or if utopianism holds potentials for grounding speculations in the real world. In the next two paragraphs I will consider two such attempts.

#### Programs

While utopian thinking is rejected in the scenario thinking discussed above, it is a central concept in the "speculative sociology" proposed by Levitas (2013: 85) aiming at capturing the various seeds for utopian transformations in art, performance and society and in doing this tracing out the 'latent futures' already in motion. In doing this, she emphasizes utopianism as an "analytical and hermeneutic method", that

does not require the imaginative construction of whole other new worlds. It [utopia] occurs as an embedded element in a wide range of human practice and culture — in the individual and collective creative practices of art as well as its reproduction and consumption. (op. cit. 5).

In this tension between a horizon of future possibilities and the latent 'Nows' the role of the artist, designer and social scientist becomes that of the educator, guiding and educating hope from its latent (or embedded) occurrence to its (potential) realization. The focus being on the utopian *programs* already in play as part of politics, culture, art, planning, technology, everyday life and so

on. Hence, Levitas argues for a three step approach in exploring the 'utopian' content of the Now and translating utopian speculation into a 'method' for intervention and transformation: Archaeology, Ontology and Architecture (2013: 149ff). The three steps in what she coins an "imaginary reconstruction of society" are designed to connect the discussion of possible scenarios with a more thorough contemplation of power and politics as well as generating

the imagination of potential alternative scenarios for the future, acknowledging the assumptions about and consequences for the people who might inhabit them. (ibid. 153).

Levitas' perspective is primarily analytical and affirmative, focusing on the already-existing utopian content of current culture and society, in order to point to preferable trajectories rather than merely possible (cf scenario-thinking). This is also the reason why she is highly critical toward ideas of utopianism centered on desire (ibid. 119-20). In the next paragraph I want to consider such approaches a bit more, especially focusing on the role of design for enabling new desires and ethical orientations to emerge as part of our considerations of potential futures and their inhabitability.

#### Desires

For Jameson (2007) it is precisely the *dualism* that makes utopianism relevant; a dualism he epitomizes in the concepts "program" (texts, spatial form, communities, cf above) and "impulse" (politics, protest, bodies, collectives). Hence, his focus is not so much to engage in the various programmatic utopias to be found in politics and literature, but rather to promote utopianism as an educational project "a kind of desiring to desire, a learning to desire, an invention of a desire called Utopia in the first place" (Jameson 1997: 293).

Taking off from a similar dualism also Appadurai emphasizes the interplay between desires and programs:

> As we refine the ways in which specific conceptions of aspirations, anticipation, and imagination become configured so as to produce the future as a specific cultural form or horizon, we will be better able to place within this scheme more particular ideas about prophecy, well-being, emergency, crisis and regulation. We also need to remember that the future is not just a technical or neutral space but is shot through with affect and sensation. Thus we need to examine not just the emotions that accompany the future as a cultural form, but the sensations that it produces: awe, vertigo, excitement, disorientation. The many forms that the future takes are also shaped by these affects and sensations, for they give to various configurations of aspiration, and

anticipation, their specific gravity, their traction, and their texture. (p 287.)

For Appadurai desires and the the sensuous and material contexts generating them should be the center of futureoriented speculation. This also explains why he views design, things and materiality as the central media for speculating about potential futures. Drawing on his earlier work on the social life of things (Appadurai 1986) he suggests to engage with the performativity of things and systems acknowledging their fluid character (cf ANT), their temporal biographies and the intentionalities they carry with them (248, 256-7). Like Jameson, Appadurai wants to open a space for aspirations, anticipation, and imaginations of the future as programs (embedded also in technological systems and artifacts) and desires (grounded in the affects and sensations that make part of the contexts generated). In doing this, he ascribes a pivotal role to design as a generator of speculative realities and contexts enabling us to imaginatively inhabit potential futures. In the next section I will discuss this a bit further by considering three examples of speculative fictions, that in different ways generate alternative realities as contexts for speculating on potential futures.

#### SPECULATIVE FICTIONS

Weird worlds

The speculative worlds of SF literature have been an inspiration for both social science and design thinking when it comes to thematising the future (Birtchnell and Urry 2013, Jameson 2007, Johnson 2011). It also plays a central role in Dunne and Raby's formulation of 'speculative design', where the elaborate fleshing out of alternative fictional worlds offers the 'methodological playground' for critical design:

Rather than thinking about architecture, products, and the environment, we start with laws, ethics, political systems, social beliefs, values, fears, and hopes, and how these can be translated into the material expressions, embodied in material culture, becoming little bits of another world that functions as synecdotes. (2013: 70).

In doing this Dunne and Raby provide a way of speculating about elaborate scenarios and alternatives grounded in the fears, beliefs and hopes of the current, hence illustrating the power of scenario thinking as a way of 'materially extrapolating' the actual Now. This is a powerful way of bringing 'realism' into 'speculation'. However, as with all scenario thinking it also runs the danger of trajectorism projecting current fears and hopes into the future rather than using it as a repository for radically confronting the Now. Paraphrasing Dunne and Raby, what if the material, affective and sensuous

qualities of alternative Nows and Futures afforded genuinely new ways of being and desiring? What if we began considered how such alternatives 'would be' to inhabit; what desires, sensations, ethical aspirations and ethical anticipations they would generate? And what if we could use design and speculative fiction as a laboratory for such an 'experimental speculative realism'.

The perhaps most ambitious attempt to speculate along such lines on potential futures in which desires, sensations, affects and ethics have become radically different from what we are currently familiar with is Stapledon's *Last and First Men* (1999, first published in 1930) spanning over a timespan 2 billion years. In this short book Stapledon envisions the emergence of more than 20 successor species' to humanity, often living under environmental conditions deadly to humanoids, and each developing distinctive 'weird' forms of desire and ethics. An example of this is the race "the 2<sup>nd</sup> men": a distinctively humanoid species that emerges after a period in which all desire has been vanished. When the "2<sup>nd</sup> men" emerges, desire emerges with it, but in a very different form than known by humans. Instead of

the lusty admiration for (...) the opposite sex there now appeared a kind of innately sublimated, and no less poignant, appreciation of delight in physical and mental forms of all kinds of live things,

resulting in a moral-ethical orientation

to all the beauties of flesh and spirit in beast and bird and plants, a parental concern for all beings (...) in need of help, and a conversion of altruism to the most passionate form, of desire. (Stapledon 1999: 114).

Hence, Stapledon's work contains a harsh critique of the projection of current desires into future scenarios "perfectly suited to a fixed human nature", as he later reflects, suggesting instead

not any such paradise, (...) [b]ut huge fluctuations of joy and woe, the results of changes not only in man's environment but in his fluid nature. (op. cit. p xviii).

What is interesting here, is how the weird worlds presented in Stabledons fiction, work as a media for exploring scenarios that may neither be possible nor preferable, but rather act as an index of potential scenarios for the future. Each exhibiting radically new and almost (un)imaginable forms of desire and ethics. Like this, Stapledon's fiction, works as a kind of experiment in speculating about multiple (prototypical) potential (future) realities that all call for radically different modes of inhabitation, and by the mere act of

proposing this possibility, may confront and unsettle the present. While Stapledon's 'experimental speculative realism' remains in the genre of the Science Fiction novel, I will explore this further in the next section by considering the potential of speculative fictions materialised as 'machinic' interventions as a medium for generating alternative desires and ethics in present realities confronting assumed relationships between power, technology, design and the future.

Design machines

As with Stabledon's 'weird worlds' *The Clock of the Long Now* aims to propose a scenario in which desires, sensations, affects and ethics have become radically different from what we currently are familiar with. Contrary to Stapledon, however, the proponents of the project are not content with stimulating speculation and imagination nut wants actively to intervene in shaping our future and especially our conception of time, technology, design and power.

The Clock of the Long Now is a collaborate project, consisting of an assemblage of art works, inventions, seminars, debates all focused on the proposition of building a gigantic clock tower was from its beginning formulated as a material critique of the assumptions of technologically change and pace emanating from the San Francisco Bay Area. First suggested by computer scientist Danny Hill, as "an instrument for thinking about time in a different, and in so doing suggest both technological devise and myth simultaneously way"" (Brand 1999: 2) the project is symbolically located at the San Francisco harbour front, but with various interventions around the world.

The clock is thought of as a design intervention that should enables us to rethink the 'now' as imbued with multiple potential futures. To quote one of its proponents Stewart Brand:

Just as the Earth photographs gave us sense of *the big here*, we need things that give us a sense of *the long now*.(op. cit.).

Another proponent of the project Brian Eno, have explained that the clock should do for the future, what the pyramids does for the past, and he continues:

"Now" is never just a moment. (...) The precise moment you're in grows out of the past and is a seed for the future. The longer your sense of Now, the more past and future it includes." (...) "We struggle to negotiate our way through an atmosphere of utopian promises and dystopian threats, a minefield studded with pots of treasure. We face a future where almost anything could happen. Will we be crippled by global warming, weapons proliferation and species depletion, or

liberated by space travel, world government and molecule-sized computers? We don't even want to start thinking about it. This is our peculiar form of selfishness. (Eno 2010).

The clock is no-near finished almost 25 years after its initiation, or even in construction (a prototype is however on display at the London Science Museum). The discussion revolving around how its physical location (and architectural form), what books its library should contain, how its glockenspiel should sound, and the public debates and seminars on slow time and long-term thinking taking place in its San Fransisco HQ have already generated an alternative reality for reflection and redirection manifested through multiple seminars, publications, prototypes and musical compositions and so on. Like this, The Clock of the Long Now can be viewed as an object specifically designed to generate an alternative context for speculating about time, temporality and the future. In this respect it is not as much a designed object as it is a design machine. It may be a technical device, but not

a technical object [closed] in on itself, on its own functionality, by giving it a closure comparable to that claimed by the art object. [I]t is understood (...) as an autopoeitic process: opened transversally to the social subjectification that it starts and on which it develops. (Savagnargues 2015: 78).

Utilizing the symbiotically relationship between humans and objects it 'manufactures subjectivity' rather than objects. By providing a (proposed) monumental technological artifact it generates a context not only for speculating on the potential future scenarios but also by actively generating utopian desires and ethics, different from the ones that currently holds power by questioning technological determinism and acceleration and by exhibiting alternative ways of inhabiting the future.

#### Artefactual activism

The idea of converting well-known technologies into reflective objects is also a strategy applied in alternative fashion and activist cultures and is also found in many of the tactics at play in current 'maker'-cultures', where performative interventions through material designs work as ways of exploring and inhabiting alternative realities. Here I will focus on one example of such a material based design experiment, that, although it was never intended in that way, has been able to generate ethical debate around potential futures.

FabLab RUC was originally established in 2013 as part of the university's ambition to introduce research-through-design methodologies and digital fabrication as an all-pervasive element in its curriculum. It is however also a design lab with a relatively large autonomy,

conceiving of itself as a 'DesignLabUtopia' (Haldrup et al 2015) in which propositions from students, researchers, interns, entrepreneurs and hobbyists can be explored and developed often conceiving of the specific material designs as 'conversation pieces' rather than ready-to-manufacture prototypes. *The Plastic Shredder* – a project initiated by FabLab intern Jason Knight intended to upcycle plastic waste as feedstock for new products illustrates this.

Almost immediately after its introduction as the preferred material for manufacturing consumer goods and items, 'plastic' became a medium for the social fantasies of post-WWII societies. Plastic was colourful, easy to shape and cheap. Plastic became a language for the 'material narratives' of hope and expectation from the early 1950es, both expressed in popular culture as well as mundane consumption such as furniture, tableware, boxes, bags and so on (Shove et al 2007: 95ff). Today the production and dissemination of plastic debris is acknowledged as a major ecological threat to the planet. While plastic affords both utopian and dystopian speculation and in many ways epitomize their bipolarity, the 'plastic shredder' project exhibits a different way of addressing this. The project was based on an idea of recycling plastic waste such as plastic bags by converting them into mouldable forms, so that new materials and items could be shaped. Both the design and the prototyping process (lasting for nine month) became an incubator for discussions on how to (re)use plastic as well of the feasibility and desirability of conceiving of plastic as a 'resource'. The shredder and the objects made from the plastic debris (small 3D-figures, shelves various containers and so on each with its own range of sensuous qualities depending on the shredded material and the heating during the moulding process) was later demonstrated at various occasions, where participants were encouraged to shred plastic and mould it into their preferred forms. The function of the machine was only partly to shred plastic, perhaps more important was to create surprise, repulsion, desire and ethical reflection under the motto, "from grave to cradle" (see Haldrup, Padfield and Hobye 2016). By taking its outset in present realities as exhibiting an apocalyptic, Anthropocene scenario and by producing artifacts and interventions pointing towards utopian programs in which plastic may resurrect as a natural resource affording new ways of desire and ethical orientations to be explored, the example reconfigures the notion of 'futurity' by reversing the relation between scenario and desire and showing how design is not simply "a mere operation upon preexisting materials," but rather:

design can be treated as a form of vibration (...) that disturbs and creatively animates the material world and adds new forms of movement to already moving and dynamic materials. (Appadurai in: Yelavich and Adams 2014: 9-10).

In redesigning an alternative reality of material futures and everyday routines and aspirations relating to this, *The Plastic Shredder* became an incubator for speculating about the desirability of a world covered in plastic.

## CONCLUSION: OUT OF THE BLUE

In this paper I have suggested that discussions of 'futuring' in design might benefit from debates around 'futurity' in social and cultural studies. I have suggested three modes of futuring - scenarios, programs and desires - in order to point out the different conceptions of 'futurity' and 'futuring' they imply. The three modes discussed here are not mutually exclusive, but configures the relation between the realm of 'the real' and 'the speculative' in quite different ways. While 'scenario' thinking seems to have dominated both social and cultural studies and design thinking, I argue that this discussion would benefit from a more sustained engagement with the latent or immanent 'programs' already embedded in politics, systems, technologies and artefacts as well as in speculating about potential 'desires' and ethical aspirations, that may emerge 'out of the blue'.

In doing this I contend that material design and design thinking has a central role to play by proposing and providing speculative affective and sensuous contexts to be imaginatively inhabited and reflected upon. As demonstrated by the 'weird worlds' of Olaf Stapledon we may be confronted with futures in which desires are radically different from ours; futures that challenge assumed ways of living, desiring, and of ethical aspiration. The Clock of the Long Now contrary shows how we deliberately may use material designs of art and artefacts as utopian *programs* enabling us to confront the present and actively engage with its transforming into a more inhabitable future. Finally, The Plastic Shredder, shows how the animation of an already existing material world can produce speculative scenarios for reflection and action. Hence all three, examples show how the articulation of speculative fictions may produce alternative 'realities' to be explored and imaginably inhabited as alternatives to the present and as propositions for projections of potential futures.

It is through the double capacity of generating speculative future contexts as well as materializing and actualizing such futures that design harbors the potential for playing a much more central role in contemporary social controversies than is currently the situation. It does so not only by offering a "pragmatic speculative realism" (Bogost 2012: 29), but also an *experimental speculative realism* that explores the genuinely new and surprisingly, objects, desires and realities emerging out of the blue, at the same time as it remains coupled to the actual world

by generating speculations not only around the suggestion of a what-if...? but also around the would-be's of such speculative realities. Hence, design thinking could provide a methodology for a utopian speculative materialism (Moir 2016) drawing on both future studies and utopianism. Speculative philosophers such as Bogost (2012) and Shaviro (2015)interesting methodologies for offers objectoriented and nonhuman speculations, but it is through the experimental engagement with objects and materialities that speculative design becomes interesting as the experimental ally of futurity. As Harman observes, 'objects' do create potential futures by 'striking back' on us. "Objects can break, creating surprises for us. Objects "kick back", (...) against our perceptions and exertions." (Harman quoted in Kimbell 2013: 106). Objects may confront us charm us or allure us). The point is that they never disclose themselves fully to the designer or the analyst ((Harman 2005: 141, see also Banu (2015). In that sense they appear 'out of the blue', to be explored, engaged with and experimented with.

As Levitas notes the colour of blue have had a significant role in utopian thinking, and especially in the works of Ernst Bloch, as the metaphor of "the fleeting promise of which is missing" (Bloch quoted in Levitas 2013: 20). However, as Bloch fleshes out, it is not only as a "lack" that the colour of blue attracts the utopian imagination. "Blue" is also where ideas, anticipations, surprises and daydreams arrive from, and when we set out for a ride 'into the blue', we tend to dream, sense and think with and along objects and relations of the real world rather than indulge in pure escapism (Bloch 1959: 21ff). Lack and longing. Imagination and articulation. Speculation and realism. They all merge in the blue. In this sense the examples on design fictions discussed here all deal with futures that emerge out of the blue at the same time as they can be conceived of as excursions into the blue. All reconfigure the relations between speculation and realism without dismissing one for the sake of the other in their exploration of potential futures: How would an ethics based on affection for things look like? How would the rhythms of everyday life and planning decisions look within an evolutionary time scale? How would everyday consumption look like based on artefacts solely made of resources recovered from mountains of plastic waste? In enacting such speculative realities they are exercises in an experimental speculative realism that opens a space for critique and change; a space for challenging assumed relations between design and power.

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