

15

FUTURE (IM)PERFECT: EXPLORING TIME, BECOMING AND DIFFERENCE IN DESIGN AND FUTURES STUDIES

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Through critically exploring intersections between futures studies and design, this essay seeks ways of approaching ‘the future’ in order to open for a variety of futures. We, the essay authors, first met at the Stockholm Futures Conference where we encountered normative paradigms that we want to question or change.¹ One of us, Josefin, comes from a professional and research practice in futures studies, and the other, Ramia, comes from a professional and research practice in design. At the conference, Theodore Gordon, a pioneer of early futures studies, spoke of the history of futures studies in the US during the post-war ‘Atomic Era’ and ‘Space Age’ premised on technocentric and positivist logics. Such futures studies have tended to imagine the future as technological and material only, portraying the future as a discrete and definite location, even a singular (‘the’ future), which might be arrived at through linear transition pathways along which the development of particular technologies as the privileged baseline for plotting human, cultural and societal ‘progress’ (if social factors are considered at all, e.g. Wangel 2011).

Such futures studies approaches are increasingly allied with design, we both argued at the conference. With the rise of more participatory, interactive and ‘grounded’ forms of governance, social and spatial planning (cf. Raco 2007; Julier 2011), design has become a powerful discipline charged with visualizing such futures in accessible, popular and persuasive forms (e.g. in Pipkin 2006; Vergragt 2010; Ilstedt and Wangel 2013). Through constructing abstract concepts (such as ‘sustainability’) in forms available for empirical (i.e. bodily) experience, the imagery and materiality of futures studies and design is powerful, shaping market demand, public opinion and cultural imaginaries (Dilnot 2015). As such future visions, along with their norms and priorities, shape both policy planning and our everyday cultures, there is much at stake in our professional disciplines of futures studies and design, as well as for us all, personally, in our everyday lives. Thus, we find the need to explore how ‘the’ (or other notions of) future and how design artifacts take part in (re)producing or countering social norms, practices and structures.

Ruth Levitas (2013) articulates three interrelated

ways of analyzing and constructing images of the future: *archaeologically*, which entails examining the ideological or discursive elements on which 'the' future is premised (for example, economic growth or individual wellbeing); *ontologically*, which involves declaring basic understandings of concepts such as human nature and time, and; *architecturally*, in which constructing alternate futures is in focus. Also relevant in our respective fields, these three ways are useful here for framing our critical exploration of intersections between futures studies and design.

In an archaeological light, for example, we can examine designed images of the future as prefiguring larger ideological programs or macro-scaled endeavors to re-design entire societies (Jameson 2005). Such images may include those well-known but unrealized, such as William Morris' 1890s socialist utopia "*News from Nowhere*" (see Mattsson and Zetterlund 2011) or those like Sweden's 1960–70s Million Program of housing that, in becoming reality, have become so normalized that their ideological or utopian aspects are hard to identify, but which, through re-examination, can also become re-politicized (see Bradley and Hedrén 2014; Hedlund and Perman 2012). Examining such examples, we can query not only the forms and functions but the worldviews on which they are premised, including for whom they are targeted, for whose benefit and for what socio-economic purposes. Examination can be of macro-scale societal implications, as in the case of futures studies scenarios that tend to be policy-oriented in outlook, or micro-scale, as design examples tend to focus on human-artifact relationships. Our main focus here is an increasing number of contemporary design-oriented future scenarios that bridge the macro and the micro, and which require critical examination concerning the societal narratives implied.

In this essay, we also take apart and piece back together some of the ontological concepts at stake in our work, revisiting turning points in our understandings and practices. What do we mean, for example, by 'the future' and 'time'? Countering universalizing narratives of time and 'the' future is one of the critical moves of feminist and post-colonial theory (see e.g. Harding 2008). Our question

is premised on Barbara Adam's challenge to modern conceptualizations of time as a linear commodity, regulated through industrial clock-time (Adam 2008), the future as simultaneously non-present and yet ultimately controllable, something to be colonized by those with power and resources. Through a feminist critique of this Modern (and essentially masculine) way of understanding time and futurity, we seek to open up for a plurality of understandings of time, temporality and futures. Challenging assumptions of determinism and control, we argue that the future is something that is always becoming, interwoven with the complex dynamics of human biological, socio-cultural, economic-political, bio-geo-chemical and astronomical formations. At different paces and in different ways, bodies, and places, the future is constantly turning into the present.

This leads us to a third exploration: that is, how different conceptions of the future may open up for different ways of conceptualizing and constructing everyday practices in the present. Without surrendering to im-possibilities (deterministic path-dependency toward 'the' future) or to supra-possibilities (in which everything is possible and there are no relevant limits), there may be other possibilities to conceptualize the relation between *present futures* and *future presents* (Adam and Groves 2007). Perhaps, to recall Levitas, this can include the construction of "prefigurative or interstitial utopias, places where a better life can be built even in the face of the dominance of [hegemonic ideologies]" (2013: 165). This might also recall her architectural mode of inquiry, but, for us, here, this includes a wider notion of conceptualization and construction that includes our everyday professional practices and personal practices. Considering the 'becomingness' that we articulate here, we explore the indeterminate interface between the present and the future, how our everyday practices, our material cultures and techniques endure or change, in different rhythms and ways, in a range of temporalities as diverse as ourselves.

Ultimately, ours is an exploration of some of the ways in which design and futures studies can be critical practices, and we, critical practitioners. Feminist, postcolonial, and environmental theories



Workshop guidance

Step 1, 10 minutes (on your own)

- Map your present and yourself within your social networks (as it exists today).
- Who makes up your social context and practices?

Step 2, 10 minutes (on your own)

Time-travel! You wake up in the future developed in Workshop part 1. What is the first thing you do? What are the first things you would like to do differently, who would you like to encounter? What is it that makes you understand that you are in another time? What happens next...

Step 3, 20 minutes (in groups)

- Meet one another in your future(s)
- Discuss your social network and time travel in terms of these questions:
- Who's future is it? Who creates/benefits from the future?
- Who is un/under/over-represented? Who is missing from the future?

Fig 15.1 Image created by a group in the workshop. The upper part of the poster shows how the participants see society today, and the lower part represents how they envision a desirable future.

are normative social theories, they are not neutral. In naming and framing phenomena and examples through such theories, we take something as an issue in ways that may destabilize the status quo or hegemonic understanding. By critical practice, we mean both critique 'outside-in', i.e. using critical theories to critically reflect on and develop the practices (including ideological and ontological implications) of design and futures studies, and critique 'inside-out' (see Mazé and Redström 2009). Critique from the inside, or criticism from within

(Mazé 2007), takes place here through anecdotal accounts of our everyday personal and professional practices, through which we reflect and examine larger societal phenomena (including ideological and ontological dimensions).

This essay stems from a class that we organized as part of the course Feminist Futures,² in which we opened up some of our conceptual questions in lecture form but also interwove professional and personal anecdotes as well as workshop activities to engage participants' perspectives (Fig 15.1). Here, inspired by feminist creative and research writing practices (Grillner 2005; Livholts and Tamboukou 2015), we expand an approach from our class session to mix our different voices, our professional and personal experiences, and multiple forms of expression. We unfold some of the turning points in our own practices, concluding with some thoughts on claims of determinism and of authority by planning, architecture and design in the shaping of futures.

In the Future When All is Well (or Goes to Hell)

The future, in our respective fields, tends to be posited as just that: 'the' future, a singular and separate reality, which might be arrived at through logical and linear pathways, seemingly free of judgment. However, such framings of 'the' future are far from neutral.

Such visions of 'the' future can be reproduced by design with deep and lasting effects on social practices and structures in the present, an example of which is the influence of the design manifesto *acceptera* within the ideological and socio-material construction of the Swedish welfare state (Mattson and Wallenstein 2010). *acceptera* is the first manifesto of Swedish Modern design (Åhrén et al. 2008 [1931]). Distributed by the publishing arm of the Social Democratic party, it is explicitly also political propaganda, evoking in text, image and form a modern or future 'A-Europe', "...the society we are building for", and 'B-Europe', or "Sweden-then": fragmented spatially and socially, but also temporally. Differences in values, cultures, families and customs are portrayed as regressive and stuck across multiple past centuries (Mattson and Wallenstein 2010), similar to how contemporary 'development' narratives are constructed based on a representa-



Fig 15.2 Facsimile from Ericson and Mazé 2011: 160–161.

tion of certain practices as ‘primitive’ or demoralized (see e.g. see Wald 2008, on ‘outbreak narratives’ in which disease and epidemics are described as a result of particular cultures). A-Europe is premised on a standardized society, allowing for industrialization at all levels, from that of large-scale communications networks to the micro and minor practices of local farming, leisure activities and domestic work. *acceptera* is a manifesto for development in a predetermined direction, created on the basis of a modern understanding of time, progress and linear causality, a specific arrow of time premised on industrial technologies and industrial design, leading to a particular and singular societal future.

These singular and technocentric futures still permeate our fields as well as other fields of research and practice. This is perpetuated by research paradigms premised on positivist ideas of cause-effect chains and prognoses that advocate ‘evidence-based planning and design’, or future projection based on those things that can be known through measure-

ment and aggregation (Adam 2008). Other things, such as social and cultural practices, psychological and biophysical forces, and socio-ecological phenomena, however, are less amenable to measurement and prediction, except within the most experimentally contained and limited contexts. This, in addition to other underlying logics and assumptions in such approaches, may partly explain why ‘probable’, ‘possible’ and ‘preferable’ future logics alike are largely devoid of explicit explorations of the social (Wangel 2011). Further, as Ulrika Gunnarsson-Östling (2011) has established, futures studies images and activities are largely devoid of women and Non-Westerners as well as feminist issues or issues of particular relevance to women. Through this construction of silences, i.e. through not elaborating on social or gendered preconditions or consequences of the suggested technological development, both technologies and the entire image of the future can be constructed as dis-embodied and free from norms and values. However, just because the social is

not spelled out it is still there, we just have to look for it in between the lines of the technological development narratives. Making such a critical reading of even 'radical' futures studies, i.e. backcasting studies for sustainable development, shows that the social side of society is assumed to go on more or less according to business as usual (Wangel 2011). This also means that the critical potential of these images of the future is severely restricted since the critique can only take place through incremental alterations of the status-quo.

Such logics are also manifest in design as it intersects with futures studies. One contemporary example of the problem of not addressing the social is the 'One Tonne Life/Villa Bright Living' project, in which the overarching objective was to explore low-carbon living. The project is clearly premised on the idea of that a 'good' (or perhaps even decent) life which, even in a low-carbon future, includes living in a single-family house and owning a car. Indeed, since the companies running the project include one car manufacturer (Volvo) and one villa manufacturer (A-hus) this might not come as a surprise. The project was also premised on an understanding of a family as two adults (one man and one woman) with two children (one girl and one boy). On close examination, the family represents more or less every privileged way of being there is in (Swedish) mainstream society: they are white (and with Swedish names), middle-class, and seemingly cis-gendered and able-bodied. In this way, the One Tonne Life comes across as a continuation of the futuristic imaginaries from the post-war era, in which technological progress is premised on a norm-fixed social system. This, and other examples of increasingly widespread design 'foresight' (e.g. the influential project by Philips Design, *Visions of the Future*, see Baxter 1996) are 'preferable' futures privileging technological progress while merely reproducing or reinforcing social norms.

Such norms may be problematized within contemporary genres of 'speculative design' and its 'design fictions', self-consciously positioned in relation to sci-fi (Sterling 2009). Ben Singleton and Jon Arden (2008), for example, developed 'ARK-INC' framed as a service design offer targeted at the select and economically privileged few within a future

society possessing the foresight to invest in financial and technical services in order to ensure their survival in a future climate crisis. Crisis preparedness training locations featured in fictional marketing campaigns include Chernobyl, thus blending history and the future in order to color that future through a popular trope of nuclear disaster brought on by the paranoia of a socio-political elite. In providing elaborate economic and technological defenses for the financially-elite 1% of the population in times of socio-ecological uncertainty, the project cynically exaggerates the elite clientele often served by design. ARK-INC's 'noir' future can be argued as a critique of prevalent normative visions of the future and how they are served by design.

Some speculative design projects may be understood as a kind of 'criticism from within' (Mazé 2007) a future predicted or preferred by science or policy. For example, some projects extrapolate a particular technological or biotechnological future from laboratory science, drawing attention (more or less intentionally) to underlying values and ethical dimensions by elaborating possible futures including unforeseen or deviant social, psychological and ecological effects. Assuming underlying values and norms, other projects, such as 'United Micro Kingdoms' by Anthony Dunne and Fiona Raby (2014), draw these out by juxtaposing potential differences and conflicts within the future among political ideologies, belief systems, and ideas about nature.

Within our own work, the 'Switch! Energy Futures' project (Mazé, Messeter, Thwaites and Önal 2013) elaborated 'superfictive' scenarios of alternative energy futures in order to draw out differences among and consequences of socio-economic and sustainability paradigms within contemporary policy (cf. Mazé 2016). Each 'superfiction' materializes tropes that can be traced within contemporary sustainable development and scenarios of energy futures. While one evokes a technological silver bullet or typically 'eco-modernist' trope, another raises issues of eco-disobedience and environmental justice, another articulates new forms of communal solidarity congruent with a 'de-growth' trope, while still another evokes increased individuation, austerity and separatism. The content of each 'possible future' varies: along with implied costs, benefits, exclusions

and beneficiaries, each is carefully crafted from a first-person standpoint in order to humanize possible experiences, worldviews and realities that are nevertheless very different. Since we were interested in opening up, rather than resolving or closing the future, each superfiction is designed so that further qualities emerge in juxtaposition when enacted in present-day participatory events involving stakeholders in debating possible future techno-social narratives. Thus, our intention in this project was to stimulate debate and change in the present concerning both the macro-ideologies and the micro-experiences underpinning possible energy futures.

Ours was a choice in contrast to most speculative design, which typically operates through the channels of the art world (ending in galleries, for example) and cultural media (occasionally featured on the culture pages of *The Financial Times*). Futures studies and design fictions can be (and claim to be) powerful: persuasive visions stir markets, politics and public debate alike. For the most part, however, design engaging with foresight or speculation on the future merely reproduces and perpetuates the economic and technological values already privileged within mainstream futures studies (see e.g. Prado and Oliviera 2014). While some design fictions appear technologically or ecologically radical, the extent to which they critique normative modernist and Western paradigms may lie in whether (or how) it is possible to imagine differences within or alternatives to a present society and its socio-economic, gender and other social structures. Here, we have drawn out some suggestive examples in this respect; however, while the content of these design fictions may query social practices and structures, a further question is whether or how such 'criticism from within' science and policy paradigms, typically confined to artistic and cultural venues, can actually counter or change such paradigms. An interesting instance of this dilemma is when those behind ARK-INC received a telephone call from the US Pentagon (Singleton 2009), offering a powerful and concrete potential to realize a future cynically portrayed. (Fig 15.2)

Telling Time (Josefin)

It was not until I started writing the cover essay of my dissertation that I became aware of my hitherto rather unreflected understanding of time. My thesis dealt with futures studies, and the concept of time suddenly surfaced from my unconscious as I realized that I actually did not know what constituted the future. Of course, I was familiar with the future, but in an intuitive and unarticulated way.

To understand the future, I needed to understand time. Or at least, so I thought. What did I know about time? How did I know time? From science classes in high school and at university, I knew time as a variable in equations. In physics, chemistry and biology, time was an essential component of speed, the half-life of radioactive substances and the population dynamics of fish. Time also came into play as geological eras and the loops of collapse and reorganization of systems ecology.

But I also knew that time was more. This knowledge, however, was not knowledge in the scientific sense but based on experience and bodily memories. I knew regret, hope, desire and fear. I knew waiting and achieving. And I knew longing and missing, and I knew that the difference between these was not as much a matter of the feeling as such, as in its temporal direction. When *Time* manifested in my mind, I was sitting at my kitchen table, where I spent what seemed like endless hours writing, hours that sometimes sped by and that, at other times, crawled slowly second by second.

– How come you never noticed me before?

Time said.

– I'm sorry, I don't have time to discuss you right now, I need to understand the future.

– Sorry, Future is not here at the moment.

– I know that the future is not here now, then it would not be the future, right, but that's what I need to know about.

– I am Future too, you know.

– I know that! I know that you are the future, the present and the past. Or that the future, the present and the past are all part of you. What

I'm trying to understand is what the difference is between the part of you that is the future and the parts of you that are the present and the past.

Perhaps, I thought, I could just skip this entire discussion. No other futures studies thesis I had read had discussed the concept of the future with any depth.

– Ok. I'll act as if I was one of these three parts of me that you mentioned, and you need to figure out which of them I am. Ok?

– Ok, *I said, taking a minute to think.* Have you happened?

– No, *Time replied.*

– Then you're Future!

– No, you can't make that conclusion. All things that have not happened are not Future. Some of the things that have not happened are Past. You see? Remember last year when you didn't get that project funded?

– Oh. So the future is that which has not happened yet. Not that which has not happened. But since the future does not exist in any predetermined way but only as a mental construct...

– Mental construct? How do you know that?!

– How do I know that? Well, I suppose I just know it? Otherwise, the kind of futures studies I do wouldn't make much sense...

– So you are making conclusions about the existence of the future based on what fits your methods?

– But this is what everyone does, *I replied, knowing that this was not at all a good argument.*

It was not until I started querying (and indeed, queering) Time that I realizing how deeply embedded my understanding of the future was in unreflected norms. I knew that there were other ways to understand the future, such as believing in fate or other types of determinisms, but since I had not been able, or willing, to see these other ways as equally valid starting points, I had not seen the need to articulate my view on the future. I had fallen into the classic trap of privileging the norm – that is, how things are usually assumed or expressed in my discipline – rather than explaining or arguing for my view. Having spent many years fighting and trying to uncover other norms, I should have known better. In the

end, I formulated my understanding of the future as follows (Wangel, 2012: 31):

In its most basic sense, the future is one of three time modalities, the past and the present being the other two. The future is not what has or has not happened. Unlike the present and the past, the future is that which has or has not happened yet. The future is the time modality for what may and may not happen. It is the abode of expectations, desire, hope and fear. Once realised, the future is no longer future but has shifted modality to the present or the past. This places the future beyond the scope of observational descriptions. According to this secular Western philosophy, the future is a subjective and/or social construct, existing only in our imagination.

I still agree with this understanding, with one exception: I do not believe that the future exists only as a mental construct. The future, as in that which comes after now, does not only depend on human imagination. If that was true, then everything would come to a halt were there no humans. Trees would no longer grow, winds would stop blowing – time (as I know it) would cease to be.

Growing, blowing and becoming are thus more than human dynamics. Our bodies transform as time passes (or as our bodily transformations mark time), but there are also transformations that involve intentional acts, whether conscious or subconscious. Indeed, even acts of non-transformation – of staying fit, staying healthy, staying alive – depend on intentional actions. Perhaps we can understand this as human becoming and our intentions towards transformation or non-transformation have been theorized not least in feminist discourse (cf. Jones 2010 [1981]; Haraway 1991; Grosz 1994). I can imagine other times, other realities, other 'I's, for example. Becoming as an intentional act always involves time, and not only futures but the present and past as well. My futures, and my understandings of the future are always shaped by my experience. And when I embark on transformation, it is not really some distinct and separate reality called 'the' future that I want to change, but rather (and closer to my practices in everyday life) the as yet unrealized

present(s) to come.

On reflection, dividing time into the categories of past, present and future assumes that time is linear. Linearity and these three categories, a tripartite ontology, can itself be queried as part of historically – and culturally – specific world-views (e.g. Adam and Groves 2007; Grosz 1999; Inayatullah 1990). If one supposes (as is common in some cultures) that time is not linear but circular, then concepts of past and future lose relevance, and there remains only the present and the non-present. However, even within a tripartite ontology of time, we can question causality and connections between the three categories. Politicizing Modern, Western, linear time, Adam (1998) highlights the complicity of clock time with the logics of industrial capitalism. She queries this as an abstract(ed) construct, at odds with complex, cyclical, interrelated, contextual and embodied cosmic, ecological and biological rhythms. Yet, it is industrial time that governs our lives, in which biopolitical time can be subsumed, as we are disciplined to suppress biorhythms reflecting seasonal daylight and hormonal cycles that affect some of us more than others.

Something – perhaps some of me and others – gets lost in the modernist paradigms underpinning many futures studies. The structural conception of diachronic or a synchronic time, of a/state b/pro-gression billiard-ball theories of change that isolate progression along a causal line, can be understood as just one way of telling time, among others. Some contemporary philosophies counter such master narratives, for example, conceiving of time as a torrent of sheer 'becoming', "a stream into which," paraphrasing Cratylus, "one cannot even step once" (see Jameson 2005). Time and futures today seem to involve jousting between facts and constructs, universal claims or sheer relativity. Jousting indefinitely, we can also look to our own everyday social practices, in which ideals, artifacts and knowledge intersect in ordinary embodied and situated acts. It is in such practices that we can be critical, intentional and active, that we can participate in the science / fiction / fact of how 'the' future comes into being.

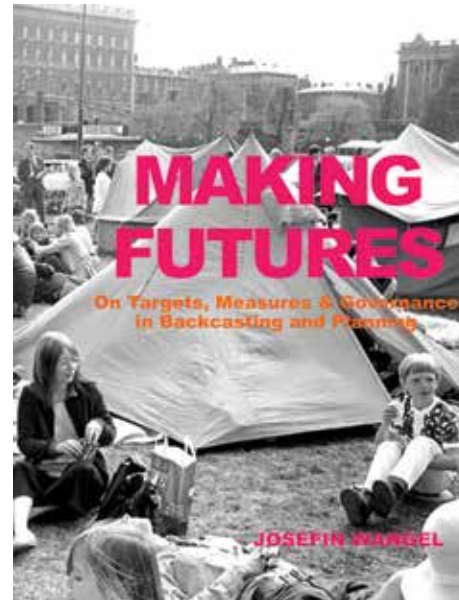


Fig 15.3 Wangel 2012. The photograph on the cover of my dissertation is taken by Lars Epstein, photographer and journalist, during the "the battle of the elms" (Almstriden) in Stockholm, May 1971.

As part of the reconstruction of central Stockholm and the development of the underground metro, the City of Stockholm, backed by the Swedish government, had decided that thirteen old elm trees and a café in the park Kungsträdgården would be removed to make room for a metro exit. The battle over the elms was the culmination of a long period of increasing citizen criticism of approaches to the reconstruction of central Stockholm. The elm battle engaged people from a variety of backgrounds and developed into a matter of principle concerning citizen participation in urban planning and local democracy – i.e. the making of futures. Activists won the battle, the metro exit was re-located, and today some of the elm trees are still standing.

There are two reasons why I wanted a photo of the elm-tree battle on the front of my thesis. First I wanted the title of the thesis *Making Futures* to be represented by 'ordinary' people rather than planners, architects, politicians, and other urban decision-makers. Secondly, and related to this, I also wanted to show that future-making is by necessity a process involving conflict over what (whose) future to aim for, and how to get there.

Dating Practices (Ramia)

This wallpaper is from the 1930s. Of course, that's only the bare fact, data printed on the auction website (Fig 15.4b). In 2010, I bought my first apartment, in Sweden, far from where I grew up in a particular context within the United States, from my previous experiences, norms and things. In this new place, making a home, becoming in other ways than I could have foreseen, I began to restore my apartment. It



Fig 15.4a Testing samples of 1930s wallpaper



Fig 15.4b Wallpaper as featured in real estate listing

proved impossible to remove the fiber wallpaper pervasive in Sweden during the '80s and the techno-tropical 'feature wallpaper' installed by a previous owner. I hired a carpenter to plaster over everything. Thus, my walls restore a particular, preferred past layered on top of others subsequently preferred by other people. I searched into Swedish design history, registering myself in online archives from the 1930 Stockholm Exhibition, among others suggested by design historian Christina Zetterlund.

I telephoned a company near Göteborg that still produces its wallpapers from previous centuries but with modern techniques. I met a woman nearby who reproduces antique wallpapers with handicraft skills. I tacked up samples on my walls from different places and times, I scanned sample patterns into Photoshop and simulated possible interiors. Eventually, I decided on one.

I bought the last 12 rolls of the wallpaper in existence. It was produced with the industrial techniques of its time, blotched with imperfections and on a thin paper, not yet today's robust, identical and impervious products. Its pattern is abstract, recalling the Stockholm Exhibition, with a hint of the Orientalism in vogue. There is also reference to a history of floral motifs in the Swedish and European decorative arts, which I recognized from the archives. It is, in fact, the 1930s; more than that, in technique and pattern, it is a particular version of the Modern, one laden with specific traces of previous eras and idealized futures.

When it came to installing the wallpaper, I encountered further temporal dilemmas. My carpenter had no idea how to treat the wall or the paper in the right way. Searching for renovation firms, I had long conversations about past technical and material cultures in Sweden. I found someone who agreed to do the job, but only because he was able to consult the oldest employee in his firm. The paper, though rare, cost much less than today's wallpapers, but the specialized carpenter charged three times as much as an ordinary one. In that moment, I perhaps experienced the postmodern 'immaterial'

economy, in which knowledge is more highly valued than material commodities.

My wallpaper thus cannot be unambiguously dated. It's the most recent surface, though maybe the oldest paper, on walls transformed many times. Its techniques and pattern are of its time, and its particular histories and desired futures. The wallpaper is a complex socio-material construction: an extinct vintage that I prefer today, techniques and patterns laden with other times and regimes of knowledge, norms and skill. It endured in, and perhaps because of, the immaterial 'knowledge economy' involved in my renovation, and perhaps most enduring, in a brochure image that was part of real estate services when I sold my apartment, an image part of the paid professional 'styling' of the realtor targeting consumers of the trendy Södermalm lifestyle (Fig 15.4b).

Along the way, I became entangled in this complex temporal (re)construction – not just a catalog date. This '1930' assembles around it a complex web of histories and ideals, technologies and aesthetics, knowledge and practices of many people. Thus excavated, even a minor practice of home-renovation is far from trivial. Further, I was transformed, renovating shaped my own becoming, then, now, entangled in these specific socio-material and temporal forms, and this home in Stockholm, and my act of (re)constructing a preferred future for myself, at least for some time.

I also encountered time in my dissertation (Mazé 2007), specifically in the problematics of design beyond the real-time and human-scale. As I design smart textiles, electronic products and interactive environments, I engage with computational materials operating at speeds faster and scales smaller than can be directly grasped by the human senses, whether those of designers or users. Simultaneously, in practices of design and of use, such artifacts transform how I, and we, think, act and relate, thereby affecting longer – and larger – scales of social change and futurity. My doctoral thesis was also separated into three temporal registers, with the table of contents revealing a structure literally

separating micro and macro spatial-temporal scales with the real-time human-scale in between. Of course, this separation is a construct, just as '1930' is only one way of telling time. Micro-, human- and macro-scales of time coexist and intermingle in practice, just as pasts and futures fold into the fleeting present.

It is precisely such practices that give form to the future – social and material practices happen, take form and persist, thereby shaping the future even as it slips by the second into the past. My future home, and evolving past, continually take form through my practices of renovating in the present. Ways of doing everyday practices such as renovating, like mine above, as well as others such as cooking and bathing (see de Jong and Mazé 2016; Scott et al. 2012) travelling and gardening (Spaargaren et al. 2006) become naturalized into bodily action and daily habit. Practices become normalized as routines that embody the values and morals of family, work, community, cultural and social life. Thus, practices endure, happening in the present but also shaping futures through simultaneously solid and enduring, and leaking and fluid (Olofsson 2016; Tuana 2010), material forms, ideals (such as aspiration for '1930') and knowledges (such as my design historical knowledge and that of my carpenter and real estate agent).

Embedded in such mundane practices is another form of power than that circulating through our professional practices in futures studies and design. We all do such everyday practices: they occupy/constitute our time, they transform our bodies, families, material cultures, economies, lifestyles and societies. While practices can take hold of us – for example, as renovating engaged me in a design culture, social network and lifestyle category – we continually negotiate in practice. Performing practices takes effort and is therefore purposeful (Shove et al. 2007): what I negotiate moment-by-moment is oriented toward particular ideas about my future, whether maintenance of the status quo or visions of how things might be different.

Circling back to the future

Even if practices are instantiated and may be recounted in terms of individual experience, as we

have done here, they are also wider and longer-term socio-culturally and geographically variegated phenomena. These accounts of writing a thesis and renovating a home are only two possible variations: there are an infinite variety of other possible ideals, knowledges and material conditions that shape our and others' practices. Gert Spaargaren (et al. 2006) locates practices in between the micro-scale of individual actors and the macro-scale systems and structures, phenomena not easily measured or amenable to prediction. Practices are conditioned by many actors and groups, with local as well as societal implications, and they are sedimented (or resisted) within habits and families, generations and cultures; they influence and are influenced by institutions, infrastructures, policies and our own professions.

It is this 'in between' that Spaargaren refers where our professions have power, for example in (re)telling history, shaping cultural imaginaries and speculating on the future. This power is a 'soft' or 'symbolic' type of power, not necessarily amenable to measurement, prediction, nor linear and causal explanations. Nevertheless, it is always laden with normative assumptions, it speaks for and from particular points of view, in selecting or preferring one future over another (see e.g. Mattsson and Wallenstein 2010; Ehrnberger et al. 2012). Soft power acts through subtle punishments and rewards, persuading us of what is 'right', 'natural' and 'normal' to be, to do and desire (Bourdieu 1999 [1998]).

In this respect, a critical and feminist design and futures studies practice can be understood to aim at de-naturalization (and thus, re-politicization) through re-narrating the familiar in un-known and unexpected ways (also see Eckstein 2003; Merrick 2003). As Veronica Hollinger points out, "one crucial facet of the feminist project is the "telling of new stories that were previously invisible, untold, unspoken (and so unthinkable, unimaginable, 'impossible')" (2003: 128). This type of 'soft power' is of course not unique to our fields. For example, movies provide a social context for technology, a kind of 'diegetic prototype', making persuasive arguments about the functionality and benefits of specific technologies to the audience (Kirby 2009). Central to the film industry is the active participation of scientists and engineers with vested interests in creating interest in, accept-

ance of and demand for their inventions through technoscience 'product placements'.

The role of filmmakers in this context is not unlike that of designers in *Vision of the Future* and many other projects. Speculative design and design fiction can also reproduce 'technology push' or 'market desire', intentionally or not. Some such projects deconstruct associated norms, taking advantage of the (rarefied) milieu of art galleries and the cultural sphere to establish some 'critical distance' to the market forces and industry clients that circumscribe other designers. These may, however, not go as far politically or aesthetically as e.g. Ursula Le Guin, Octavia Butler and other feminist, queer and in other ways critical science fiction writers in elaborating alternative worlds and world orders (for an overview see any of the several feminist and queer sci-fi anthologies, e.g. Vandermeer and Vandermeer 2015, Notkin and the Secret Feminist Cabal 1998, Barr 1981, and Sargent 1975).

However, it is not only in fiction, but in the most ordinary practices of everyday life that norms surface in ways that are not soft at all (Fig 15.5). For us professionally, accounting for everyday practices is a way of philosophical jousting between facts or constructs, universal claims or sheer relativity. Such an approach can also account for time in the ontological sense that we explore here since time may be understood in terms of historical, cultural and ideological differences. This can also avoid the empirical shortcomings of predictions since, as we emphasize here, knowledge can be understood as always situated, partial and normative. For us, personally, insisting on excavating and recounting our own everyday practices, our agency and transformation complicates the possibility of any singular grand narrative, an objective or culture-free perspective.

My personal struggles with dress codes (norms) for female academics was cast in a new, politicized light when I stumbled over a blog post one day describing how these codes are "simply a reflection of the wider policing of women's bodies in other professional contexts in western society" (Stavropoulou 2014). I could now pinpoint and shift my sense of trepidation and inhibition, internalized as shame, in not follow-

ing 'the' norm. Suddenly, it felt easier to dress the way I wanted to. And to defend the rights of others to do the same. This outside intervention into my everyday reminded me again that, paraphrasing Simone de Beauvoir, you are not born a feminist, you become one, as well as that being (a) feminist is a continuous process.

This performative aspect of feminism was also highlighted several times during the course Feminist Futures. One example that I recall clearly is when the New Beauty Council (NBC), as preparation for one of the course meetings, asked all participants to bring a garment or a piece of accessories we love but that we would feel uncomfortable wearing in public. I immediately came to think of a dress that I had inherited from my great aunt. The dress was bright yellow and had a discrete checkered pattern in green and white, and it was way too large for me. But I loved it. I also came to think of my son and how he continued wearing his beloved Hello Kitty t-shirt, even when his classmates questioned him for this, and for his long hair.



Fig 15.5 A picture and story by Josefin Wangel from one of the other Feminist Futures course sessions arranged by the New Beauty Council.

"We walk freely, joyfully moving. I wear the dress my great aunt made, right in every way, but size, color, style. But I walk freely, the matters of taste doesn't matter here. My son in his long hair and Hello Kitty t-shirt, right in his own right, right in every way, but ideas of how boys behave. But he walks freely, the matters of gender doesn't matter here. We walk freely, joyful."

Countering universalizing narratives of time and 'the' future is one of the critical moves of feminist and postcolonial theory. Sandra Harding (2008) demonstrates how such theories expose and challenge a spectre of "the Modern rational man" tacit within the sciences (also see Merrick 2003; Strengers 2014), a hegemony of grand narrative that presumes a universally valid history and culture-free prediction of the future. Harding argues that so-called 'modern' images, artifacts and knowledges are, in fact, spread in different ways to different people and places, intermingled with local practices in ways that cannot be privileged or separated without analysis of the power dimensions and politics of privileging one reality over another. For us, this means that we must continually interrogate time and notions of 'the' future, rather than presuming and reproducing norms embedded in the sciences, our professions, and indeed ourselves.

Determinisms and standpoints

Our encounter at the Stockholm Futures Conference and our reflections and collaborations since then continue to influence how we approach our professions in futures studies and design. We are more circumspect about the power, norms and determinisms underpinning our fields.

Design, like film, can have profound effects on market demand, public opinions and cultural imaginaries. Unlike film, it also enters deeply into everyday life practices, literally and materially touching and disciplining us through all of our senses: once, repeatedly and many times, (re)forming our bodies, habits, environments and relations. Aligned with a Latourian concern for the 'missing masses' in much technology and consumption studies, Elizabeth Shove and colleagues (2007) examine the material cultures of practice, in which artifacts carry meanings, have agency, and act as resources for the construction of individual and collective identities. Beyond the study of individuals as carriers of semiotic meaning, she pays attention to the relations among the 'complexes of stuff' comprising everyday life. Practices, becomings, are shaped by materialities and technologies, which may be given

form by planning, policymaking, architecture and design. The power of design lies in deeply entering into everyday practices, including both those mainstream design artifacts intended both for mass consumption as well as speculative design intended for 'mass communication' (Dunne and Raby 2009) through other modes of consumption.

Nevertheless, design does not fully determine everyday practices. Images and artifacts are also negotiated in socio-material practices, reflection, resistance and agency, and have a part in how the future, or alternative futures, come into being. In order to account for and to allow such agency, we must challenge the reduction of everyday socio-material practices to grand or data-driven narratives, attend to heterogeneity and seek out not only continuity but discontinuities. As Ben Highmore articulates (2002), social practices cannot be reduced to macro- and slow-moving formulations that might be generalized in terms of culture, gender or geography, they are localized in materials, bodies and situations through which they are continually performed, reproduced and renegotiated. The ways in which socio-material practices co-evolve, making futures, becomes important to understand as situated, multiple and different. In this way, we can not only examine the conceptualization and construction of images of the future, but we must also critically examine how images, artifacts and knowledges spread in different ways to different people and places (Harding 2008).

Futures studies and design can thus question and counter a legacy of Western scientific 'grand' and 'universal' claims. Indeed, norms of practice, for example concerning decoration, hygiene and care, can be understood as highly gendered, cultural and racialized (Fallan 2012). Designs and policies for certain 'sustainable' renovation practices in the modernist Modern Program housing areas in Stockholm disadvantage certain socio-cultural groups and types of families (Hedlund and Perman 2012). Our respective work concerning planning and design for energy consumption argues that there is no universal 'good', 'proper' or 'sustainable' practice; rather, there are diverse practices that must be understood and valued in terms of how they are situated socially, culturally, historically and ecologi-

cally (Jonsson et al. 2011; Mazé 2013).

Futures studies, by articulating that there are not only predicted and possible but also 'preferable' futures, makes an important distinction for us. Moreover, we acknowledge the importance of material representations of preferable futures, as these, "no matter how imperfect or implausible, ...allow us to become emotionally and corporeally invested in the promise of a better future" (Vrasti 2012). The 'preferable', if dealt with through critical practice, implies a selection, judgment and prioritization; it implies a human subject, or subjectivity, an intentionality, a standpoint, situated and positioned in a particular background knowledge, cultural context and historical moment. 'Who' comes into focus, both as the subjective makers of and as the envisioned subjects in such futures. We can ask, for example, who prefers what, for whom? Predicted or possible futures might refer to seemingly 'objective' data (and even data is, of course, more or less socially-influenced and -constructed (see e.g. Mauthner and Doucet 2003; Finlay 2002), but preferring one future over another is, explicitly, a social and even a political practice.

Futures can be understood as an everyday practice, made by professionals who are circumscribed by systems and structures reproducing the ideals, knowledges and material realities of individuals – but who must also take responsibility for their assumptions, agency and power. We are privileged in our professional roles and social positions, and as critical practitioners, we acknowledge the power dimensions and politics in how we select, prefer and privilege one reality over another. Indeed, as critical practitioners we work from the 'outside in' and 'inside out' to bring new social-critical and feminist theories to destabilize the status-quo of prevalent ideologies and ontologies embedded in the context of design futures, and we also work through our professional and personal practices to explore and live through alternative ideologies and ontologies. Inevitably, futures studies and design are embedded with preferences, subjectivities and normativities. However, futures studies and design can also be plural, positioned, and explicit about preferences, subjectivities and normatives, allowing other forms of agency, participation and practice. At the

Stockholm Futures Conference, 'prospective-action research', 'cultural-interpretive' and 'critical-post-modern' practitioners spoke (cf. Gidley et al. 2009; Adam 2008) alongside the technocentric, Modern and masculine orientations that still dominate futures studies and design foresight – we could say, "even in the face of the dominance of [hegemonic ideologies]" (Levitas 2013: 165). We position our work as part of this critical turn in futures and design practice, professionally as well as personally, towards the kinds of futures this may bring into being.

References

Among colleagues in a common project some time ago, we found ourselves discussing how design history and theory seem to be disproportionately dominated by male authors. I was writing at the time about how climate change disproportionately affects certain peoples, genders and parts of the world, and how design can reproduce such inequalities (Mazé 2013). Further scrutinizing the references in my article, I found my own citation practices dominated by white, Western, male authors. It is apparently, normal to cite female authors less frequently than males (Larivière et al. 2013), and I was reproducing a practice that contributes to systematically discriminate and exclude female academics, like myself, from advancing within academia (Savonick and Davidson 2016). I decided, equally systematically, to analyze and rectify my reference list. This involved quantitative counting but also set me off on a qualitative journey to engage with other authors, from many backgrounds and parts of the world. In the process, I encountered a wealth of examples, issues and approaches that I have only begun to explore, but which have fundamentally transformed my research content. My critical citational practice (cf. Ahmed 2012) has transformed my ideals, knowledges and the basic materiality of my everyday practice as an academic.

1

The Stockholm Futures Conference was themed 'Our Future in the Making' and was held on November 18–19, 2010, organized by the Swedish Institute for Futures Studies, the CESC Centre for Sustainable Communications and the FMS Environmental Strategies Research department at KTH Royal Institute of Technology. The positioning text for the conference articulated: "Particularly, we want to ask the question of the role and relevance of futures studies for making our future, for imagining alternative paths of development and helping us see the consequences and impacts of decisions taken today." Invited speakers included ourselves and many key scholars from across different eras, geographies and epistemologies of futures studies, including Theodore Gordon, Barbara Adam, Jennifer Gidley, Jaco Quist, and others referred to in this essay.

2

Our lecture and workshop was 'Scenarios for Sustainable Futures' on Sept 28, 2011. Ours was a one class session within the Feminist Futures course at the The School of Architecture and Built Environment, KTH Royal Institute of Technology, in collaboration with WISP (Women in Swedish Performing Arts).