Does Design Care...?

An International Workshop of Design Thought and Action

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Does Design Care…?

Care, like ***design***, is both a noun and a verb. As a noun, care is defined as the provision of what is necessary for the health, welfare, maintenance, or protection of someone or something (*e.g. care of the elderly, taking care of business*). In this usage, care is concerned with giving serious attention or consideration to doing something correctly or to avoid damage or risk.

As a verb, care is to feel concern or interest or attach importance to something. Care can be used negatively (*e.g. they don't care about human life)* and positively to attach importance to something (*e.g. I care very deeply for him)*.

To care for means to look after and provide for the needs of someone or something (*e.g. he has numerous patients to care for*).

Care is often used in everyday phrases such as:

I couldn't care less… to express complete indifference.

For all you care… to indicate that someone feels no interest or concern.

Take care… often said to someone on leaving.

Take care of… meaning to keep (someone or something) safe and provided for.
It is unlikely anyone would dispute the general intention of care as something that expresses our relationship to each other and the world. However, the same general agreement would have to be applied to the overwhelming evidence that we don't seem to care for much at all.

So much design continues to invest energy in what design can do based on the sentimental belief in what-might-become. Does Design Care…? is interested in the more slippery but acute reality of what-might-not-become. And what-might-not-become has to confront the uncomfortable reality that design might not be able to do what it believes it can do. Care, being invisible, is a good example of a gesture that has shaped the world but now is more problem than cure. Does Design Care…? asks design what it can do with this question?

This design thought and action workshop seeks to explore what it means to care now and stakes its platform on a general principle of carelessness that we express in the following 10 problems with care (based loosely on Dieter Rams' 10 Principles of "Good Design").

We seek participation from researchers and practitioners across a wide range of disciplines to attend and contribute to a 2-day workshop at Imagination, Lancaster University, UK on 12 and 13 September 2017.

This thinking, making and doing workshop will explore different ways to explore, conceptualise, provoke, contest and disrupt ***care***, and will serve as a venue for synthesising future visions of care. We encourage both inexperienced and experienced researchers, novices and experts, and practitioners involved in and/or interested in ***care*** to submit initially a short position paper. In your initial position paper (1 page maximum), we ask you to select and tackle one of these problems with care (see below) and make some sort of careful proposal[1].

1 Please note that a proposal can be more problems.

10 Problems with Care…

Problem 1. Care is aesthetic…

A problem with care concerns not how I care for the world outside, but how I care myself or, rather, how I react to the way in which the world appears to care for me. And my appearance in the world appears to affect the way the world appears to care for me. Today everyone is subject to a visual appraisal so everyone has to take responsibility for his or her appearance in the world, for his or her self-care. Therefore, care can only be perceived and if being perceived is all about appearance then care is aesthetic.

> How can we live with care once it has been aestheticized?

Problem 2. Care is universal…

A problem with care is if somebody now wants to engage with the gesture of care it is not immediately clear to him or her what care actually is, and how the gesture is supposed to be performed. In order to start taking care, we need a theory that explains what care is. Such a theory could give us the possibility to universalise care.

> What might a theory of care look and feel like?

Problem 3. Care is obtrusive…

The problem with care is it is not obtrusive as in lurid but obtrusive because it has become somewhat methodological so we now tend to insist on care resembling a transaction rather than a gesture. Perhaps care should be less implicit and more explicit / resist the contractual and consume time by intruding into everything. That way care is obtrusive.

> How can care be made more explicit?

Problem 4. Care is transitional…

The problem with care, while we live in transitional times, is that transition these days resembles a transit lounge. And transition, is not transformation. Whereas transformation implies dramatic change, transition suggests a defined future state arrived at through some form of managed change. A central promise of care is the possibility for transition to a better future. In that sentimental sense care is transitional.

> How do we get to better care and what will it be like?

Problem 5. Care is inconsistent…

The problem with care is that in the service enterprises of the caring economy care is regulated to guarantee its delivery is consistent. But care is like conversation theory, which maintains that conversation is constituted by the listener not the speaker. In the case of care – care is regulated by the receiver not the provider – so care is best when it is inconsistent.

> Is inconsistent, unpredictable and ever-changing care desirable?

Problem 6. Care should be useful…

The problem with care is how to use it…or what is it for? We like to think the more care we use in negotiating the world the better it will get. But how we care for the world is constantly being conditioned in the same way marketing has conditioned the consumer into consuming. That is, care has become essential for both profit and pleasure. Perhaps the most useful application of care now is for people to craft with care their own personalised and customised better world.

> How do we create attractive personalised and customised care?

Problem 7. Care should be political…

A major problem with care is it is not political – not political in the partisan sense – left versus right / right versus further right / party versus media – but political in the sense that care, as a gesture, is persuasive and persuading someone to do something changes their behaviour. While we suggest care should be political quite probably it has always been political.

> What might politicised versions of care look and feel like?

Problem 8. Care should be friendly…

The problem with care in the caring economy is it is mixed up with friendship to improve its effectiveness. The trappings of caring have been tactically adopted by the corporate world where every service-oriented exchange is meant to enfold us in familial friendliness. And the entire predatory tech economy bases its imagined visionary and disruptive identity on some sentimental narrative of caring for us. Instead care should be friendly as in the noun ‘friendly’ – a friendly – as in the match between teams that does not form part of serious competition.

> Can we design friendly care?

Problem 9. Care needs to take as much care as possible…

The problem with care is it doesn’t take enough care of itself. Despite all the energy and effort thrown at sustaining life on the one planet we share, now all we can do is constantly recalibrate downward earth’s carrying capacity. Care needs to be taken with the calibrations and the calibrations tell us how much more care we need to take. Which raises the question how can care care for itself? It can only do this through the historic project of stewardship – matching the infinitely possible with the infinitely responsible. By taking care to take as much responsibility as possible only though care is a future possible.

> If the future is to last forever how can design take care of it?

Problem 10. By being care-full care becomes inevitable…

The problem with care is we are inevitably careless and we need to be careful about our carelessness. To be care-full – Care cannot be designed…(e.g. into a service); Care must remain distinctive from commerce…; Care cannot be an optional extra… And because it is possible we can restore how to extend and receive care it is inevitable that we will rediscover the gesture of care.

> Are there any consequences of inevitable, care-full care?

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Contents

"Care" as a problem: How to begin to create, for design, an adequate theory or model of care
Clive Dilnot 1

Is care a shared responsibility or shared value? An opportunity for exploration using design fictions
Emmanuel Tsekleves 7

Does design care?
James Fathers 11

Conceptualising radically careful design
Sarah Kettley and Richard Kettley 19

Sarvodaya - A political version of care and design
Saurabh Tewari 29

Care is obtrusive
Tara French, Gemma Teal and Cara Broadley 35

Care as tactics in civil disobedience: Protest-making in the Hong Kong umbrella movement
Kwan Chan 43

Designing caring occasions for aesthetic and ethical fairness
Mashal Khan 51

How do we create attractive personalised and customised care?
Cathy Treadaway and Jac Fennell 59

Designs need to care for carers
Euan Winton 67

Redefining care in health-care design
Jonathan Ventura and Dina Shahar 73

Care is expensive
Heather Wiltse 79

How can we live with care once it has been aestheticized?
Peter Lloyd Jones and Trudy A. Watt 85

In conversation: Is care in opposition to design?
Chris Fremantle and Lynn-Sayers McHattie 95

Impossible care
Stephanie Carleklev 99

Care is transitional
Alessia Cadamuro 105

Magical agents: The powers of care are not ours alone
Jen Archer-Martin 113

Weird design weirding care designed
Karl Logge 121

My Dad was a great furniture maker
Robert Pulley, Ashley Hall and Hamed Moradi Valadkeshyaei 127

Does (social) design care…?
Diogo Pereira Henriques 133

Biographies 139

“Care” as a problem: How to begin to create, for design, an adequate theory or model of care

Clive Dilnot

The problem with the idea of “care” in design is not that it is not evocative (the response to the call for this workshop is sufficient proof of that) it is that, thought as an ideal, an aspiration, a principle, it is without operative purchase. In this sense the word lies close to what Rancière complains of as a parallel problem with ‘ethics’, namely that as an idea it is ‘indistinct’, meaning that *as a concept* it does not contain within itself the operative criteria by which it can become manifest.

This explains, I think, why the organizers of this workshop found themselves writing in the second of their ‘problems with care’ that it is not immediately clear ‘what care actually *is*, and *how* the gesture [of care] is supposed to be performed.’

The problem is abstraction. As a material act care is subsumed in and by the substantive action. In the *act* of caring one does not *speak* care: one *does* the act; one ‘takes-into-account’; one pays attention-to; one considers, carefully, the ways of meeting a perceived need. One *makes* (in one way or another) the proffered solution. These are substantive, transitive acts. Even if we speak of care in undertaking it we name not the principle but the specific act we are engaged in. And when we do so our language is operational. As Barthes says, it is ‘transitively linked to its object’: ‘Between the act and how we speak of it in doing it ‘there is nothing but my labor, that is to say, an action.’[2]

But when we speak *about* care (as an aspiration, an ideal, a quality we aspire to) we are no longer speaking from the actor’s viewpoint. If I am not *doing* the act I can no longer ‘speak’ it directly, I can only speak *about* it. The relation is intransitive not transitive. More disturbingly, the substance of the act vanishes: it loses its reality as a human action. Because of this the gestures that emanate

2 See Roland Barthes, “Myth Today” in *Mythologies*, trans. Annette Lavers (New York: Vintage, 1993) [Original, 1957] p. 145-146. All further quotations are from these paragraphs.

from the generalized (abstracted) concept of care remain without understanding of what must be done and hence without specific content. Henceforth, as Barthes puts it with some brutality, we discover that we cannot 'act the things' but only 'act their names,' i.e., perform a kind of shadow play; a simulacrum (of care) but *not* the act itself. We find ourselves back where we began, no longer sure what 'care' is, or how the gesture is supposed to be performed.

Two things are being told to us here. The first is a general law about language. It is that the moment we split language from the site where it is concretely linked to its object (where language is, in effect, *subordinate* to the act) then even *in spite of any and all subjective intention to the contrary*, we dissociate; we turn substance into something close to myth ("Caring for Life") and we discover that that with which we most wish to engage disappears or at best becomes difficult of access. But not only does dissociation interpose a gap, an uncertainty, between thought and act it obscures our understanding of the *substance* of the gesture of care itself, that which founds the act and which is that through which care happens. Even more seriously, we lose the sense of what care actually is; that is we lose the basic understanding that it is the *taking-into-account* of (another's) needs and circumstances (their situation, their requirements) and the *translation* of that taking-into-account into the act or object or gesture that attempts to answer or meet those needs, that is *itself* care.

The second lesson that we can take from this is just that: that care is nothing *more than* – but is also nothing *less than* – the sequence of actions that make up the (complex) substantive act of care. In a certain sense "Care" *per se*, care in the abstract, does not exist[3]: all that exists are *acts* of care (it is delivered only through *acts* not through intention). What this first conclusion throws attention onto are the moments or stages involved in the actuality of care. Chronologically, these are three- or perhaps four-fold. They begin with the ***perception of***, or the ***taking account of***, need (a need as seemingly mundane as Heidegger's passing reference to how a covered railway platform 'takes account of' the need for shelter from bad weather,[4] or in the form of the far more remarkable Odyssey's of need that

3 In the abstract care does not *matter*, in the full sense of that term. Which is why it so rapidly empties as a slogan. Intransitive, disconnected from action and without operative criteria, it loses all substance,

4 Martin Heidegger, *Being and Time*, (San Francisco, Harper, 1962) p. 101.

Elaine Scarry describes in *The Body in Pain*).[5] Since care is always care-in-relation-to it always involves (in some manner, direct or indirect) an other (care originates in caring for the person) but it is also circumstantial, even particular. But if care begins in the clear vision or perception of another's (often bodily)[6] condition, it itself maybe of little account without ***translation*** into a materially-expressed gesture, act or object; into that which materially takes into account of need and which (through an extraordinary act of imaginative translation) embodies in-itself, through voice, gesture, act or through the capabilities of a made thing, the capacities to in some manner meet the perceived need (as an Aspirin, say, meets the need to relive the pain of a headache). 'Sentient awareness materialized in a freestanding design,'[7] Scarry calls it and this seems correct – besides reminding us, sharply, of what the potential role of design in this process might be.

Third, care is in some manner *delivered*: there is the moment of ***gesture*** of how this act of care is presented. Gesture here stands for the manner (attitude) through which an act of care is presented. We know that especially if we think of care in intimate terms the *quality* of gesture becomes crucial. But oddly, so too in its reverse when, as Elaine Scarry again points out, it is the impersonality of the care that mundane objects (an asprin, a lightbulb, an app) offer; their simple there-ness, their availability (theoretically for all: care as a universal attribute) that makes them so useful to us; makes them able, as she puts it, to contain and to exemplify a 'collective and equally extraordinary message: Whoever you are, and whether or not I personally like or even know you, in at least this small way, be well.'[8]

5 I am thinking here of Elaine Scarry's extraordinary description of the light-bulb and the needs it serves … [It] 'transforms the human being from a creature who one who would spend approximately a third of each day groping in the dark, to one who sees simply by wishing to see: its impossibly fragile, milky-white globe curved protectively around an even more fragile, upright-then-folding filament of wire is the materialization of neither retina, nor pupil, nor day-seeing, nor night seeing; it is the materialization of a counterfactual perception about the dependence of human sight on the rhythm of the earth's rotation; no wonder it is in its form so beautiful.' Elaine Scarry, *The Body in Pain* (Oxford: Oxford University Press, 1985) p.292.

6 Scarry again. This is the entire thrust of *The Body in Pain*. It is captured in this line: 'The shape of the chair is not the shape of the skeleton, the shape of body weight, nor even the shape of pain-perceived, but the shape of perceived-pain-wished-gone' (p. 290). In other words, care begins with the perception of another's pain or distress and the seeking to answer or meet that pain.

7 Ibid. p. 291

8 Ibid. p. 292

But gesture in this sense relates also to what is perhaps the fourth, overarching moment of care which is context or ***situation***, for all care happens in particular contexts and moments. Repeatable in its patterns there is always both a generality and a particularity to care, they combine in the ambit of a situation—that which holds within itself, the essential moment of ethical action. For as Badiou argues '… there is no need for an 'ethics' [in general] but only for a clear vision of *the* situation. *For to be faithful to this situation means: to treat it right to the limit of the possible. Or, if you prefer: to draw from this situation, to the greatest possible extent, the affirmative humanity that it contains.*'[9] It would be difficult to discover a more apposite injunction for an ethics of care.[10]

It follows from all of this that an adequate *theory* or model of care - one which can universalize it and ground it in comprehensible actions; which can restore to care its transitive and hence to its immanent ethical (and political) dimensions – will not be a reflection on Care per se (with its dangers of abstraction and intransitivity) but will be a recovery of these substantive moments of care(ing). There is useful analogy here in a recent book on design research. At one point Johan Redström notes a difference between a theory of design and what he calls 'design theory': whereas the former would take 'design and designing as its subject' the latter, he says, 'seems to call for an inquiry into theory as something developed in and through design.'[11] So it is with care: It may be – it *will* be - impossible to develop a theory or a universal model of care by taking Care 'as a subject', i.e., care in the abstract, theoretically. Rather it will developed through the analysis of acts of care, comprehending these in their (largely) embodied and always situated sites. It is impossible of course to develop such a theory here but I will finish these reflections by looking further at the moment of translation in regard to care because, for design, so much rests here.

9 *Alain Badiou: Ethics: An Essay on Evil (London: Verso: 1998) p. 15 (Quotation adapted).*

10 It is worth adding that Badiou's proposition adds the necessary moment to Herbert Simon's otherwise too-open famous definition of design as that '… aimed at changing existing situations into preferred ones.' We can also link here into David Pye's notion of workmanship (care) as in some moments providing a reservoir or site of resistance to ideology, whether political, theological or economic. See his *The Nature and Art of Workmanship* (1968).

11 Johna Redström, *Making Design Theory* (Cambridge: MIT press, 2017) p. 133

What matters in the movement from perception (of need, for care) is how the translation is effected so that the perception (compassion, understanding, sense) issues into something that relives or answers the need. Here, materialization (however we think of it) has striking advantages, not over sympathy or empathy per se, but over *only* these, for a Elaine Scarry again points out, a chair relieves the distress of standing, and does so by offering two distinct advantages: that once the completed chair is in the possession of the person concerned then relief of the pain of standing is at her disposal not at the possible disposal of others; that its memorialization and *answering* of need endures (across time). Here care is the translation of need into that which relieves and which as it relieves endures and so builds into what Scarry calls 'the revised structure of the external world … a certain minimum level of objectified human compassion'[12] But that care can be thought in this way depends on two things. One of these is the quantum and quality of knowledge/understanding that is built into that which is the object of care; a quantum which is manifested in terms of care in the object's configuration (using "object" here in the non-literal as well as in a literal sense). What is in a sense extraordinary about the care involved in making in answering needs is the ability of the "designer" (here thought always as a multiple entity) to provide a configuration which, as well as offering the requisite technical conditions for the existence of this enduring thing more particularly, from the side of need and care, encodes into the configuration of the thing extra-ordinary levels of knowledge and understanding of its user(s).

To quote from Scarry one last time: 'What is it that th[e] aspirin bottle—'knows'' about the human world? It knows about the chemical and neuronal structure of small aches and pains, and about the human desire to be free of those aches and pains. It knows the size of the hand that will reach out to relieve those aches and pains. It knows that it is itself dangerous to those human beings if taken in large doses. It knows that these human beings know how to read and communicates with them on the subject of amounts through language. It also knows that some human beings do not yet know how to read or read only a different language. It deals with this problem by further knowing how human beings intuitively and habitually take caps off bottles, and by being itself counterintuitive in its own cap. Thus only someone who knows how to read (or who knows someone else who

12 Scarry, ibid. p. 291

knows how to read) can take off the cap and successfully reach the aspirin which, because the person not only knows how to read but has been made to stop and be reminded to read, will be taken in the right dosage. It contains within its design a test for helping to ensure responsible usage that has all the elegance of a simple three-step mathematical proof.'[13]

Knowledge is not of course the only quantum of need that might be encoded—better, configured—within the 'object' through which care is delivered. Since care is by definition qualitative as well as quantitative it demands degrees of discrimination that are sharply aware, not merely of the possibility of varieties of ways in which needs for care can be met but of their implications. A fully nationalized heath service (the UK after 1947), modes of single-payer systems (Europe and Canada) and wholly privatized health care (the USA, China) are all ways of meeting the need for treating and dealing with a society's and a persons need for dealing with sickness. But they are not the same ways, and their consequences, costs, benefits are not the same, nor do they serve, necessarily, the same persons in the same ways. There are 'winners' and 'losers.' Taken neutrally the difference, in the wide sense, is configurational. Care, when we now extend it and, in effect, universalize it as an encompassing service, is the complex translation of needs into varieties of forms (largely, but wholly institutional) capable of meeting these needs. Social, as well as individual – and of course economic, political and cultural (in the US, above all, racial) – relations play into this. Politics today (Obamacare) is often very little else but a battle over forms of care (and, increasingly, its lack, or its refusal). Here, care, is concrete not abstract. It is 'distinct' (in its consequences). Configuration (design) matters absolutely.

But this also reminds us or throws into relief the extra-ordinary relation between projection and reciprocity involved in making, constituting and configuring systems of care. Care encapsulated in *forms* of care *matters* because the enduring forms through which care is delivered endure in their work—for good and ill. In that sense there can be no doubt about what care actually *is*, and *how* the gesture of care is to be performed.

13 Scarry, ibid. p. 305

Is care a shared responsibility or shared value? An opportunity for exploration using design fictions

Emmanuel Tsekleves

Care and caring for a person is often portrayed in media and government/policy literature as someone's responsibility. For example, caring for a patient is a nurse's *duty*, caring for the environment is everyone's *responsibility*; caring for a person with disability is the state's *obligation*, caring for grandma is the family's *burden*, etc.

The language used in all of these examples carries a negative connotation presenting caring as a task someone has to perform as opposed to choosing to do. It is remarkable how powerful the verbalisation of thoughts is in our perception of situations, actions and life in general.

What happens when we reverse and turn the negative descriptions of care into more positive ones? For instance, caring for a patient is a nurse's *privilege*, caring for the environment is everyone's *playground*; caring for a person with disability is the state's *mission*, caring for grandma is the family's *joy*, etc. Does that shift from negative to positive equate to a shift from a dystopian to a utopian worldview of society?

In the shift from negative to positive, can we also imagine an economic one. Where care is generally considered a cost for governments, can it become a gain for society? Interestingly there are some initiatives that can put this into the test. In recent years national and local governments have been considering the concept of a universal basic income.

This is based on the principle of offering every individual, regardless of existing welfare benefits or earned income, a non-conditional flat-rate payment. The intention is to provide a basic economic platform on which people can build their lives, whether they choose to earn, learn, set up a business or care for family, friends other members of society. Universal basic income trials are already being

considered in Scotland[14], Finland[15], Canada[16], Netherlands and Switzerland. In cities, such as Lausanne and Utrecht the results of such pilots will be closely monitored by local Universities measuring the economic and societal impact of such schemes[17]. It would be most interesting to see what the pilot data reveal regarding the additional time citizens in those cities spend on caring for others.

Changing the perception about care and the way it is portrayed visually requires a change in the way we describe care. Changing the way we describe care requires in turn a shift in our values.

Looking into developing countries gives us a glimpse into some of the values developed nations shared several decades ago but perhaps not anymore. In particular looking at the caring of elderly people within a family or a community shows positive values. Elders are considered experienced, wise and thus caring for them is a privilege and spending time with them is well sought after.

In the developed world, our super busy modern lives, followed by the opportunities available to work and live in more places than ever before, have explicitly or implicitly resulted in a shift of several of our values with regards to care. Shifting our values requires a change on how we design care.

How might the care of the future look like? Can design fiction help us develop what if scenarios and open a wider debate with the public?

Design fiction draws on both science fiction's ability to depict imagined design objects within a diegesis (Kirby, 2010) and its critical potential in exposing the use of technologies within possible worlds as chosen social constructions. For instance, the ageing society depicted in Robot and Frank (2012) on one hand foretells researchers' experimentation with robotics and artificial intelligence as a potential future caregiver of older people; and on the other hand it depicts some of the socio-ethical questions such a technology service can lead to. In a similar

14 https://www.theguardian.com/politics/2017/jan/01/universal-basic-income-trials-being-considered-in-scotland

15 http://www.independent.co.uk/news/world/europe/finland-to-consider-introducing-universal-basic-income-in-2017-a6963321.html

16 https://qz.com/914247/canada-is-betting-on-a-universal-basic-income-to-help-cities-gutted-by-manufacturing-job-loss/

17 http://basicincome.org/news/2016/04/lausanne-council-motion-pilot/

fashion design fictions –like short films, prototypes and graphic novels– are often provocative and engage people, encouraging them to envision, explain and raise questions about the direction of future technology, society and possible worlds.

Design fictions do not claim to predict the future; they act as aids to enable their audiences to act as interlocutors (Sterling, 2009; Hales, 2013). They are concerned with progress, ideas for the better, but they take into account that better means different things to different people and corporations (Dunne and Raby, 2013).

There are already examples emerging where such methods have been pilot tested by Governments, such as in the case of the Government Office for Science, in the UK. In a design fiction project they brought together and generated new evidence about the likely impact of an ageing population on society. It was found that guided discussions allowed participants to move beyond polarising debates for 'good' or 'bad' to voice opinions about the images that were not so immediately obvious – for example, their positive aspects and the points of conflict within them (Voss et al., 2015).

Within this context design fiction could be employed as a tool to facilitate and encourage the drawing out of concerns and raise questions regarding the societal, economical, legal and ethical issues of current and future care services and technologies. This can in turn help in fostering debate that leads to the conceptualization and design of care products, models and services that are not simply desirable by different community groups (family, professional caregivers, etc.) but are also socio-ethically explored. Operating within utopian futures design fictions can 'exploit the power of media design to craft and deploy compelling visions of the future' (Hales, 2013: 2) that captures not just the public's imagination for aiming bigger but also portrays the societal values of such futures.

But equally designing undesirable, dystopian futures, has a great role to fulfill within this context. On one hand they might be just the right way to shake things up, as they offer a space where even 'dangerous ideas can be conceived that open up possibilities better left unexplored, and once thought cannot be unthought' (Dunne and Raby 2014: 51), provoking debate and actions to be taken. Furthermore, factors that may lead 'to undesirable futures can be spotted early on and addressed or at least limited' (Dunne and Raby 2014: 6) by putting pressure on nascent government policies.

The language used in crafting these design fictions would be key in developing different 'what if' scenarios, as how we describe care influences how we design care. Here design fictions can serve two distinct purposes. Firstly enable designers to shift from simply designing future applications of care (just products and services) to designing implications too; and secondly help designers, researchers, care communities and the public to critique current practices (Auger, 2013).

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Does design care?

James Fathers

Addressing the broader question 'Does design care?' I have elected to use the statement 'Care should be useful' as a way to focus my response.

Research into design initiatives that addressed 'need' led me to conclude that many designers have taken a 'quick and dirty' interventionist approach. I found few examples of designers engaging in a careful manner to co-produce sustainable and transformational change with communities that have self-identified areas of need. In search for answers that I couldn't find in the design research taking place at that time, I looked instead towards other areas that take a careful approach to addressing need, such as Development Studies. An example of this research is a paper entitled 'Helping' by Marion Gronemeyer, a German author and educator. In this seminal text, she described the genesis and development of the idea of 'helping' which is at the core of the concept of care. Her conclusions after addressing the secularization of help and its use in the service of 'progress' and 'modernization', were that helping is nothing to do with help but is about the exercise of 'elegant power'(Gronemeyer 1992 p.53).

Gronemeyer's text clearly communicates her view that there is no hope for the concept of 'help' or indeed any organized strategy to care for others. This rather hopeless view does little to sign post what positives steps might be taken to improve 'helping' or 'caring for' others. However, what it does do, especially for designers, is that it highlights the fact that we need to move on from romantic notions of help that cast us as the 'superhero' saving the day and instead we must commit to a thoroughly informed, rigorously critical, ruthlessly self-reflective and radically open-minded approach to all design, but especially those areas that purport to 'care for' or indeed 'help' other people.

One of the reasons that I was drawn to look again at this text to inform this position paper was that in her introduction, Gronemeyer quoted Henry David Thoreau: "*If I knew for a certainty that a man was coming to my house with the conscious design of doing me good, I should run for my life*" (Thoreau 1977 p.328).

Although I am changing the meaning of his words, I like the challenge for designers implicit in Thoreau's phrase **"…the conscious design of doing me good**." How many of the people we engage with in our attempt to design caring solutions, in their heart of hearts want to run for their lives, or perhaps more accurately want to run to preserve what they love about their lives?

Many people will resonate with this sentiment because we don't like to feel out of control, we don't like things being 'done to us'. There is also another aspect to this, the decision to do good to someone or to prescribe a treatment, by definition sets up a power hierarchy. It defines us as in 'need' and others in the place of providing the solution to that need. In relation to healthcare this raises two issues, the first and possibly the most important for designers is that the current predominant paradigm in healthcare conforms to what is generally termed 'the medical model' which primarily focusses on treating sickness, as opposed to facilitating the care of health. Challenging the medical model is certainly not a new idea and many far more qualified than I have expounded on this, in particular the late Dr Alan Barbour in his book Caring for Patients (1995). However, it doesn't take an expert to discern that the medical model still holds sway across many western countries. We have all experienced it, and all seen the impact of the pharmaceutical and insurance industries. A recent initiative in the Morecambe Bay area is a good example of a more holistic approach to health.[18] The second challenge is that many models of helping others as stated earlier set up a power hierarchy where an expert prescribes solutions. We recognize this in the medical profession, but it is just as prevalent amongst designers.

Challenging this hierarchical paradigm in design is not as simple as deciding to 'co-design' solutions with stakeholders. Co-design is a complex interaction that demands a deep understanding of all aspects of the context which in itself requires careful strategies to enable those 'truths' to emerge. Principles drawn from participatory approaches to change originated in development practice in the mid 1970's and can be particularly helpful in framing how to engage in co-design so that the real needs of the stakeholders are identified and addressed (Chambers, 1983 and 1999).

When I stated earlier that people might be motivated to 'run' from help being prescribed to them, I think the key issue here is trust. It will take time to properly design and implement participatory approaches to promote health so that the stakeholders at all levels have confidence that the right issues that matter to them are being addressed. The following two references support this position; they emerged at the same time from two very different disciplines. In 1972 at a conference entitled 'Design for Need' Peter Lloyd Jones addressed this issue, suggesting that designers should *"Go live with the people. Work with them –and then see what you can do to help. If you try to help from outside you are unlikely to succeed and may inadvertently do more harm than good"* (Lloyd-Jones, 1976 p.93). EF Schumacher, an economist, made a very similar statement saying: "*The best formulation of the necessary interplay of theory and practice comes from Mao Tse Tung: Go to the practical people and learn from them, then synthesize their experience into principles and theories; and then return to the practical people and call on them to put these principles and methods into practice so as to solve their problems and achieve freedom and happiness"* (Schumacher, 1973 p.213). Victor Papanek the once infamous design polemicist echoed a similar theme stating that *"There are professions more harmful than design …but only a very few"* (Papanek, 1972 p.xxi). In a later publication he stated that *"Design is too important to be left to the designers"* (Papanek, 1983 p.31). These statements taken together are an early call for an immersive, participatory approach to design where the needs experienced by stakeholders are identified and addressed in a manner that promotes trust. Unfortunately, in the three decades since this call there have been few examples of this type of approach in designing to address social need.

In recent years, service design has emerged as one of the primary methods of engaging with design challenges that impact groups of people. Many of its methods have been influenced by ethnographic and other qualitative research tools. The challenge as I see it, is that the majority of designers today have been trained in the paradigm of design as a business strategy, where the designer is the sole creator of solutions. If we are to address 'wicked' problems such as care systems and **make them useful** as I stated above, we must commit to an informed, critical, self-reflective and open-minded approach to design that insists on co-creation with stake holders and other experts as a core principle (Buchanan, 1992 p.5).

18 http://reimagininghealth.com/the-3-cords-of-population-health/ Blog post by Dr A Knox 24th July 2017

Two examples of participatory design approaches that address issues of care:

1. Spice is an organization that focuses on community development using time credits. Its projects address many areas that relate to and promote healthcare. In 2013 they used a service design approach in collaboration with the Department of Health and The Young Foundation to pilot a Time Credits model in the health and social care sector. The program focused on supporting people who benefitted from health and social care services to enable them to be more actively involved in the services they received and to contribute in their review and redesign. The service design approach enabled participants to rethink all aspects of the way they engaged with health and social care systems. The definition they used for this project speaks to the earlier point made about the medical model of health care. "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." and was taken from the constitution of the World Health Organization.[19] (Apteiligen, 2013 p.12).

2. The Adaptive Design Association (ADA), has pioneered a model for involving parents, clinicians, makers and designers as a community to co-design and make adaptive equipment out of non-traditional materials.[20] ADA solutions are identified, planned, designed and made in collaborative teams where parents/carers and users play as active a part as possible. This unique model has led to the provision of many thousands of pieces of custom adaptive equipment. The fact that this equipment is co-designed results a number of key benefits: The equipment is customized to their needs and thus maximizes their abilities; Because the parents/carers and users were integral to the design and build process they have an ownership of the equipment and are inspired to identify and design the next piece; The co-design approach means liability is a non-issue, which in it self is a significant factor in the medical equipment sector.

19 Taken from the Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. (The Definition has not been amended since 1948).

20 The Adaptive Design Association is based in New York with associated chapters emerging across the country and the globe. For more information see: www.adaptivedesign.org

Conclusions

If Gronemeyer's challenge that 'helping' or by implication any form of organized care is simply the exercise of elegant power, then what is the answer? Disorganized care?

This would depend on your definition of organization. If it is founded on principles of state control or top down solutions, then yes alternative models of care might seem disorganized, even chaotic or anarchic. However, if one takes a lesson from development practice, much of what is recognized as sustainable development happens at a grass roots level. It relies on principles of empowerment, bottom sideways propagation and training trainers. One aspect of the cultural revolution in China was the creation of 'Barefoot Doctors', where rural people were given basic training as a means of increasing access to healthcare. Although there were many issues with this initiative, it is an interesting grass roots approach that maximized access to healthcare (Carrin,G et al.1999). In conclusion, it would seem that systems of care that are carefully co-designed engaging with and empowering the full range of stakeholders are likely to exhibit flatter hierarchies and be more sustainable. The recognition that there isn't just one type of expertise that deserves a voice, whether it be the trained medic or the designer is key to this approach. As Robert Chambers would say: "Whose reality counts?" (Chambers 1997). Locally owned grass roots movements of empowered people partnered with supportive healthcare experts have the potential of neutralizing some of the disempowerment that comes with a top-down prescribed model of care that seeks to treat only the illness and not the whole person.

I will end with a statement by Lila Watson an Aboriginal elder, activist and educator from Queensland, Australia.

> *"If you have come to help me, you are wasting your time.*
> *But If you have come because your liberation is bound up with mine, then let us work together."*
> (Labonte, 1994 p.258).

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A Short biography:

For nearly thirty years as a designer, educator and researcher, I have focused on what I term design for 'development contexts'. I choose this term because contexts that are in need of development can't be neatly delineated within Countries, or even cities. I live in a city in which has the highest rate of extreme poverty, focused predominantly along lines of race, in a city that is number 3 in New York State and in the top 50 in the nation for the gap between rich and poor [21]. Development contexts therefore define people groups and places, that have a need for development. Early experience in relief work whilst working in the manufacturing sector inspired my later academic research interest and eventually led to a period of time living and working in South Asia. Dual themes of grass

21 Report by the Century Foundation. For more information see https://tcf.org/content/report/architecture-of-segregation/ accessed 8/16/17

roots design strategies and collaborating with clinicians working with people with different abilities have woven through the years. More recently this has led to exploring radical design-led, grass-roots, co-production strategies to empower community engagement.

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Conceptualising radically careful design

Sarah Kettley and Richard Kettley

Abstract

In a 2008 keynote, Bruno Latour called for the hubris of design as Promethean progress to be tempered by the care of craft. He proposed a radically careful, and carefully radical approach as design attends to the extreme scales of human experience. For the past three years, the authors have been engaged in cross-disciplinary action research to bring the caring professions to bear on the conceptualisation of careful design. This has been undertaken in collaboration with a local Mind network of mental health service providers, professionals, volunteers and members. Through a literature review, we have shown that while design seeks to care, it has not yet differentiated between modes of caring as practiced in health and mental health services in the UK. Nor does it engage habitually with the rich literature of care to be found in, for example, nursing or psychotherapy research and practice. As design increasingly becomes entangled with wellbeing, we are concerned that a lack of critical reflection on care will at best hamper well-intended work, and at worst, has the potential to cause real harm to individuals. To put it bluntly, design has so far not cared enough to pay attention to care. Through participatory design, we have demonstrated one modality of care in action, that is, the Person-Centred Approach. We propose this approach as an ethical, reflexive and reflective form of practice, which is at once personal and political. We propose that a Person-Centred Approach to Design become a theory based in radically careful practice. This short paper gives an overview of the literature review and the participatory design research the authors have been involved with, before responding to the provocation of Rams' principles for caring design. We do this by drawing on the Person-Centred literature of the past 60 years.

Keywords

Attitude, psychotherapy, modality, methodology, person

A literature review on design research and mental health

The literature review searched for design literature that explicitly mentioned mental health, and mental health literature that discussed design collaborations. It included only the UK and Europe, and excluded an analysis of the grey literature due to time constraints. 130 papers were identified as being accurately on target (Kettley and Lucas 2016). Key themes were drawn out, and modalities and philosophies of care were sought to understand how design research contextualises itself (or not) according to theories of the person. It transpired that technological developments and design of assistive digital devices for mental health were the largest category of publications, while noticing an increasing interest in art, craft, and creative practice in mental health research. Most relevant for this paper, was the finding that design thinking practices appear to lack an awareness of the larger mental health service provision landscape; the range of mental health challenges faced by service users; the philosophical modalities underpinning different services; and the potential personal and ethical impact of working within this sector. We found that several theoretical models are available to extend existing frameworks of design, but that User Centred Design effectively demands a medical model, and habitually engages in design for a diagnostic label or disorder.

Bringing a Person-Centred approach to participatory design research

The two-year project with Mind involved three phases, including creative workshops, service design, and future workshops (An Internet of Soft Things 2017). Its aim was to experientially develop a Person-Centred Approach methodology for the participatory design of future technologies, and particularly of networked 'smart' environments as they become enabled by physical computing and e-textile interfaces. Our assumption was that by explicitly developing, applying and reflecting on a single care modality as a design research process, we would be able reflect on the experience, tools and nuances of theory in action, and thus on how design approaches care.

Carl Rogers (1902–1987) was one of the founders of the humanistic approach to psychology. His theory of personality and behaviour marked a radical departure from the traditional power dynamics of psychotherapy, and challenged "almost all of the 'sacred cows' in the therapeutic world" (Kettley et al 2017, Rogers 1980:270): "I was saying…that it wasn't a question of whether the therapist…possessed expertise in diagnosis, or had a thorough acquaintance with

therapeutic techniques. Rather I was saying that the therapist's effectiveness in therapy depended on his or her *attitudes*. I even had the nerve to define what I thought those attitudes were." (Rogers 1980:270). This approach asked for a shift from diagnosis and interpretation to a non-judgmental listening attentiveness. The practitioner is asked to forego the safety net of expert status and a habitual focus on problem solving, and instead to trust and facilitate the inherent motivation for personal growth of the individual (Casemore 2006). Rogers (1957) proposed six conditions for therapeutic personality change; each is necessary and together, they are sufficient for change to occur. Kettley et al (2017) summarize and explicate these as:

1. Psychological Contact: there is at least a minimal relationship in which two people are aware of each other and each makes some perceived difference in the experiential field of the other.

2. Client Incongruence: one person – the client – is feeling vulnerable or anxious; this arises from a discrepancy between the actual 'felt' experience and the self-concept the individual holds of her/himself.

3. Therapist Congruence: the other – the therapist – is integrated in the relationship; s/he is able to be genuine as her/his actual experience is accurately represented by her/his awareness of her/himself.

4. Therapist Unconditional Positive Regard (UPR) for the client: there are no conditions for acceptance; there is a prizing of the person (Rogers acknowledges Dewey here); it is the opposite of a selective, evaluating attitude; it is a caring for the client as a separate person with her/his own feelings and experiences.

5. Therapist Empathic Understanding of the client's internal frame of reference and communication of this back to the client: accurate empathy might provide clarity or disentanglement from distress, leading to a sense of movement or relaxation.

6. Client Perception of the therapist's empathic understanding and UPR: the client feels accepted and understood.

All types of data were gathered throughout the project and a phenomenological approach was taken to its analysis. Methods included Interpersonal Process Recall (IPR), as used in therapist training (Kettley et al 2015). The project generated findings on methodology, the development of e-textiles, and network structures. Of these, the first is most relevant here:

- The Person-Centred Approach (the PCA) is very well suited as a design research methodology in a non-medical mental health service environment, but requires a high level of reflexive commitment from researchers. Thinking in reflexive/reflective ways, integral to the PCA, was less familiar within some disciplines and is potentially challenging for researchers.
- Participants respond positively to the approach. Non-directivity in workshops, while challenging for some researchers, was welcomed by participants, who tended to settle quickly on what they wanted to do. With the support of a researcher on a 1:1 basis, participants co-created an object which had significant personal meaning as a result of being self-made. Participants also benefited therapeutically from an empathic, non-judgemental relationship with the researcher (reported in feedback as well as revealed in IPR). Participants valued genuine, transparent, mutually respectful relationships with researchers, where they felt they could be themselves.

Rams' principles for caring design, through the lens of the Person-Centred Approach

The Person-Centred Approach began as a theory of therapeutic process, and became a broader approach in the 1960s, when Rogers applied it to education, management, groups and conflict resolution (Sanders 2008:6). We see potential now for it to be applied as design seeks to impact on strategies for living through new practices (for example, Service Design), in response to new pervasive technologies (Ekman et al 2017), and in light of its contemporary applicability to groups, communities, organisations and environments (including 'the' environment) (Embleton-Tudor et al 2004).

Problem 1. Care is aesthetic…

Not only visual, but an interaction and attitude to oneself (congruence) and to the other (empathy). In psychotherapeutic terms, the practitioner is congruent

(caring of him or her self), and the client is incongruent (vulnerable or anxious). In Service Design and Interaction Design, interaction experiences are already conceived of as aesthetic in the fullest sense. We propose the PCA as a way to aestheticise experiences as part of the design process, and with its outcomes; it is a phenomenological attention to the phenomenal experience of the other (Embleton Tudor et al 2004).

Problem 2. Care is universal…

Engaging with the gesture of care depends on a readiness to engage, identified in the first condition for the PCA as 'psychological contact' (Rogers 1957). Sometimes, this condition is satisfied by the capacity to give informed consent. Psychological contact can also be embodied in 'expressive contact behaviour', as when working with people with a different sense of reality (dementia). Psychological contact is allied with an empathic and non-judgemental approach, and as such is universal.

Problem 3. Care is obtrusive…

The Person-Centred practitioner strives to make care (positive regard) apparent to the person at all stages. The client or participant experiences the practitioner's congruence, non-judgemental warmth and acceptance, and empathy. This means the designer or carer is present and 'real' in the relationship, a different mode of conduct from clinical, objective practices. The designed object should also be seen in the light of craft theory, as a 'meeting place' (Greenhalgh 2002), and through technology studies, as configuring designers' attitudes to the user (Oudshoorn and Pinch 2003).

Problem 4. Care is transitional…

Transition in the PCA is conceptualised as growth, and is described in terms of seven stages, from 'stuck' and resistant to fluidity, towards fully-functioning, empathic autonomy. This conception of transition is not from one form of fixed identity to some other new form of fixity, but is the shift from fixity itself towards "changingness", or process (Rogers 1957:100). This helpful conceptualisation of process can equally be applied to communities or societies.

Problem 5. Care is inconsistent…

The Person-Centred Approach is characterised by a listening attitude, which is responsive and individuated in the moment. Content, tools and techniques

of interactions with users are less important than the listening attitude, which pays attention to, and cherishes the whole of the other person. The authors have differentiated this aspect of the PCA from current narratives of personalisation in design (Kettley et al 2017).

Problem 6. Care should be useful…

This is a pragmatic approach that expects always to change the world for the better, rooted in a Promethean meta-narrative (Latour 2008). Care is useful as and when the person chooses to find it useful, rather than being predefined by the carer or designer. The person may find new uses, or decline to use any design outcome for their own dwelling in the world. In this way, we shift from a pragmatic to an existential conceptualisation of use value (Hallnäs and Redström 2002).

Problem 7. Care should be political…

The PCA is political in that it gives power to individuals to grow and makes sense of their own experiences. It is non-directive, which in design terms, means that people decide how to behave and act themselves; further, there is discussion in the PCA literature regarding 'instrumental' approaches to non-directivity, which retain a carer/designer driven agenda for change. The use of 'nudge' psychology and design for behaviour change would be understood as being directive, and therefore incompatible with the PCA, which maintains 'principled' non-directivity (Grant 2002).

Problem 8. Care should be friendly…

Unconditional positive regard (UPR) is described in the PCA as experiencing non-judgemental warmth and acceptance towards the client or user. This would certainly entail a shift away from design merely for market differentiation. However, UPR is more than simply being nice as part of a user-centred process; it prizes the user and accepting their frame of reference.

Problem 9. Care needs to take as much care as possible…

Vines et al have called for more reflective practice in Participatory Design (2012). We propose the Person-Centred Approach to design as radically reflective – in the moment (reflexive) and outside it (reflective). The practitioner can only achieve congruence and empathic listening through reflexive and reflective work. In the therapeutic professions, practitioners are supported ethically by a system of

supervision, through which practice can be discussed; we see this as essential for the radically careful design of the future.

Problem 10. By being care-full care becomes inevitable…

When the other conditions are met, the person-centred approach is inevitably non-directive, ethical, and careful.

Concluding remarks

This paper provided an overview of the Person-Centred Approach and proposed it be considered in answer to the provocation 'does design care?'. To conclude, let us consider this summary of what people commonly seek from therapeutic encounters (Sanders 2006:4):

- support
- recovery
- problem-solving
- gaining insight or self-awareness
- developing new strategies for living

Even this short list can help us reflect on what design aims to do, or what it claims to be for. We might associate User-Centred Design with the central goal on Sanders' list ('problem-solving'), and Human-Centred Design can easily be related to 'recovery'. 'Support' might be associated with either UCD or HCD. However, the last two, 'gaining insights' and 'new strategies for living', we suspect may be better aligned with the PCA. Given the shifting drivers for design and technology (Ekman et al 2017), we believe that it is now important to explicitly reflect on the philosophies of care in design, and that the PCA offers a promising starting point as it contrasts sharply with deterministic and interventionist approaches. This level of reflection demands a questioning engagement with other domains beyond an acceptance of 'the expert'. In care domains themselves, this includes a more critically active attitude to the assumption that we are now all applied behavioural psychologists (after Donald Norman); 'the psychiatrist said it would be OK' is an unacceptable defense for ethically questionable representations of participants, and "I am not a psychologist" is no longer a good enough position if we are to achieve radically careful design.

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Sarvodaya - A political version of care and design

Saurabh Tewari

> "I will give you a talisman. Whenever you are in doubt, or when the self becomes too much with you, apply the following test. Recall the face of the poorest and the weakest wo/man whom you may have seen, and ask yourself, if the step you contemplate is going to be of any use to her/him. Will he gain anything by it? Will it restore her/him to control over her/his own life and destiny? In other words, will it lead to swaraj (self-rule and freedom) for the hungry and spiritually starving millions? Then you will find your doubts, and your self melt away."
> - Gandhi (1958)

Introduction: Gandhi's Talisman

In India, the above text present in most of the secondary school textbooks' introductory pages represents an optimism for a better future. The purpose of its placement within the young minds' textbooks is to motivate new generations for a caring and empathetic tomorrow, socially and politically. Unfortunately, the tomorrow never comes. The above 'talisman' and perhaps Gandhi's greatest thought for the humankind is often read, seldom acknowledged and mostly shelved along with the book on which it is printed.

However, the potential of Gandhi's ideas lies with the 'decision' makers, politicians and policymakers, technocrats and economists, health professionals and teachers etc., at various levels of our societies, nations, and the larger world. For the context of this paper, the bracket of decision-makers include the designers; the creative heads who take decisions regarding the form, function, context, users and so on in its making process.

Design and Gandhi

One of the most quoted definitions of Design by Herbert A. Simon, "to design is to devise courses of action aimed at changing existing situations into preferred

ones" underlines the intention of the design, i.e., to make things preferable for its users. The word 'preferable' associates itself with a variety of meanings including the interpretations about making things better in thinking, making and operational processes. To do so, it calls for a greater, coordinated and organised human action in which the care can be central, if not for all, at least for one of the considerations.

Gandhi and Care

In the larger developing world context, the idea of 'care' is visible in Mohandas Gandhi's thoughts. Though Gandhi was not a designer in established notions, as an excellent communicator[22] (Balaram, 1989) and critical political activist, his sense of 'care' was reflected in his thoughts, speeches and writings. His public and private actions and decisions reflected an integrated empathy for the environment and living beings. During the Indian Independence struggle, through 'ahimsa' (non-violence) he even cared to care for the opponents, the rulers of the British empire, an act rarely seen in the history of political revolutions.

Post-independence, Gandhi's vision for India was overtaken by the modernist policies of India's first Prime Minister Nehru, under whom, India through the course went for another path chasing the idea of materialistic development. Gandhi's ideas were only incorporated superficially in the weak policy-making processes. Only the image of Gandhi remained alive in the currency notes, as a portrait in government offices, selected museums and in national holidays etc. In the new millennium, Gandhi's returned back as Mahatma Gandhi National Rural Employment Guarantee Act which too is under review by the current parliamentarians.

Sarvodaya

> "In my opinion, the social structure of India – not only of India but of the whole world – should be such that none has to suffer the lack of food and clothing. Everyone should get enough work so that these basic needs can be met. The means of production of life's primary needs should be available to everyone without any hindrance, just as air and water are given to us by god." - From Gandhi's India of My Dreams (Trivedi, 2008)

22 Balaram (1989) explains the importance of rhetoric in India: Indians are emotional, unlike analytical westerners. They see symbols everywhere and often exhibit 'suspension of reason'. This is the reason Gandhi's symbolic use of artefacts was a great socio-political strategy in India. Through the powerful methods of semantics, Gandhi was able impress his ideas of simplicity, righteousness, and empathy.

Gandhi's 'Sarvodaya' or 'Upliftment of All' was profoundly influenced by John Ruskin's 'Unto This Last'. Sorabji (2012) notes the connection of Ruskinian thought to Christ's parable of the workers in a vineyard and their equal wage. British architect and revivalist Ruskin critiqued the practices of material economics which only looked into efficiency rather upliftment of the weakest. This idea influenced and transformed Gandhi, and he established the famous Phoenix farm near Durban where everyone would get equal pay without any distinction. Gandhi also interpreted and paraphrased Ruskin's 'Unto this Last' as 'Sarvodaya' with some of the edits on economic concepts. He also philosophised ways of living beyond a materialistic aspirations and understanding of the world by paraphrasing three principles (Gandhi,) as,

"1. That the good of the individual is contained in the good of all.
2. That a lawyer's work has the same value as the barber's inasmuch as all have the same right of earning their livehood from their work.
3. That a life of labour, i.e., the life of the tiller of the soil and the handicraftsman, is the life worth living."

This series of actions can be seen as an act of care for fellow human beings and their rights. From the Indian political history, when Gandhi dreamt of India's future, the 'care' for various factors remained central in his vision. Be it caring for the human labour or towards reclaiming the environment, or cultural values to the village structures.

Through the course of Indian struggle for independence, Gandhi articulated his dream for India. Sarvodaya, Village Self-rule, Bread Labour, Critical Industrialisation, Decentralisation, De-addiction, Renunciation, Non-violence etc. were all integral part of his dream and vision for a better world. Khadi embodies all these qualities as a systemic manifestation.

Khadi and Care

> "Khadi mentality means decentralisation of the production and distribution of the necessaries of life. All should make it a point

of honour to only use village articles whenever and wherever available." - From Gandhi's India of My Dreams (Trivedi, 2008)

History of Khadi

Khadi, a hand-spun and handwoven cotton cloth, reflect his greater ideas of Sarvodaya. It's making involves care for the human labour and environment at various levels of its existence. Historically, it has been associated with the Indian Independence movement as the manifestation of self-reliance, self-sufficiency and a non-violent symbol of protest against the British products. Worn by the freedom fighters, it manoeuvred the idea of nationalism and unity against the British Rule.

Care for the environment

As an organic and decomposable material, Khadi cares for the environment too. In its material life, it travels from being in cotton fields, spinning wheel, handloom, cloth sheet to clothing wear. After its active use, it is further used as a modest carpet or an altruistic wick in the lamps of the Indian households (Tewari & Jyoti, 2017). Koulagi (2015) notes; With no chronic exploitation of human or natural resources, Khadi can be seen as a way forward in creating a Green Economy.

Care for the weakest

As a social actor, Khadi is a low-cost system which can be installed in villages and supports its economy. The cotton and the organic dyes sourced from the agrarian fields help the rural agrarian economy rather the industrial. Through this model, Khadi also supports the traditional crafts through the engagements of many talented practitioners.

Khadi in present times

Khadi and Village Industries Commission manages Khadi in India. Through a chain of setups in almost every Indian region, its role is to handle and support its creation, distribution and mediation in the consumer world. Many private initiatives, like FabIndia, have been helping the cause of Khadi. Many contemporary fashion designers too, have embraced Khadi in their original fashion lines. The government has directed its bodies to deal in books or Khadi items in its official gift exchanges instead of flower-bouquets.

With the critique of modern design education and the realisation of situatedness, the design schools have gone back to realise the potential of traditions. Khadi too is being benefitted by this curriculum turn in India. The National Institute of Fashion Technology in India, premier fashion design schools in India, have documented several craft practices including Khadi and symbiotically operated with the village groups.

Discussion and Conclusion

Gandhian discourse in ethics is academically rich and continuous. Design for the coming years, including 'Design for Care', has the potential to draw from Gandhi's empathetic views towards the world. With a range of ideas on politics and environment, Sarvodaya and Khadi are the two ideas, which can be connected with the design. Both of them offer a larger vision for care in the design process and its embodiment, at the idea and its implementation levels respectively. Sarvodaya may be called as a utopian idea, but Khadi is one of its systemic and physical manifestation.

The author would like to propose the idea of Sarvodaya as a political version of Care and Design. Sarvodaya as a thought might have lost its voice in the political unfolding of history in India and the developing world. However, the sense of it remains at the politics of it, though more selectively. To answer the question, "What might politicised versions of care look and feel like?", Sarvodaya can be a caring and careful answer for the way ahead of the humanity. The design practices can subscribe to this idea where they consider 'upliftment of all' from one end to another in benefitting the weakest of the weak, economically, physically, and politically. It has to consider the aspirations and needs in the global context. If not consider, it has to at least hear the voices of the same. The true care would start with empathising the marginalised, weak and voiceless.

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Care is obtrusive

Tara French, Gemma Teal and Cara Broadley

The subtleties of care: illuminating relational care through design

Greater numbers of people in society need care. However, receiving care disrupts identity, changing the sense of self to being cared 'for' or 'looked after' and can shift the balance where a person is no longer independent, but has certain dependencies in their everyday life. These may lead to significant impacts on maintaining day to day life routines and activities. Many of these examples represent transactional care, where a person receives care (in the form of a care package) from another person or service based on their assessed needs, set out in contractual terms in relation to the length and nature of care specified. In research undertaken by Scottish Care, current care models are time-restrictive and mean providing intensive support in the minimum amount of time, leaving little opportunity to provide relational care (Scottish Care, 2017).

Shifting the balance in care

Across the UK, there is a shift in the balance of power and control within health and care systems to support an integrated and person-centred approach that enables people to become active agents in their own care. In Scotland, the vision of the Chief Medical Officer is 'Realistic Medicine' whereby patients become co-managers and are supported to make informed decisions regarding their health and care (CMO, 2015). This vision is reinforced in the new National Health and Social Care standards in Scotland, which states that people receiving care will be involved in all decisions regarding care and support. Underpinned by the principles of dignity and respect, compassion, be included, responsive care, and support and wellbeing, the new standards aim to ensure appropriate care is received and that people have confidence in care providers including workers and organisations (Scottish Government, 2017). Both visions support the need to move from models of transactional care, towards models and systems which support relational, person-centred caring.

In this position paper, we propose that many forms of care can, and should be implicit with greater effort to 'normalise' care by supporting and instilling values

of empathy, compassion, and dignity; what we term the 'subtleties of care'. We argue that there is a key role for design in developing asset-based care (Garven et al., 2016) which supports and responds to the aspirations and capabilities of people to enable eudaimonic wellbeing (human flourishing) and prevent the assumption of the 'cared for', dependent role. The creation of asset-based care experiences can also promote a sense of identity that enhances self acceptance, personal growth and control, shifting care from a transactional model of giving and receiving, to a model which values the contribution of the person, self care, wider circles of care (including families and professionals) and the role of the community.

Approaching care from an asset-based perspective involves centring care around the existing capabilities, 'assets' and aspirations of a person. Heavily influenced by the theory of salutogenesis (Antonovsky, 1979), asset-based approaches identify resources which foster health and wellbeing by drawing upon the positive capacities of individuals and communities to protect against negative health outcomes (McLean, 2011). By focusing on the positive capabilities of individuals and communities, health assets have the potential to contribute to quality of life and wellbeing across the lifespan (ibid) and can support individual development in terms of self-esteem, purpose in life, mastery and self actualisation (Rotegard, Moore, Fagermoen and Ruland, 2010). The related concept of eudaimonic wellbeing also asserts a shift in focus from the absence of illness towards the potential and capacity of individuals to achieve and flourish in life. Eudaimonic approaches are considered as being more holistic and have a greater emphasis on meaning in understanding wellbeing (Kashdan, Biswas-Diener, and King, 2008).

Design in care, care in design

The role of design within the context of care, is concerned with systems and technologies, but also with social interactions and experiences, particularly among the 'actors' likely to be involved in organising, providing and receiving care. At a systems level, design involves the development of new services, models, products and technologies that can support care. Design at the interaction and experience level goes beyond the design of an innovative service or technology to consider the impact on the person organising, providing or receiving care in order to support a seamless care experience. At this level, designers are required to develop a 'caring design ethic' based on displaying

empathy, sensitivity and a holistic consideration of patients as people, whilst ensuring their repertoire of methods and tools can expand to accommodate this contextual shift (Jones, 2013).

We acknowledge the need to make care explicit at a systems level, rebalancing the workload to foreground care and reduce bureaucratic data collection (Cottam, 2011), often driven by the need to manage risk (Horlick-Jones, 2005). However, at a relational level, between the person and their care giver, this reprioritisation should allow care to be implicit and embedded in all social interactions. Whilst there is a need for designers to span both these domains, we propose that greater emphasis should be placed on understanding where people place value within care interactions and creating the conditions to foreground these moments. Framing the approach around this core objective, designers can ask the right questions and make more pragmatic decisions, and most importantly, appropriate methods to design 'with', rather than 'for' people (French and Teal, 2016).

Illuminating relational care through design

Our work within the Innovation School at The Glasgow School of Art spans formal and informal care in community and acute settings, to design innovative care pathways and services, technology, and systems. We draw from examples of design research in care contexts to reflect on the role of creative, participatory and visual methods, and discuss the relationship between the mindset and skill of the designer in these settings.

In the context of digital health, we employ a participatory design approach to collaboratively design 'preferable' solutions to health and social care challenges. In this context design is not focused on the artefact or end result, but instead is focused on creating an open and participatory process that relies on the direct contextual insight of participants, their creativity and lived experience, and is inclusive of a multiplicity of perspectives (French, Teal, Hepburn and Raman, 2016). Within this collaborative space, problems can be re-framed based on the lived experiences of participants, generating insight based on needs, and raising and answering questions that without the user perspective might previously have been assumed (ibid). Across our work in this context is the overarching aspiration for less obtrusive technology and less 'technology push' to focus on identifying real needs for technology, where technology would be most appropriate within a system or service, and more broadly, the wider impacts in relation to working

practices and everyday life. In previous work we have described this as creating a 'community of care' (French, Blom and Raman, 2015) enabled and supported by technology, not as a replacement of existing services and resources, but as a way to facilitate connections and overcome the burden of time consuming tasks that prevent human-based relational care. Across a number of projects, staff providing care have expressed frustration with the time they are required to spend inputting or studying information on screens, reducing eye-contact with the people they are caring for. This theme cuts across a number of different contexts of health and care, including information systems and records, and video conferencing technology to deliver remote care. Just as the technology needs to fade into the background to allow for more natural and relational interactions between the person and their care provider, care needs to be embedded and implicit in conversations centred around the capabilities and aspirations of the person.

In this context, design focuses on supporting the development of technology and systems that redesign care pathways to enable a seamless care experience by exploiting the role of technology more efficiently to create time to care. The evolution of a risk averse culture, in part driven by dysfunctions within the NHS in the late 1990s (Brown and Calnan, 2009) has led to an emphasis on accountability and the creation of audit trails that are time consuming, leaving little time or energy to devote to relational care. The information collected is often seen to be driven by the systemic need to manage contingency, often described by our participants as "ticking boxes" rather than driven by personal care needs. The way in which technology is deployed in the health and care context must ensure that the data collected is meaningful for both the person receiving care and the care provider. As such, the role of the designer shifts from the 'top-down creative' to the 'humble' designer (Slavin, 2016) to engage people as collaborators in the design process and build empathy to translate insights into opportunities that address needs. The designer employs a flexible, adaptive approach to identify the most appropriate method to help people find a way to share their experience, translate, and make this visible and tangible.

In broader wellbeing contexts, our work considers the role of relational care in community contexts. The Curated Care project was undertaken with Highland Hospice in Inverness to explore the role of relational care through volunteering and the impact of this experience on a volunteer's own sense of wellbeing. Through initial meetings with senior clinical and fundraising staff we captured

information around the hospice's objectives, infrastructure, and stakeholders into a large asset map (McKnight and Kretzmann, 1997; Foot and Hopkins, 2010) as a means of making available resources visible and tangible. This supported us to consider creative ways to involve members of this 750-strong community in a series of activities to understand their experiences. Following a series of informal introductory meetings, we invited 19 volunteers to take part in a participatory workshop to share their personal motivations, experiences, and aspirations, and collaboratively consider opportunities for enhancing volunteer participation. By drawing out motivations to volunteer – including "keeping busy", "staying involved" in their local communities, and "socialising, whilst helping a good cause" – it became apparent that several volunteers referred to losing friends and family to terminal illnesses and others had experienced health complications themselves and felt "the need to give something back". Appreciation, acknowledgement, and "feeling involved and not anonymous" highlighted the volunteers' senses of achievement and purpose. Interrogating public perceptions, the volunteers noted the need to move away from the old idea of standing outside a shop collecting money towards something more "innovative and compelling" and accentuated "the power of word-of-mouth" as a promotional strategy to extend volunteer participation to a younger demographic. Reflecting on the personal and professional stories that were shared, the volunteers collectively identified an illustrative book as an opportunity to promote Highland Hospices' work across the region; communicate the benefits of volunteering at individual, community, and organisational levels; and the importance of informal care in remote and rural areas. Through a process of consultation, feedback, and iteration, we co-created textual accounts and watercolour illustrations for the book. This centred on a series of Volunteer Portraits, echoing Wright and McCarthy's descriptions of narrative vignettes (2008). As "short pen pictures of people in a setting" employed by researchers to "capture the felt experience of working in a particular place", narrative vignettes offer a glimpse into their "practical, intellectual, and emotional world" and seek to evoke empathic responses from their readers (2008: 642).

Employed by Highland Hospice as a touch-point in their recruitment initiatives, the illustrative book contributes a creative mode of dissemination that has transferable applications in diverse and distinct contexts as part of an asset-based approach. Reflecting on our development of the asset-based approach, we found that its positively-attuned, appreciative ethos allowed us to adapt visual and

participatory methods to introduce our work to Highland Hospice, highlight connections between our aims and practices, collaboratively shape appropriate activities, and together embark on a joint process of learning and discovery (Foot and Hopkins, 2010). As an asset-based approach "does not provide a quick solution to developing community cohesion and resilience, but an alternative mind-set" (Baker, 2014), it is important to emphasise that our objectives in Curated Care were not concerned with co-designing solutions to identified problems, but rather, to better understand volunteers' motivations, experiences, and aspirations and to consider ways to enhance volunteer participation together.

Conclusions

There is a key role for design in addressing the complexities within the care context towards developing future models that support relational care underpinned by core values such as empathy, compassion and dignity. As society continues to be driven by technology and ever-increasing technology consumption, it will become crucial for designers to maintain an ethical approach when considering the role of technology within sensitive contexts such as health and care. Our approach is underpinned by participatory design's democratic values, which view participation as building on primary knowledge, expertise, and tradition to operate as a springboard for envisaging future scenarios (Steen, 2013; Vines et al., 2013). Pursuing our projects with an open mind, and an asset-based approach redirects design's historical tendency to interrogate deficits, problems, and needs, towards being led by the designer's and participants' collective and cumulative knowledge, skills, and aspirations for a flourishing society. Visual and participatory methods can support designers and researchers to identify talents, resources, and capabilities – which may be hidden or ineffable – from within organisations and communities, and to devise creative ways to share and celebrate these strengths towards illuminating relational care.

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Care as tactics in civil disobedience: Protest-making in the Hong Kong umbrella movement

Kwan Chan

In civil disobedience contexts, the issue of care emerges with the rise of encampment as an insurgent tactic, primarily steered by the Occupy Movement since 2011. Adopting this form of protest, the extensive street occupation in the Hong Kong Umbrella Movement in 2014 similarly gave rise to the challenges of providing care to the protesters. Issues like how to make sleeping in public space safe, how the protesters pass their time productively in the site, and how to manage the psyche and morale of the protest community are as crucial as the direct political actions.

In tasking themselves with the transformation of the public venue into an occupiable and reasonably inhabitable environment, the protesters temporarily, collectively and mostly unknowingly took up the role of designing and placemaking. The material proliferation of the creative actions, from making functional artefacts to expressive artworks, shaped the uniqueness of the Umbrella Movement. While scholars generally interpret these artefacts as 'occupation arts' (Wong 2015, Pang 2016), the quality of design that some of the objects performed in Papanek's expanded concept of design — 'the planning and patterning of any act toward a desired, foreseeable end' (1986/2006: 3) — is not sufficiently articulated.

The atypicality of the protest artefacts in comparison to professional design may account for this gap. The contemporary concept of design is widely understood to be the design professions and industries. However, the occasional appearance of the study of design activities outside of the design industry, such as amateur making (Hackney 2013, Jackson 2015), self-build home (Brown 2008), protest object design and practice (Fisher 2008) and lay designers (Campbell 2017), reflects a growing awareness of Pacey's criticism in the early nineties, that "the 'specialized, professional character of design' has become so well established, [...]

that it is design as an activity practiced by all human beings which is in danger of being not merely ignored but progressively undermined and marginalised until it all but ceases to be." (1992: 217)

The 'design' in disobedient context is notably different from that in the professional fields. One conspicuous distinction is that while in latter's practice, the designers and the makers are largely separated from the users, the design in protest site is dialectical between the three stakeholders without tangible clients. This phenomenon, which I term as protest-making, can be said as being instigated by care rather than by the clients. Also, the form of care here differs from that in the care industry. While the latter's provision of care services is institutional care (Philips 2007), the care in a protest site requires a variety of manifestations, from material to infrastructural, to cater for the wide range of needs.

In this paper, I respond to the question of the politics of care with the notion of protest-making and a case study of a protest infrastructure, namely the Charter Study Room, in the Umbrella Movement. Through analysing the impact of the design of this infrastructure, I investigate its carerelated qualities using Tronto's four elements of care (1993), how the caring design works as tactics in the social movement and draws insights for professional design. First, the issues of care and design in the phenomenon of protest-making are explicated. Then de Certeau's notions of strategy and tactics are applied to discuss the dynamics between care and tactics. The paper concludes with an elaboration of the possible learning for conventional design.

Protest-Making and Care as Tactics in the Umbrella Movement

Protest-making refers to the acts of designing and producing artefacts, infrastructures and services in an insurgent context, regardless of the backgrounds and skills of the protester-makers. Studying the infrastructures of historical and contemporary camps' infrastructures, Feigenbaum, Frenzel and McCurdy propose four typologies: the infrastructures for media and communication, for protest action, for governance and for re-creation. While the first three are formative to direct actions of a protest, the re-creational infrastructure is the one that deal with the issues of care, catering to the basic needs and manifest the political ideology in material forms. Some common examples are the tents, communal kitchens, sanitary facilities and educational

spaces. This type of facilities points to creating the camp "as a 'world', a micro-city or micro-village, a sociality on its own" (Feigenbaum, Frenzel and McCurdy 2013: 183). This world-making aspect is most relevant to protest-making. In creating the re-creational infrastructures, the protesters' participation resembles that of designing: identifying what is needed, sourcing what materials can be used, deciding the best ways to set things up, executing the design decision, and maintaining the material outcomes. I propose the term 'protest-making' to emphasise the production process and the world making character of the protest camp, and to denote their difference from designing in studio.

While the protesters from all walks of life had diversified political attitudes and goals under the leaderless Umbrella Movement, most of them upheld the principle of peaceful and non-violent resistance as the core value. Hence apart from being a general political drive, care was a valued ethics in the movement. A key example is the Charter Study Room which was set up in the second week after the outbreak. In the following, I illustrate how care is manifested through the design and serves as a tactic in this protest context.

The study room infrastructure was initiated by a group of design students who saw an urgent need, to which if not responded would risk driving the student-protesters away. The design students overheard some secondary school students saying that they regretfully had to go home to catch up with their studies. The street could not meet their need of a proper study environment when many of them were facing enormous pressure from the public examinations. Fearing that it would make a negative impact on the protest participation, the designers-to-be came up with a plan to tackle the problem. They designed an add-on structure to turn the concrete-step barriers in the middle of the roads into a makeshift desk using very simple materials, namely a wooden board as the desk surface, and two medium-sized poles as the diagonal support. This readily replicable design was soon picked up by other protesters and it expanded into the Charter Study Room, housing fifty to sixty people at a time[23]. The place was then co-managed by the protesters. Some oversaw the day-to-day management, some contributed foods and material supplies, some took up the duty of maintenance of the facilities, and some volunteered to tutor the student-protesters.

23 1 理大女生製石壆書枱 馬路變身自修室 [Desktops on concrete step barrier made by PolyU students transform the streets into a studyroom] , Apple Daily, 10 October 2014. [online] Available at: http://hk.apple.nextmedia.com/realtime/breaking/20141010/53000547

The care perspective of the study room can be explicated with Tronto's four ethical elements of care (1993). Arguing care as a practice rather than a set of rules or principles, Tronto suggests four moral qualities in a care practice: attentiveness, responsibility, competence and responsiveness. First, the designers showed their attentiveness in discerning the plight and the need of their fellow protesters, their struggle between choosing to commit to the protest for a better political future of Hong Kong or to their education which is crucial to their personal future. Then the designers recognised their responsibility to provide care to them, committed to offering an effective solution and took action to materialise the design. They applied their design expertise, despite the experimentality, and showed competence in identifying the problem accurately, using suitable materials and making it easy to replicate. The outcome turned a disadvantage of the site's physicality into an advantage. Other protester-makers aptly contributed their expertise as well — woodwork, material supplies, management and tutorial skills — and demonstrated their responsiveness to the further needs in order to make the study room operate better.

The caring qualities of the Charter Study Room also serve as a tactic of the protest. In his influential book The Practice of Everyday Life, de Certeau applies contextualised meanings on strategy and tactics to discuss the power relationship between those with power and those live under the power. Briefly speaking, strategy is embedded in the agenda of the powerful class (the government or the corporate) to regulate and limit the action and behaviour of the people, who in turn use or consume the authority's project with idiosyncratic tactics to serve their own interest, defying the intended control of the strategy.

The dynamics of care and tactics can be analysed on two levels. Firstly, the design idea was originated from the care for the student-protesters' wellbeing, aiming to provide a solution to relieve their pressure while keeping them engaged in the protest. This is also a pragmatic concern. In an Occupy protest, the physical presence of the protesters is decisive for sustaining the existence of an occupation site. Hence the physicality of the protesters is part of the essential materiality of a protest camp. In this connection, the wellbeing of the protesters is prioritised, and providing appropriate care is proved to be an effective tactic.

The second level is ideological. While the protest's tactic of disrupting the city's operation by blocking major roads appears to be a disregard to the non-protesters, the study room in fact is an action of the protesters' care towards

the public's criticism. Facing the growing resentment of the general public and the the anti-protest groups' hostile attack (for the purpose of stirring up violent incidents), they responded by demonstrating their care to each other, to the site and to the reproach outside, reinforcing the protest's non-violent nature. While many condemned the student strike, the study room materialised the 'boycott class, not learning' slogan and impactfully visualised the student-led nature, rendering learning in situ as a form of constructive protest. A civilised and ordered protest camp portrays the protesters as productive members of the society instead of rioters. It brings the notion of non-violent resistance further: not only are the protest activities peaceful, they are also productive and creative. It demonstrates people's capabilities of self-organisation and self-discipline, and the possibilities which may arise when people are given the freedom to create and express. The Umbrella protest-making is the people's strong criticism to the Hong Kong government's failure in acknowledging and caring the citizens' political aspiration for an open, just and democratic society.

What Can Design Professionals Learn from Protest-Making?

After the above explication and analysis, in the occasion of the 'Does Design Care…?' workshop, I conclude with some thoughts for the design professions. However, we have to note that the discussion of what design practitioners can learn from insurgent examples should be treated with care. In many occasions, designers work for clients with power; the scrutiny of people's tactics would risk revealing the details of their operations for the service of the strategy makers. Being conscious of this, I suggest two points of view, the first on the surface and the second more reflective.

The immediate insight is about what designers can do when situated in an insurgent event. It is surely not new for them to contribute their design skills to the course of civil disobedience; but usually, it remains in the graphic design of posters, placards and props. As the form of social movement diversifies with the help of the Internet, there are more possibilities in which the designers can get involved. In the study room example, the design students' apt and timely contribution to the protest successfully shifted the focus of public discussions. Designing for protest is not instigated by any clients but the protester-makers' care to the movement. In other words, it is to put design in the service of care towards a community's political future.

On a reflective level, I suggest to extend de Certeau's sense of strategy and tactics to understand the power relationship in design. This direction is especially grounded on his explicit use of the term 'user', and his aim to investigate 'the ways in which users — commonly assumed to be passive and guided by established rules — operate' (de Certeau xi). On the one hand, we can understand the users' idiosyncratic usage of a design as tactics, with or without regards to the original purpose. On the other, the clients' brief can be seen as strategy: the projection of certain actions or behaviours in the users through using a design (material or immaterial). Hence, between the clients and the users, designers find themselves in between strategy and tactics. In the traditional sense, designers use their skills to fulfil the clients' needs, hence manifesting the latter's strategy in material forms. There are countless examples in urban life. Some become unsettling when the intention to control is conspicuous, such as the partitioned benches in the parks to prohibit people from sleeping in the public spaces; or the configuration of the escalators inside the shopping malls to make the shoppers unnecessarily walk by more shops. These are undoubtedly bad design that manipulates the users, but the designers may argue that they have little power in front of the clients, and thus evade the responsibility. However, in the Charter Study Room example, we witness the impact when the designers contribute their knowledge to the users' tactics. In an everyday professional context, the designers inevitably appear more on the clients' side. With the emergence of user-centred design, designers increasingly ground their practice on user research and are equipped with numerous research methodologies to draw insights from the users' thinking and behaviour. As this type of design prevails, it is important to raise questions to the ethics when applying the knowledge of the users' tactics to serve commercial clients' requirements. In her analysis of the responsibilities of designers in design participation, Lee (2007) urges designers to adapt flexibility in the design process, shifting among the roles of design developer, facilitator and generator. I would add to it the role of gatekeeper, being vigilant to the politics of the clients' strategy and the users' benefits, as a manifestation of design practitioners' care to the end users.

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Designing caring occasions for aesthetic and ethical fairness

Mashal Khan

Images of the poor, the sick, the old, and the orphans and widows evoke a moral response. The mainstream media tries to elicit our moral conscious towards care by attaching a label of human distress or human need. Care is therefore, both aesthetic and political. Aesthetic, being a sensory perception translates beauty into being either passive perception or instrumental perception. Instrumental perception is looking and hearing that gives rise to intervening or changing what one has seen or heard is political[24].There is this link between aesthetic fairness (beauty) and ethical fairness (justice) as both are committed to equality[25]. That is both beauty and justice are present to an individual's sensorial perception but acknowledgment of this presence depends upon the individual. According to Professor Avishai Margalit, caring is a demanding attitude. This attitude varies depending to whom care is being extended — whether it is the "thick relations" of family and friends or "thin relations" of remote strangers.[26] Caring is an ethical relation where simply being human is sometimes not enough to elicit care. Margalit posits care with wants and needs. He notes that care is a sentiment and attitude of "perceiving as much as a way of doing."[27] How might designers be responsive and caring towards the visual representation of objects, ideas, plants, animals and its participants?

Designers wield immense power and privilege, which can be distributed to create a circle of care with participants through co-creation activities to generate visual inclusion, and endow them with a sense of empowerment. I endeavor to position design as an intellectual activity that investigates the ethics of cares grounded

24 Elaine Scarry, On Beauty and Being Just, Reprint ed. (New Jersey: Princeton University Press, 2001), 61.

25 Scarry, 109.

26 Avishai Margalit, The Ethics of Memory, First ed. (Harvard University Press, 2002), 37.

27 Margalit, 35.

in participatory process of co-learning. There is a lack of case studies regarding design's role in co-operative forms of pedagogy and selfrepresentation. By conjoining the theories of Paulo Freire's Critical Pedagogy; Nel Noddings' Circles of Care; Elaine Scarry's Aesthetic Care; Betty A. Reardon on Peace Education and Human Rights — in order to conceive design practice as a mode of and media for developing thoughtful engagement activities. Design activity enveloped in an emergent process of care and collaboration can help develop the aesthetic and political representation of its participants as they express themselves and create their own visual image.

Approaches for Design Inquiry and the Ethics of Care

Care begins with self. Peter Lucas, Professor of Human Rights and Media, scaffolds Nel Noddings ethics of care as a "spiral matrix" that starts from self and extends outward to distant others, plants, animals and earth. Ideally there should be a back and forth movement between

ethical circle (thick relations) and the moral circle (thin relations regarding human needs). There is an organic flow between the circles of cares as an individual spirals in and out from the centre of their personal concerns. Noddings describes this as establishing a relational definition of self where "everything we care about is somehow caught up in concerns about self."[28] This notion of caring is interconnected with the social values of human dignity and integrity. Dignity stands for the appreciation of human life. But integrity refers to the wholeness of person in the sense that everyone has a physical life, an intellectual life, a spiritual life, an emotional life, and an aesthetic life. Everyone should be able to express and develop these multiple facets of themselves such as "their own bodies, minds, and spirits."[29] Then how might designers create "caring occasions" in every project and interaction? The circle of care for strangers and distant others is critical for designers to explore the notions of visual representation and human rights. Design has this innate ability of vision and imagination of creating dreams and hopes of possible futures or alternative realities that can inspire action for change. How to use these concepts of imagination, creativity,

28 Nel Noddings, The Challenge to Care in Schools: An Alternative Approach to Education, 2nd ed., Advances in Contemporary Educational Thought (Teachers College Press, 2005), 74.

29 Betty A. Reardon, Educating for Human Dignity: Learning About Rights and Responsibilities, Pennsylvania Studies in Human Rights (University of Pennsylvania Press, 1995), 6.

beauty, and expression to design for, about and with a specific community? From the beginning I was intuitively inclined to participatory design — there was something about its inclusive and reflexive nature of active listening and conversing that resonated with me. In doing ethnographic field work I found Nodding's ethics of care instrumental in teaching me the power of deep listening. Noddings asserts that the carer needs to establish a relational view of caring in that he or she really listens to others expressed needs.[30] She uses the term "engrossment" to explain how we need to truly listen or be receptive so that we receive and understand what the other person is feeling or trying to communicate. This is reiterated by Peace Education Leader Betty A. Reardon who asserts, "nothing validates a person's sense of dignity and worth so much as 'being heard' or 'attended to'."[31] Like Noddings, Reardon posits that reflective listening as a way of integrating others views is a culture of caring.[32] Care is instrumental in facilitating a culture of peace. Designers can facilitate aesthetic care by giving participants agency to create their own visual narrative — to expressive oneself creatively through various mediums such as digital storytelling, radio, poster, postcards, t-shirts, photography, drawing and blogging. In order facilitate aesthetic care, participatory design needs to adopt Noddings framework of moral education, which has four components of modeling, dialogue, practice, and confirmation.

These four components of Noddings correlate with Freire's critical pedagogy and theories of transformative education. Freire's framework centers on using dialogue to discuss local "generative themes" or everyday concerns to raise inquiries, and develop the skills that awaken the critical conscious so that the individual can create change and social transformation themselves. Here the interconnection between aesthetic and political care becomes more apparent. This idea of critical dialogue has a strong correlational with human rights and social change embedded in the future tense of positive peace. At it roots critical consciousness has two inseparable elements — reflection and action. I perceive reflection as being aesthetic care grounded in understanding the self

30 Noddings, xv.

31 Betty A. Reardon, Education for a Culture of Peace in a Gender Perspective, The Teacher's Library (Unesco, 2001), 106.

32 Reardon (Unesco, 2001), 85.

and our own biographies and how that may affect our knowledge, bias and behavior. With receptivity or aesthetic care of their social, political and economic contradictions follows the ability to express concern over social injustice. The act of self-expression is political care as it is a shift in behavior from being passive towards progressive action. By problematizing reality, design can create a space for reflection and expressive interaction that could potentially pave the way to action. In order to understand the situation in relation to its plurality and to verify its "objective fact" is to view design as inquiry to create a transitional space for discourse, reflection, and expression on the streets — hanging out, creating a caring relationship by exchanging gifts, sharing skills, utilizing personal cultural capital, and privilege to build capacity of self-representation.

Caring Processes in Practice

These theories frame an approach of how to design caring occasions that embody the ethics of care, critical pedagogy, human rights, social transformation and positive peace vision of the future. This adaptable theoretical framework was explored during my thesis project to guide fieldwork that attends to the homeless aesthetic needs — investigated the right to creative expression, co-learning and representation of everyday life. I embarked on a self-critical journey of learning and un-learning internalized biases and prejudices of mainstream culture. Over the course of one year I conducted eight street engagement activities with the homeless. These activities slowly uncovered the sixteen needs that sit under the umbrella of the four main aspirations of the homeless that include safety, health, consultation, and communication. I approached the homeless with humility, respect and an open-mind in order to better understand the joys, the risks, and the possibilities of attending to their aesthetic (often neglected) part of the homeless people's needs. I let intuition guide the inquiry process by going out to social site with little gifts (i.e. food) and planned mini activities of co-creation like post-cards and homeless bill of rights that elicit responses from the local community on 125th street Lexington Avenue, New York.

Gifts or gestures can take the form of applied design in the guise of cultural probes that enables visual inclusion. Gifts as design probes can allow for natural exchange of experiences and understanding. Consider a cultural probe as a gift, where design simultaneously shares its aesthetic skills and provokes inspirational responses. Gifts as probes carry within them the promise of transformation as they contain the identity of the giver with them. In accepting the gifts, you

are also accepting the identity of the giver. Think of gifts as "teachings", or as true mentors, which awakens a part of the soul. The transformative power of the gift only works when the recipient "feels gratitude."[33] Once this feeling of gratitude surfaces, the recipient begins the "labor of gratitude" to give back what was received. This type of gift-design probe is best done over duration of time. But suppose what is being shared and done touches the heart or soul of the participant? Then he or she will respond in kind and work towards holding on to what was shared and to give the gift back to other individuals in the community. This experimental design as gift is responsive as it generates visual inclusion for the homeless. It is an impressionistic account of their beliefs, desires, and cultural concerns.

Homelessness is a complex problem; in discussing one need, other needs are simultaneously discussed or at least brought to attention. I explored the potential of creativity and design in demythicizing reality in order to bring about social change through street engagement activities. Each activity was built on the learning of the former street engagement. I compiled my learning, experiences and inter mixed them with a theoretical framework of ideas and engagement activities that address the aesthetics qualities of life of the homeless into a Street Encounters Manual. I believe the manual can be used by any profession wishing to engage with the homeless with notions of beauty, care and expression. By sharing the manual, which is my findings with relevant community members, I took a participatory peer-based analysis

approach where we could discuss and challenge each other's assumptions. What emerged was an appreciation of language and social values or process being presented in a different manner. Shelter Manger, Ms. Powell, energetically stated how she liked the word "gifts" in place of services for the homeless. Likewise, Mr. Bonck, Communication Manger of Breaking Ground, stated that the outreach workers would find the manual useful as it shares open-ended prompts, which he termed as "art therapy". He expressed interest in the ethics of care framework. He relayed that Breaking Ground has its own model but appreciated the diagrams and the different approaches of engaging with the homeless. It is humbling to see how these practitioners find some value in the exploratory content of the manual.

33 Lewis Hyde, The Gift: Creativity and the Artist in the Modern World, 25th Anniversary ed. (New York: Vintage, 2007),89.

I acknowledge that there are different truths as knowledge stems from different ways of perceiving and understanding. Therefore, I hope the manual acts as a tool to facilitate community thinking. Where members can improvise on the prompts and create their own process or knowledge, thereby empowering local communities with intellectual respect and ownership.

Grounded in Reflexive Self Analysis

Being creatures of intellect there is an innate curiosity revolving around existential questions such as: What is the purpose of life? Why am I doing this? Should we care for those we have nothing in common with? Here it is important to return to the relational definition of self. Ultimately everything is connected to self. As designers and practitioners of storytelling and visual communication we should consider how our work impacts others. In the spirit of care, we should strive to connect with the other to understand and make both our lives ethically better by embracing participatory ethos that encourage reflective criticism, revision, creation and renewal. Design as inquiry is a medium of reflection and action as it provides the opportunity of visual inclusion as the right to participate in the cultural life, the right to create local knowledge and the right to "enjoy the arts and to share in scientific advancement and its benefits."[34] This inclusive approach, by offering opportunities and recognizing that critical consciousness varies in form and expression due to the contextual history of the individual, is the baseline for human rights. It is an acknowledgment of an individual's dignity and integrity.

Naturally there are limitations in the act of engagement itself. Here the ethics of care can be evaluated. Take the thesis project as case study — was I responsive to the expressed needs of the homeless? Did I create a context of caring between the homeless and myself? In moments of doubt and incomprehension I always exercised reflective listening in order to understand what was being communicated and why; and what were the underlying thoughts, feelings and hopes of the homeless. I strove to understand and avoided jumping to conclusions to solve the problem.

The beauty of design lies in its ambiguity as an emergent practice to pivot, adapt and be responsive to the expressed needs of the participants. Design as a reflective practice is enshrouded in developing caring occasions with the participants. "By sharing our individual stories we open places for others to connect to us, to find common ground with us, and know us more completely"[35] writes Kay Pranis trainer of Peacemaking Circles. This path is not a straightforward one as it is constantly evolving and changing as we continue to learn and engage with community members. By being reflexive, honest and present we can practice ethical design, which is infused with profound love and beauty — an act of freedom that is committed to the cause of transformation.

34 United Nations, Universal Declaration of Human Rights, Article 27.

35 Kay Pranis, The Little Book of Circle Processes : A New/Old Approach to Peacemaking, Little Books of Justice & Peacebuilding (Good Books, 2005), 11.

How do we create attractive personalised and customised care?

Cathy Treadaway and Jac Fennell

This position paper contends that care can only be useful when it understands the personal context of care and can be shaped to accommodate individual needs. To design with care and to care through design we need to develop a designerly empathic attitude that listens to and 'feels with' others. This requires the designer to be observant, curious, non-judgmental and open to understand the perspectives and issues of others.

Compassion may provide a good way forward and is currently rising on the national agenda within the care sector[36] (NHS, 2014[37]; Cole- King and Gilbert 2011[38]) A compassionate approach is respectful, non-judgmental and open to hear the other voices. It tries to personalise rather than generalize. It sees the intertwined complexities rather than the simple components – it is a rainbow of colours rather than black and white, four dimensional rather than three. Caring design evidences that it listens to others and works collaboratively to propose alternative perspectives that are bespoke, personalised rather than universal. Caring design approaches are democratic and empowering.

We live in a fast world, dominated by data, speed of communication, numbers, stats, quant. In the rush for big data the individual may be lost, the detail ignored, the context generalized.

Care is not quantitative; it is without clearly defined edges, it is difficult to measure – it is about values, personal experiences, attitudes, contextualization and strives to challenge unconscious bias. Care implies human values: it is physical, practical and involves sensory knowledge informed by lived experience;

36 https://ageingissues.wordpress.com/2015/03/18/on-compassionate-care/

37 NHS England (2014) Safe, compassionate care for frail older people using an integrated care pathway

38 Cole-King, A. & Gilbert, P.(2011) Compassionate Care: the theory and the reality

it is a continuum of iterative and reflective change. We care from our own perspective. If we want to customize care we may need to open up to new experiences and listen to and feel the pain and joy of others.

Compassionate Design is an approach that has evolved from design research with people with advanced dementia[39]. These are often some of the most marginalized and vulnerable people in society. Their care requires personalized approaches that affirm their sense of identity, even when they themselves can no longer remember who they are. Compassionate Design can help people living with dementia to retain their dignity as a valued member of society[40] (Hughes 2014). Universal designs are often not 'universal' for people living with advanced dementia – colours, shapes tonal relationships are perceived differently. Lines, shape and colours misbehave by normal design rules. For individuals living with dementia, design can be over stimulating or under-stimulating and perception can change as the disease progresses. There are no fixed points; it is a spectrum of constant variation from hour to hour. Compassionate Design has evolved and been tested through design practice and research[41]. It proposes three key components to be considered and prioritised when addressing needs of those in the advanced stages of dementia: designs should be personalized, be stimulating to the senses and help the person living with dementia to connect with others. By taking this approach it is possible to create appropriate personalised and customised designs that help craft a more caring world.

Using Compassionate Design to underpin the design problem requires researchers to explore the foundational constituents essential for all human beings to thrive. These 'core needs' shape our ability to flourish and live well; they are universal and include connection with others, the desire to nurture and be nurtured and the deep emotional responses that arise (often beyond conscious thought) as a result of sensory stimulation. Lived experience shapes our sense of self, builds personhood; it is sedimented through memory, both explicit (cognitive) and procedural (tacitly through bodily knowledge or muscle

39 www.compassionatedesign.org

40 Hughes, Julian C. (2014). *How we think about dementia: personhood, rights, ethics, the arts and what they mean for care.* London: Jessica Kingsley Publishers

41 www.LAUGHproject.info

memory) to build a person's identity[42]. To develop appropriate designs for those who are cognitively impaired, or no longer know who they are, requires the researcher to find ways to reveal and connect with these much deeper aspects of an individual's humanity.

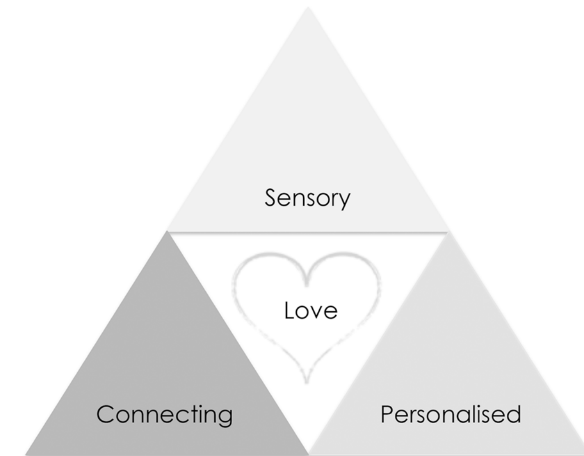

Fig 1. Compassionate Design

Research Methods

The help of care experts is essential when dealing with complex problems such as dementia. The 'expert' in this situation will include the end user as well as those that know them well, such as family and professional carers. Bottom-up approaches, which listen to the voices of others, democratize the design process and empower those who have deep understanding of what is needed, to have a voice[43]. Participatory design, expert group panels and focus groups provide opportunities for knowledge to be shared. By bringing together interdisciplinary groups that represent a variety of viewpoints along with professional expertise

42 Hughes, Julian C. (2014). *How we think about dementia: personhood, rights, ethics, the arts and what they mean for care.* London: Jessica Kingsley Publishers

43 'Design for Dementia Care: making a difference' Jakob, A., Manchester H., and Treadaway, C., (2017): Nordes 2017: DESIGN+POWER, 7th Nordic Design Research Conference 15 - 17 June 2017 AHO · Oslo, Norway ISSN 1604-9705. Oslo, http://www.nordes.org/nordes2017

it is possible to gain insights into the design problem that can be discovered no other way[44]. Family members may have their own particular bias and opinion about what their relative requires, based on their own preferences and life history, or relationship with the person being designed for. By including the user in the design process, the assumptions of family and friends can be validated or challenged through their observable responses to evolving design concepts, even when verbal communication is difficult. Professional carers often do not have the detailed personal history (known only to family members) that can inform design in order to rekindle past memories and provoke conversation, but they may understand the 'in the moment' pleasures and preferences of someone living with the disease, for whom they care for daily. Medical and healthcare experts can identify problems with design in terms of infection control, physical limitations or integration into care practice. By bringing teams together with a wide range of experience and expertise, new avenues for design potential can be explored and greater understanding generated for all involved. In order to reveal and capture these insights, participants need to feel valued, relaxed and safe. Playful and creative hands-on activities can facilitate this and contribute to the design process in a practical way, through paper prototyping, sketching, storyboarding etc[45].

Live Labs have been shown to be useful ways of evaluating developing design concepts and providing useful feedback loops that enable designers to iteratively hone and refine ideas and prototype designs[46]. By capturing and analyzing the ways designs are experienced in every day care environments it is possible to ensure that practical needs are met and designs are appropriate, not only for the user but also within the context of everyday care and with those who provide it. Video is a useful way to help understand the context and evaluation frameworks can focus researchers' observations on key design aspects needing to be developed (such as ease of use or stimulation of positive emotions).

44 Krippendorff, K. (2006). The semantic turn: a new foundation for design. Boca Raton, CRC/Taylor & Francis.

45 'In the Moment: designing for late stage dementia.' Treadaway, C., Prytherch, D., Kenning, G. and Fennell, J. in: P. Lloyd & E. Bohemia, eds., *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 4, pp 1442-1457, DOI: 10.21606/drs.2016.107 ISSN 2398-3132 Design Research Society Conference 2016, Brighton, June 27-30

46 Brankaert, R., den Ouden, E. & Brombacher, A. (2015)," Innovate dementia: the development of a living lab protocol to evaluate interventions in context ", info, Vol. 17 Iss 4 pp. 40 - 52

Finding ways to inform design through incorporating the voices of expert carers and users as participants in the design process requires time to build trusting relationships and a common shared language with all involved. Helping people to open up and distribute their knowledge requires creative approaches that can break down communication and psychological barriers. It also requires empathic researchers who can foster a safe space with clear goals and adherence to ethical guidelines. A number of recent CARIAD design research projects have been incorporating expert groups comprising care and health professionals as well as end users with severe cognitive and communication difficulties, in order to develop designs for people living with advanced dementia. Guided by the Compassionate Design approach, the design solutions have placed the needs of the individual at the heart of the process and specifically looked for ways to personalise designs, stimulate the senses and encourage connections between the person living with dementia and their carers and loved ones. By using embedded technology it has been possible to create design solutions that can be highly personal but easily transferrable. An example of this is the use of favourite music accessed from embedded sound files, evocative smells or tactile feedback.

Design Examples

The CARIAD Sensor e-Textile project used participatory design research with care experts and health professionals to develop textiles with embedded electronics to support the wellbeing of people living with advanced dementia. One of the artefacts developed was a textile dog made as part of a 'dementia apron' garment. The dog was no ordinary soft toy but an object that was designed to tap into the emotional memories of a particular lady's favorite pet – a white West Highland terrier called Kim. The dog contained simple touch sensors and embedded microcontroller with a number of West Highland terrier sound files, including barking, growling and scurrying around noises. Although the lady no longer remembered the pet, nor recognised the members of her family, she was able to respond positively by touching the dog, expressing pleasure and sharing her joy with members of her family that came to visit. Although her normal attention span was about 5 minutes, researchers observed her communicate, laugh and play with several members of her family for over half an hour using the dog to broker conversation and connections.

Fig 2. Sensor e-Textile project: Dog connecting the family

CARIAD researchers have developed a design for a steering wheel activity as part of the LAUGH project. This highly personalised object has been developed for a man who had worked as a car mechanic and loved driving throughout his active life. LAUGH research with expert groups has found that loss of the ability to drive is particularly distressing for men living with dementia and that an object to replicate the sensory activity of driving would be being something that many people would enjoy. The object, although potentially a generic activity for those who have enjoyed driving, was developed into a highly personalised object through the inclusion of the end user's favorite music - activated by tuning the radio on the dashboard. He was delighted with the steering wheel and could 'drive' his wheelchair into the lounge and then 'take a road trip to the seaside'. His carers imaginatively encouraged the sensation of going around bends and parking the car. The steering wheel has embedded electronics that provide vibration to evoke the running engine, flashing indicators and a dashboard with speedometer, fuel gauge etc. The steering wheel provides sensory stimulation, is highly personalized, provides opportunities to connect with carers and family through playful imaginative activity and stimulates conversation through reminiscence.

Discussion

Both *person centered*[47] and *relational*[48] approaches to care demand a greater understanding of the needs and lived experiences of the end user. Where severe cognitive, perceptual and communications difficulties are involved, designing appropriate and attractive designs is complicated. There is often no 'one size fits all' solution; however, technology can provide useful methods for extending functionality and ensuring that it is personalised and appropriate. By ensuring that the person is kept at the heart of the design process it is possible to design with compassion, consider individual needs and help them to continue to live with dignity and pleasure. The more complex the care needs the more likely a person will become withdrawn from those around them. Specifically looking for ways to develop designs that can be used to reconnect people in care relationships not only supports the wellbeing of those being cared for but also enhances compassionate relationships in the care environment. Compassionate Design approaches encourage designers to ensure that all people are valued in society and that love remains at the heart of the design process.

47 Kitwood, T. M. (1997). 'Dementia reconsidered: The person comes first'. Buckingham, Open University Press.

48 Morhardt, D and Spira, M (2013) 'From Person-Centered Care to Relational-Centered Care' Generations, Fall 2013

Designs need to care for carers

Euan Winton

This work explores where design should care, from the perspective of caring about carers of people who have degenerative mental conditions such as Alzheimer's or other forms of dementia.

In the current epoch caring is delivered through many different structures, from organised and centralised systems of paid for services, through to ad-hoc responsive and enforced positions, thrust upon loved ones. When the burden of becoming a carer of a friend or loved one becomes your responsibility a number of sacrifices or responses are attached to the situation. Personal identification, emotional entanglement, immersion, investment and empowerment, along with many other concerns interweave, sometimes for the better and sometimes for the worse. For some, the sudden and deep immersion of becoming a carer can even appear to be like a 'prison sentence' constricting time and freedom or restricting personal rights and responsibilities. Whilst for some 'care' is liberating, gives purpose and defines their being. And of course, 'care' can be hugely emotionally charged, both for those giving and receiving. Care is paradoxical in that it can both nurture and destroy and as such can lead to even more unmetered complexities. Or, 'care' can represent the greatest presentation of humanity.

> "There are millions of people… Millions! All grappling with the same difficulties. All assailed, from time to time, by guilt and doubt and loneliness and despair. All doing something that is necessary, worthwhile and, dammit, wonderful."
> (H. Marriott, 2011, p50)

Perhaps, there is no greater human capacity than to sacrifice yourself in order to improve the living conditions of other people who, through no fault of their own, need your support, help and care. Dementia is one of the UK's largest health concerns today there are an estimated 850,000 people living with dementia in the UK (www.alzheimers.org.uk). The term covers a plethora of conditions that progressively reduce a person's mental capacity and with that comes faltering

memory, reasoning, fine motor skills, sight and mobility leading to the need for support and care. The conditions termed as dementia, strip people of personal thought structures and reasoning, and as such a sense of self. The rate at which the problem has increased has required families and friends to devote themselves to caring roles. Simply because social and medical care cannot cope with the numerical and economic burden. And so, that burden becomes privately solved, but often there is a struggle to do so. Pressure is put upon the nearest and dearest to fulfil the care void and to assume responsibility. Within this context a number of lifestyle, health and wellbeing impacts occur. Often what appears to be the symbiotic occurrence of mental and physical strain becomes a common factor.

In his book, The Selfish Pig's Guide to Caring, Hugh Marriot (Marriott, 2003) embarks upon many of the complex discussions of what it is to care, from a carer's point of view. Identifying that the process of caring appears to demand that you lose the sense of yourself in the cycle of expectation or burden now forced upon you as a caring individual. Through first-hand accounts his experience and knowledge, illustrates the complex position that a carer executes and the duress under which those activities are performed, the sense of duty and the need to put oneself aside in order to best fulfil the role. Through conversations, meetings and workshops undertaken, between 2015-17, with carers and people living with dementia in Edinburgh the patterns and concerns illustrated in Marriott's discussion were often repeated. These conversations are used within this work to highlight perspectives and to illustrate the potentials for disruption through design. This work discusses the primary carer and the situation in which they provide care. It is apparent that this context of care, most commonly identifies the person living with dementia as the person of primary concern, appearing to down grade the rights of the carer and their personhood. It is within this stressful consideration of care, based upon pre-existing relationships, that many of the key concerns for individual wellbeing comes to the foreground. Personhood for both the person being cared for and the carer themselves becomes muddled and individuality is unclear. Although support for people who are carers his recognised as being widely improved, problems persist especially in the form of isolation and the loss of personal identity for carers. As such it is arguable, that a system that forces a person into a position of care and that requires a carer to 'give-up' on themselves is one that is broken. As one workshop participant stated "There is a need to care for carers, a need for changing perspective".

As previously alluded to, it appears in current processes of care support and care assessment that the discussion of carers is taken predominantly from the person being cared for's perspective. Age UK in Improving Later Life: Services for Older People Caroline Glendinning (2014) suggests that as such the ways in which care is managed and assessed from the carers perspective are unsatisfactory at best. For example, questions, as to whether or not people want to be in a caring role are not asked. The impact includes disjointed assessments of the parties involved, which, in many ways, suggest at least disinterest, and at worst neglect of the lived experiences of carers.

It should be noted although the discussion this far appears rather bleak, it is clear that many carers undertake the role because they want to. In the discussions I have undertaken their talk is often of the responsibility to care, a sense of 'It is my wife or husband, or mother, or father and therefore it is my responsibility to care' is a common reasoning of the undertaking of the role, and that this is usually tempered with the view that they do it for love. Admirable as it is to be in a caring role, like all roles time and pressure can take its toll. As such, evidence suggests that there is a need to measure the stresses of the role. As Glendinning (2014) identifies the system for carers needs resolutions, systems need to be adaptive; responsive to changing needs and mind-sets or flexible enough to adapt. These sytems must also be clear in the understanding that carers need support and appropriate monitoring. For most carers and care paths, there is a threshold to delivery of personal care must be recognised and psychologically overcome. One key part of which is the point at which to relinquish the care being given. Which in itself results in further issues of belonging and place for the individual carer. It is important to understand these thresholds and to understand the general health and wellbeing of carers on route to this point. There also appears to be a requirement to support and guide people when changes in circumstances are required. As one carer discussed "overcoming personal perception of stigma on not seeing through the commitment [it is a] massive thing to give up; that you've been defeated" she continued that "it's alright to be selfish" and that there is a need to "overcome guilt; dump the guilt".

Within the issues faced by carers both during and after caring are set within identity, belonging and connectedness. Here design has the capacity to develop ways of intervening in the care for carers, however, there are multitudes of ways in which this disenfranchised group of people might be supported by designers.

Design has the potential to help in identifying thresholds, metering behaviours and signposting within the acts of caring. Design and its tools also has the capacity to aid people in finding and creating their own solutions to care based problems and furthermore has the responsibility to positively reinforce personal decision making.

In the report People Shaped Localism (Buddery, 2016) the discussion centres around society solving its own problems, where the onus is placed upon citizens to manifest new ways of looking at long term problems. It proposes “local social movements as drivers of better health outcomes” the idea being that in Britain today, individuals and collectives take upon themselves the burden to find solutions. Empowering local groups and individuals to develop “a sense of local identity, belonging and connectedness are crucial to subjective wellbeing, life chances, collective inventiveness and resilience”. For example, locally empowering people to identify and fix the problems caused by an outdated, massive and cumbersome social care system. Such championing publications promote designers and their actions within this context from a belief that powerful tools for change are at their disposal. Promoting views that:

> “Rather than solving merely ‘the problem as given’ they apply their intelligence to the wider context and suggest imaginative, apposite solutions that resolve conflicts and unscertainties”
> (Cross, 2011)

It is therefore understood that design can facilitate change by delivering interruptions to the current situation empowering people and highlighting problems, making sure society and communities are informed, connected and inclusive. As care worker Beckie Rawlinson put to me in interview “if design can help in any way with carers it should help in being proactive not reactive to carers needs, identifying when carers need help much earlier, we need early intervention and prevention”.

> “As an ideal, care invites us to recognize the lived experience of others as worthy of our attention. When these others are vulnerable, marginalized, or in need, care suggests that we respond in a way that is helpful and which perhaps facilitates positive change”
> (Conradson, 2011)

The interventions or disruptions to common problems are likely to be found across a range of scales. It will require methods that challenge the sombre sincerity that often appears to surround care and the reverence in which caring is held. As one carer noted it’s good to recognise that “not everything is wonderful”, “black humour is required” and that “carers need fun space and time”.

In a social context (and after all this is a social care issue) caring for somebody with a degenerative condition can create sense of isolation compounded by dislocation from the historic personal endeavours and activities that comprised social inclusion. The very activities and identifiers of what used to be the interests of the individual carers. Caring for carers therefore requires reinforcement of a person’s esteem and reassurance of their capacity to be involved with the kinds of things that they identify themselves with, but sometimes it also requires new opportunities to be considered and proposed.

In one workshop ‘Redesign Sunday’, I ran for Edinburgh, Mid and East Lothian Dementia Action Network Dementia Network, I was informed by a former carer that, for her, “Sunday has become the loneliest day of the week”. She went on to explain that it is a day for families and then friends but also because she had become removed from historic personal social networks through the need to care for someone. For her once the caring role was removed the day became even lonelier. In this scenario it was not merely, that during the process of caring, that she had become isolated but also as a legacy of having been a carer she remained isolated. As such finding ways to regain and reaffirm who she was, was difficult and yet she was finding the idea of rethinking what Sunday could be as “uplifting and exciting”. In this investigation, she could see potential for new personal opportunities.

This work proposes that new methods for exploring and highlighting the role, concerns and wellbeing of primary carers both during and after the need to care is required as part of a holistic review. Creativity in this space should under take action that should lead to designed opportunities and acts of empowerment and personhood. The first of which may require a greater public understanding of the situation to be generated. Currently ‘care’ is most commonly represented in the form of government statistics, numerical representations of people; or, on occasion, collected commentaries in written documentation, but to ‘care’ it is interesting to think about representations in more tangible forms. Design has the power to transform complex information and to open it up to greater audiences.

Design changes through many means by the design of systems and tools but also through the creation of objects of commentary and debate. Through design there are many ways that we might bring greater understanding of the situation and how to navigate its collective challenges. For instance, there may be the potential to provide better public understanding through a barometer of care showing the state of wellbeing of carers in the UK. Or we may well find new inventive ways to encourage social integration providing time, platforms and opportunities to meet and play. Designers have the potential to find ways of undertaking disruptions capable of plotting and displaying the narrative and intensity of sentiment within care - the potential exists to create a more relational display or platforms and to develop more meaningful discussion in how carers must be cared for.

In this case caring for carers will become more explicit in that it will identify those people who have been for too long overlooked in the care system. Once this identification is clear and the situation of carer wellbeing meaningfully challenged then new ways of recognising and empowering carers can be achieved.

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Redefining care in health-care design

Jonathan Ventura and Dina Shahar

First: Outlining a Wicked Problem

In our contemporary reality design is standing at the threshold of a deep and meaningful change. On the one hand, design's main function as a romantic marketing tool is rapidly coming to an end and stemming from economic and socio-cultural global changes, its main core is shifting as well. In this exciting and challenging time, the focus on care is not only needed but will become an essential element of the future of design. However, as anyone changing a tile in their kitchen is a self-titled designer, anyone can be a "care-provider", so indeed, what is the future of care in design?

A Problem: since the early 1990s inclusive design has permeated and influenced the world of design and to our delight became an almost well-known concept. However, while some do not truly understand its scope and scale, others have integrated its backbone in their practice to such extent, we started contemplating the crucial question of "what is the next stage in the evolution of inclusive design?". Another problem relating to the focus on care in design is the somewhat fashionable concept of empathic design. As a team comprised of a design anthropologist and an inclusive designer, we clearly understand the importance and relevance of human-centred design and the empathy needed to truly understand the users' needs and constraints. However, when practicing inclusive design the empathy is embedded in its core, which then turns this important concept somewhat redundant. Furthermore, as we shall see, we cannot change a paradigm while keep using the same linguistic frame. In other words, designers working in health-*care* are not mere problem-solvers, but something different whole together. Yet, what that something is?

A Solution: Our solution, with implications both in the theoretical, as well as the practical spheres, lies in combining two major concepts of *design as interpretation* and *design situation*. As care takes central role in various design strategies (from co-design, through empathic design to human-centred design and universal design) we want to think of the next stage. For truly embedding care in healthcare

design we need another angle. By design as interpretation we mean traveling beyond the use of semiotics or indeed aesthetics to create user-centred material languages to the realm of hermeneutics. By applying this innovative frame, we define the designer not as a re-definer of products, but rather as a socio-cultural interpreter, with the ability to transform a broader vista of designed solutions. Conversely, a broader view of the designer as a spoke in a larger wheel, will result in reframing a context in which design, as a cultural and Anthropos-centred discipline is situated. This approach goes hand in hand with shifting our attention from designing a *product*, or indeed looking for "things to fix", to designing or indeed, reframing a *situation*. A situation will encompass four layers of design partners: the primary user (the patient), the secondary users (healthcare professionals), tertiary users (care-givers – i.e., friends or family) and lastly, the socio-cultural surroundings. By taking this road we believe the concept of care in healthcare design will be imbued with a deeper and meaningful layer.

Second: Back to the Roots

In many ways, the Romantic ethos of self-fulfilment transformed design into its current manifestation of aesthetics-focused discipline, laden with compelling narratives and evocative attributes. Coupled with the rise of industrialization, it became a marketing tool for consumerism and conspicuous consumption, in Veblen's terms. Furthermore, the moment designers stopped discussing ideology was the crucial moment when a drift was formed between the designer, the industrial sphere and the socio-cultural sphere. Prior to WWI and Following WWII and its horrendous effects, designers started refocusing their interest on ideology. Austrian architect Adolf Loos is a good example for bringing back designers' attention to function (naturally, after Sullivan's famous call for *Form Follows Function* in 1896), embedded in a somewhat socialist view of the intricate relation between the modes of production and their professional agents – designers and architects. Designers, according to Loos, should keep ornamentation to a functional minimum for two reasons – economic (reducing costs) and professional (the addition of ornamentation takes up precious workhours).

Half a decade later, American designer Henry Dreyfuss with his masterpiece *Designing for People* (1955) brought back the end-users to the equation. Entre parenthesis, however, while his outline of ergonomics was and is crucial in applying care, the socio-cultural sphere was overlooked or even neglected. As

a last point of interest, Victor Papanek's seminal work *Design for the Real World* (1971) introduced ecology and ethics to the design discourse of his age. In a famous quote, he called designers to think not on "how to design", but rather on "why design?". And yet, looking at our contemporary crave for new Apple gadgets and ever-growing annual design festivals, depicting all the usual high-end suspects (a lamp, a chair and a fruit bowl), let us refocus two key-points in design evolution, that called for attention to design function - the Ulm School of Design and the influential minimalist German designer Dieter Rams.

In turn, the important debate/conflict that ended in the collapse of the Ulm School in the 1960s symbolizes a clash between classic product design and its ideologic alternative. Tomás Maldonado (1991) described the School's social, philosophical and technological revolution as a transition from alchemy to chemistry, a metaphor symbolizing the change from magic to a more scientific approach. In sum, Maldonado rejected the school's previous headmaster German Max Bill's lofty depiction of the "artist-designer", along with the over-emphasize on the designer as partnering with the ever-growing consumer culture. The role of the new designer, according to Maldonado was to become embedded in the production process itself, mediating other professionals, in order to attain maximum productivity, material efficiency, and cultural satisfaction of the user (Betts, 2004). Naturally, while Bill symbolizes the classic efficiency-centred design approach, care as a central concept would have found a warm welcome in Maldonado's socially-oriented embrace.

As another offspring of the Modernist approach to design, Dieter Rams' "10 Principles for Good Design" are retaught and remembered exactly for their relevance to contemporary designers focusing first and foremost on function. While his contribution to user-centred design or indeed social design could be challenged, let us try and rephrase 3 of his most relevant "commandments" and see how we can use these as a platform for regenerating care in healthcare design. In other words, rephrasing Rams' concepts will lead us to the next step of inclusive design, or in turn to re-evaluating care in healthcare design.

No. 3: "Good design is aesthetic". Dieter Rams' original principle is almost a reiteration of contemporary healthcare design – "The aesthetic quality of a product is integral to its usefulness because products we use every day affect our person and our well-being." In other words, as we shall see, aesthetic decisions along the design process of healthcare could and should influence the

medical, recuperation and rehabilitation processes and ultimately the patient's well-being. When interviewing an Israeli medical designer, we asked what is more important in his work, aesthetics or function, he answered instantly – aesthetics. His explanation relates to the first question asked in the "Design Cares" frame. The question is indeed not "How can we live with care once it has been aestheticized?", but rather, "what is the functionality of the aestheticizing of medical products"? In itself, aesthetic features of healthcare products come second to their functionality, but, as designers harness aesthetics to empower the users, or to enable excessive use of these products – it is an important step in the right direction. Therefore, when imbuing aesthetics with various layers of meaning, whereas hermeneutic understanding becomes useful, they become crucial in applying care in design.

No. 6: "Good design is honest". Apart from keeping to one's promises, the essence of honesty in healthcare design is that of the designer as an involved socio-cultural agent or interpreter. As we mentioned, along the 20th century, design as a discipline lost its connection with the social sphere in which it operates, and thus designers lost their connection with the communities in which they are embedded. In healthcare design, it is fairly easy to strengthen one's sense of care, however in classic product design it is much harder. In that manner, refocusing on social design as an umbrella concept relating to various strategies (from co-design, through universal design, empathic design and human-centred design),[49] will lead us to a different type of care, that of the various persons for which we as designers work. Therefore, when dealing with care in design, the ethical frame should stem directly from the red lines outlined by the design team, as well as a clear ideology regarding the place of the designer in society.

No. 10: "Good design is as little design as possible". Rams talks of "purity" and "simplicity", however, in the popular style dubbed "minimalism" lies various dangers, not necessarily originated by the 10 principles of good design, but by Rams' successors. Much as Apple, various brands, dealing with visual communication, architecture or product design, have harnessed the essence of "as little design as possible" to their marketing efforts, followed by a substantial

49 Indeed, there is an inflation of "person-centered" strategies in design, yet see Ventura and Bichard's table relating to these vis-à-vis their concept of social design in Ventura, J., & Bichard, J. A. (2017). Design anthropology or anthropological design? Towards 'Social Design'. *International Journal of Design Creativity and Innovation*, 5(3-4), 222-234.

price-tag. Going back to Adolf Loos' *Crime of Ornament* (1908), we must stress the importance of rooting minimalistic design in ideologic theorization. For minimalistic design to create an impact and generate care in healthcare it must relate to what is termed "frugal design". However, while one might claim or search for frugality in Johnny Ives' sleek products, we must separate between stylish frugality and ideologic frugality. A classic ideologically-embedded minimalist design would be the woodwork of the Shakers. Deeply-rooted in religious principles, leading to a specific colour-scheme, simple yet extremely intelligent use of materials and configurations, the Shakers' design embodies all that frugal design should be. Added with the importance of a strict economic budget will help relate care into contemporary healthcare design. Therefore, in harnessing the essence of care in the design process we must start by rethinking the very definition of the designer. Traditionally, being a designer meant you are primary invested in caring about aesthetics, caring for functionality, caring for user-friendliness etc. However, as designers become increasingly involved in diverse and complex systems and situations, care must evolve to become the ability to observe human situations with as little design in mind as possible. Paradoxically, this state of mind enables the designer to identify real needs, define objectives, and create meaningful design outcomes. Therefore, we must not look for solutions, but perhaps generate a broader process of enabling, which could be applied in three layers – change (redefining the needs and desired outcomes, or translating in hermeneutics lingua), improvement (changing something, or interpreting in hermeneutics) or suggesting a deeply-rooted contextual non-change or non-design. This new designer, acting as a contextual interpreter will focus primarily in enabling the design partners, imbuing each situation with various ways to shift their daily existence.

Third: Going beyond Inclusive, or towards Social Design and Design Situation

In sum, contemporary social design, as a harbinger of care stands on three keystones. First, economic and aesthetic frugality, stemming from a deeper understanding of the design partners' needs as well as the systems and processes involved. Second, ideology in the political meaning of the term, is key to bring back care as a deeply-rooted concept in the design process, not as a marketing buzzword. Through redefining ethics and the importance of design as interpretation, care would become an inherent and obvious trait of

design. Finally, these two primary concepts stand firmly in the centre of shifting from designing a product (virtual, visual or material) to designing or indeed facilitating or enabling a situation. By that we mean the various contextual layers that comprise the designed product as a mediator between various design partners.

Care is expensive

Heather Wiltse

There is hardly a shortage of care among (especially young) designers. It is not uncommon for them to arrive at their chosen profession due to some kind of desire to 'change the world' — often, though certainly not always, in directions that improve the quality of human experience. This impulse is after all at the very heart of what it means to design. Other kinds of care are also manifested in their slaving away over the details of a form, pushing pixels or shaping materials until it looks just so. Many (if not all) designers care deeply about the quality of their work and the character of its impact on the lives of those who will use or be otherwise affected by what they design. Although I am myself not a designer, I have chosen to work at a world-class industrial design school (Umeå Institute of Design) because of similar motivations: it seemed like a place where my work on the role of (digital) technologies in everyday life and society could have real-world impact, where I might be able to help young designers to develop their own critical stances toward understanding the consequences and responsibilities of design. I, as so many others, am in the field of design because I care.

With resources of talented and dedicated designers, critical (if still underdeveloped and insufficient) design and other critical theory that can illuminate the social implications of design action and designed things, and the capacity of design to change the world, why is the world still, to put it crudely, such a mess? In contrast to the potential of design, we find that it often serves to exacerbate rather than alleviate existing problems, perhaps now most notably through its role in furthering unsustainable cycles of production and consumption. It is also more often than not done in service of the wealthy or very wealthy, or as well-intentioned but naive development projects that perpetuate dynamics of colonisation (unfortunately still all too present within the discipline of design research itself). And the systems of mass production of designed goods typically reinforce global inequalities, exploiting cheap and loosely regulated labor in Asia and the global South.

In light of these considerations, a good first step for design on a path to more elaborate forms of care would be to accept Papanek's (1984) diagnosis and simply

stop doing harm. After all, it is not as if the 'evils' of industrial design and their remedies are terribly hard to identify: it is easily conceivable at least to try to source materials responsibly; ensure safe and fair working conditions for those who manufacture the products; and design products for longevity (good initial quality, repairability, cultural durability) and in consideration of their entire lifecycles (including disposal and recycling). It is also quite possible to think about designing for where there are real needs rather than simply markets for minimally brand-differentiated luxury products.

And yet, the root cause of all of these issues is sadly all too easy to identify. I have summarised it as Problem 11: Care is expensive. It is expensive to do things right rather than cheap and easy. It is not lucrative to design things for the poor who cannot afford to pay (or to pay much) rather than for the rich who can. A product that lasts for a long time is not the most productive in ensuring a consistent revenue stream, whereas one that needs to be replaced or upgraded regularly makes for a more solid business model. Commodities produced in capitalist society do not inherently require, but rather discourage, ethical conditions of production.

I have heard from already-disillusioned industrial design Master's students that, much as they might want to do things differently, when working in companies in industry they are not able to have any real effect. One student related how, after making a remark to a more senior colleague that was something to do with taking better care about the products their company (a global consumer electronics corporation) produced, the colleague responded by saying: "OK, now I'm going to break you…". He then proceeded to take her to the department that stress tests the company's products to make sure that they will break as the result of normal use, and of course immediately after the expiration of the warranty.

Another, perhaps more subtle, way in which (adequate) care is expensive is that it requires a significant investment of time, energy, and thought to develop the intellectual capabilities, both individually and within the discipline, that are necessary to properly identify and understand what calls for care and to figure out how to design an appropriate response. As noted in the reflections above, design action is undertaken within larger systems that both constrain and enable, in which there are multiple actors with different interests and levels of power. And designed artefacts themselves can play complex and even political roles in human experience and affairs, as shown by extensive literatures in philosophy

of technology, technology studies, media and cultural studies, as well as some literature in design research. Yet it is well-known and often remarked that 'designers don't read', a phrase uttered at times with ruefulness or exasperation and at others with a tone of sympathetically indulgent acceptance of the way things are that also tends to characterise phrases such as 'boys will be boys'.

Adequately thinking design and accounting for its possibilities and responsibilities requires engaging with a level of systemic complexity and with social structures and dynamics in relation to the artificial that are not available to immediate perceptual apprehension at the level of a designed artifact. In addition, there remains a severe dearth of intellectual resources that directly address these issues from the perspective of design, even though many can be productively appropriated, "stolen," and pieced together from other literatures (Dilnot 2016). And no amount of waxing rhapsodic about making as a form of knowledge production while prototyping

hipster collectibles or couture lifestyle accessories will suffice to address these challenges. In order for design to become adequate to the task of caring responsibly for the artificial and its consequences, it must invest in developing the intellectual resources and skills that are necessary—a rather expensive proposition on several counts.

In this context, I have been thinking with colleagues about the response-abilities of design: not only what design should do, but also what it is actually able to do, and, importantly, what contexts and resources are required in order for it to have the capability to adequately respond to what calls for care (Wiltse et al. 2016; https://designresponseabilities.wordpress.com/). I suggest that in order to foster more care-full modes of industrial design (and not only design research), we need to squarely address the fact that care is expensive. Design has so far been expensive for the planet and for those at the back side of the capitalist commodity production process (as seen in the extreme when they pay with their lives when a factory collapses). But since expenses must be reconfigured in order to properly care for the planet and people on it, who should get the bill?

There are at least two sets of broad issues sketched here: the first has to do with more or less obvious issues of ethical production and consumption and design practices aimed at serving wellbeing and sustainment for all than the luxury lifestyles of the super rich few (and the exploitation of others they entail). The

second deals with issues of complexity and the less obvious ramifications of the artificial and its current and possible configurations, and of mapping and bringing to presence things that are matters of concern and the conflicts they entail (Latour 2008). This is the intellectual problem of thinking design in ways that can lead to adequately caring for its responsibilities and possibilities. Not least, this involves the radical reconceptualization of form that digital networked technologies require but has barely been begun (Wiltse, Stolterman, and Redström 2015; Redström and Wiltse 2015).

Regarding the first set of issues, this is ultimately a political question not unlike others concerning distribution of power and resources, and political mechanisms that can be put in place to limit and channel them (e.g. regulations, public investment and incentives, tax structures). This is obviously hugely complex, and changing things in preferable directions would also require a certain level of altruism and strength of political will that are unfortunately not hallmarks of the politico-economic condition of neoliberal global capitalism. Imagining and prototyping realistic alternative conditions for its own practice that move outside existing logics of industrial capitalism could thus be an important task of thinking design. However, the difficulty of this task should not be underestimated, particularly in light of the fact that it was industrial capitalism that called industrial design into being and continues to serve as its raison d'être and pragmatic source of sustainment.

This leads to the second, intellectual set of problems. There is of course a substantive set of challenges here regarding the intellectual work to be done. Much more can and needs to be said on this that is outside the scope of the present short reflections and provocations, although I will at least heartily endorse Dilnot's (2016) proposal that those of us working in design research become unrepentantly curious intellectual thieves. But the question of expense is more of a structural issue that touches on the resources and priorities of departments where design (research) happens, and on the funding structures that determine which kinds of research are supported. Design studies research is, in my own context of Sweden at least, in a tough position. It does not really fit anywhere in existing funding structures, where 'Design' as a subject sits under artistic research, the social sciences and humanities budgets are already stretched thin by more traditional types of research, and more technical areas are typically driven by the imperative to deliver 'innovation' in a way that is not

terribly hospitable to critical thought. At more local levels, it is also a question of whether space will be made in design curriculums for criticality of the sort that might challenge and expand students' worldviews, perhaps even requiring and valuing substantive reading, reflection, and writing as core elements of becoming reflective, care-full and care-equipped practitioners able to both draw on and productively extend the collective intellectual resources available for thinking design and its consequences. It is also a question of whether design studies will, rather than being servile to it, speak back to design and hold it to account in the name of things that call for care (Tonkinwise 2014). The cost of developing adequate intellectual resources involves resources of the ordinary financial sort but also other less tangible ones, such as courage, passion, and perhaps even a little bit of stubbornness. And of course, it requires care.

As with any expense, the expense of care requires justification that it is a reasonable and necessary cost and/or a good investment. Fortunately, there is a compelling case to be made.

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How can we live with care once it has been aestheticized?

Peter Lloyd Jones and Trudy A. Watt

[DESIGN is the method of putting form and content together. Design, just as art, has multiple definitions; there is no single definition. Design can be art. Design can be aesthetics. Design is so simple, that's why it is so complicated." Paul Rand]

DESIGN, CARE and AESTHETICS are relative terms with multiple meanings, and so any attempt at generating a single solution to a specific problem involving all three is bound to produce an array of conflicting and complex final positions. Furthermore, each of these words may be perceived differently, depending upon countless additional factors including literacy, history, time, experience, context, environment, scientific and technical knowledge, stage of life, memory, perceived and personal values, religion, socio-economics, ethnicity, geographical location, culture and so on. Care alone has the potential to impose different values and characteristics upon design as a process or a product, which subsequently exert their specific effects on individuals, groups, and entire systems, depending upon whom they target, what they are trying to do, and where they operate at a particular moment in time or place. But it is aesthetics, with its mercurial "Je n'est sais quoi?!" heavily rooted in visual culture, the class system, judgment, taste, market trends and politics that can rapidly change the demographic profiles of who cares or not.

As a potent antidote to these faster-moving and fickle effectors, ethics allow care to transcend aesthetics, and in ways that include empathy, a carefully considered and highly prescriptive form of care. Ethics may also create an additional layer of deeper care that enhances value and worth; it connects a design with its intended user at a deeper emotional level beyond the purely visual aesthetic. To achieve this feat, personal experience, professional knowledge, and research combine using logic and intuition as additional super powers, which help to balance empathy within the final formula: Too many drops, and the result will appear to be opportunistic or sycophantic. Too few, and it will feel uncaring or disingenuous. When an appropriate balance is found, however, empathy delivers

a sustained key core value to care that creates a powerful psychological link between the producer, their work, and the audience. This act of alchemy is part of what happens when a mother bonds with her newborn child, reflected in the commonalities of physiological responses that these very different experiences trigger.[1] So in the end, perhaps it just comes down to creating a simple formula which anyone can use?[2] Given the emergent and complex behaviors that arise when nature meets nurture, however, it is of no surprise to discover that these intimate, intense and highly energetic encounters cannot be recapitulated using a simple, single, linear algorithm to be shared on demand in order to create aestheticized care, yet this notion forms part of the underlying logic behind the design thinking movement.

Originating as a business tool, and later touted as a shortcut to empathy, creativity and innovation, when framed within the context of care and aesthetics, design thinking does not live up to its promise. Even if it did include a contemplative phase, design thinking participants still often lack the necessary fundamental knowledge, context, experience and tools for which practiced design professionals are revered, including a complex understanding and delivery of care. Simply put, design thinking is a transient, high-speed, hacked-in, top-down, diluted version of care, which not only lacks professional expertise, but also perhaps humility, another essential ingredient in the empathy toolkit. In commenting on a design thinking workshop aimed at "redesigning death" one critic noted "As the team delved into the endless complexities of their grand idea, they began to understand how something as vast as death eludes the kinds of solutions that could help fix a chair or website. There's something important to learn here: Though tackling great ideas and big problems (via design thinking) can be a noble pursuit, doing so without humility defeats the point."[3] Without a doubt, design thinking's main intent is to care about the problem being addressed, but in doing so it inadvertently trivializes and seems to care less about the very profession it wishes to emulate. In a sense, this reversal of care resembles what developers of digital tools are experiencing, including those designed for social media.

Increased global communication through social media and the internet was expected to enhance democracy, while connecting people across borders, mountains, oceans, and even other atmospheres. Once out of the hands of developers though, unintended consequences soon appeared. This was especially

notable when this type of aestheticized care networked more deeply and autonomously, and along the way became subject to transformation in the hands of other developers and other agencies, both governmental and other. Fast-forward to today, and machine learning is also taking flight, but from whom or what is AI learning, and do we even care or understand enough to intervene if it takes a wrong turn? As a species, we've only just mastered TV remote controls, and it seems that we're still apprenticing on mainstream social media, because we don't know what to expect, or how to use it to care for ourselves and others. With our smartphones we Instagram happiness when we're absurdly depressed, so no one has to worry. When our tweets receive approval, our dopamine levels spike giving us a reward…but if we dislike a particular aesthetic, or disagree with an idea presented using this type of media, we never have to look at the hideous or distasteful [fill in the blank] again. We unfollow, unfriend, or block as a way to stop caring about others while increasing our sense of righteousness. Sometimes this may be justified if our Facebook friends are really fascist foes, or if fake news and hacking are derailing democracy. The overarching "net" effect, however, appears to be leading us further into fear, loathing, isolation, and a war of words composed of 140 characters in Helvetica, a font whose aesthetics graphic designers care for very much, incidentally). Unfortunately, the chronic stress that crooked social media produces is already having noticeable and measureable effects on mental and physical health[4], including the effect of increasing loneliness, now considered a reliable prognostic indicator for early death, especially in the elder set[5]. How then can any of us continue to live with care that has been aestheticized?

Viewing all of this from a scientific level, what is striking about the way in which these multiple factors interact with the systems of care already described, and the variety of care responses they potentially produce, is that it almost describes "systems biology", an interdisciplinary field of study that focuses on dynamic, emergent and complex interactions that co-exist within living systems, and one that integrates a holistic versus reductionist (one might even say modernist) approach to mechanistic knowledge acquisition. More specifically, the care systems described seem especially well-suited to interrogation involving theories of epigenesis, famously described by Conrad Waddington in the following way: "Genes are not only actors, but are also acted upon."[6] If we transpose this rather dramatic, genetic-turned-theatric metaphor into a set of instructions for the design of care, however, we might rephrase it like this, Design idea(l)s become

real and cared for only when they respond to specific criteria held in tension by ethics and aesthetics.

Although this latter definition of epigenesis is also subjective and simplistic for something as complex as care, the comparison is valid at some level, because both are nonetheless replete with multiple active nodes, checkpoints, and balances that have evolved over time to specifically care for the survival of any given species within their ever-shifting aesthetic landscape. Considering this, perhaps it's worth reappraising epigenesis as a device in the larger human sphere –in art, design, aesthetics, philosophy, politics, and social institutions? In a landmark paper titled "Bioconstructivisms" architect and theorist Detlef Mertins indeed describes the idea of epigenesis in the context of a broader human condition, and before systems biology became a fully-fledged field unto itself. Mertins states, "Epigenesis provided a direct model for Kant's deduction of the categories, on which his shift from metaphysics to epistemology relied. 'Only if they are self-produced can the categories guarantee transcendental apriority, and, by implication, cognitive necessity and universality.'"[7]

Since epigenesis appears to be a useful metaphor for discovering relationships within complex systems, we'll describe how its transposition into another field, via an aesthetic model cared for and shared between science and design, may give rise to new architectural typology, as well as a de novo treatment strategies for cancer care. Finally, we'll provide examples where the use of aestheticized care may cause harm. Examples include eugenics, slavery and racism, each of which may be rooted, in part, in a false aesthetic model designed to create wealth via a one-sided, non-negotiable, dehumanizing process that simply doesn't care about humanity as a whole. And because of this lack of ethics, and thus lack of care, injustices and atrocities can and do arise. Before tackling that, however, we'll return to life and how it may be improved through aestheticized care, in this instance of a universal model whose structure was first conceived and cared for in the aesthetic art of sculpture.

An Aestheticized Model for Design and Science which Weaves Between and Benefits Both

From carbon lattices to skeletal systems, tensegrity is a universal and scalable naturally-occurring system, first made comprehensible by both Buckminster Fuller, who invented the word, and Kenneth Snelson, who made it real through

sculpture[8,9]. Since then, tensegrity has been successfully shuttled back and forth between art, design and biology by many including Stephen Levin and his early models of biotensegrity[10], Mina Bissell and her now proven theory of "Dynamic Reciprocity"[11], and Donald Ingber in describing the geometric control of life[12]. Peter Lloyd Jones, who trained with Bissell studied tensegrity in his own lab, revealing new mechanisms of blood vessel development, breast cancer development[13] , and most recently how spaces are generated in tissues to form or prevent the presence of a lumen[14]. Importing this model into LabStudio, a design research practice co-founded with architect Jenny Sabin, represented the next step, where this move further catalyzed their joint research in biology and architecture[15]. In 2017, as winner of MOMA's PS1 Young Architect Program Prize, Jenny Sabin chose tensegrity as an integral part of her studio's design of LUMEN; a soft curvaceous, caring, cooling, cavernous, canopy of "knitted light", which glowed, sensed and touched visitors with color-changing fabric columns, and clouds of mist to provide a reprieve from New York's Summer heat and humidity[16]. These examples show that when models are carefully considered and shuttled between science and design, their abstract descendants may gather information, or ornament, over time. In other words, the initial aesthetic draw of the tensegrity model already makes us care, and is "acted upon" and augmented in an epigenetic manner. It feels closer to nature with each and every pass, even though it is entirely synthetic and digitally-produced at every stich from the initial script to the lights that illuminate.

So what value might tensegrity filtered through design and science bring back to medicine and the healing arts? To answer that, a brief explanation as to how tensegrity works is needed. Snelson's sculptures (a design) are amongst the first to demonstrate the sheer beauty (aesthetics) of opposing forces working collectively and in vibration (genetics + epigenetics) to generate an awe-inspiring structure that can self-support -- and as if by magic. Tensegrity or as Fuller coined, Tension + Integrity, is a categorical term used to describe a structural, material system defined by tensional integrity. It refers to structures that exhibit continuous self-tensioning through a balanced array of discrete tension and compression members. Significantly, as early as1935 in his article entitled "Le Toles Composees et leurs applications aux constructions metaliques legeres", Robert Le Ricolais imagined a rapport of relationships in opposition, leading to the conclusion that there is a correlation between a mechanical principle and a geometric pattern, an aesthetic[16]. As with models of architectural tensegrity,

tension in cellular tensegrity is continuously transmitted across all structures within the cell so that tension in one of the members, results in increased tension in members throughout the structure. How does this relationship relate to environmental influences on cell behavior?

Within cells, a network of filaments extends throughout exerting tension. In turn, this structure is connected through the cell membrane to the cell's extracellular matrix, and inwardly to the nucleus via filaments that comprise the nuclear matrix. Thus, the cell can be viewed as a "hard-wired" parametric network of molecular struts, which extend from the extracellular space to the DNA via the cytoskeleton. If the cell and nucleus are physically connected by tensile filaments and not solely by a fluid cytoplasm, then chemical or physical stimulation of receptors that interact with the matrix at the cell surface should produce immediate structural changes deep inside the cell. Indeed, both actual and simulation models of tensegrity reveal how mechanical forces applied to the cell surface lead to realignment of cytoskeletal fibers/filaments and structures within the nucleus (where the DNA code is located). What is more, soluble biochemical reactions are known to take place on the solid-state cytoskeletal fiber bundles, indicating that changing extracellular matrix-dependent cytoskeletal geometry can modulate signaling to and from the cells code.[18]

At a physical level, this model is also remarkably similar to Le Ricolais' Trihex network structures, and to his Funicular Polygon of Revolution system, which is described by "connectivity of the compression system, and the chain action of the tension cables, acting as bundles of fibers." This has also provided ample clues as to what might happen when tensional integrity (the ethics of a cell) is compromised, and nowhere is this more obvious than in cancer cells, most readily described as renegades that bend all rules. In most forms of cancer, multiple genetic alterations, some inherited, but most simply put, cancer cells defy the normal laws of nature by creating their own rule-set, including altering the equilibrium that governs and defines tensegrity/integrity.

Because our primary role as designers, biomedical scientists or physicians is to care, great efforts have been made to use this information in order to reprogram cancer cells in ways that may eventually lead to new cures. Experimentally, this tactic appears to be a success, because if cancer cells are tricked into re-engaging a normal epigenetic landscape, they quickly restore their tensional integrity, and revert to a completely normal form, both morphologically and behaviorally[19.] Of

equal importance is the fact that they now ignore the internal nuclear mutated DNA code that marked them as cancer cells in the first place. In their normalized state, they become good neighbors once more; mowing their lawn while obeying a few simple rules of decorum. So can this type of scientific model, transferred to scientists through art and design, also provide sufficient "cognitive necessity" as to be used as a universal salve for other sometimes equally life-threatening ills in society, including racism? In other words, if science and design begin to converse and collaborate on equal terms, could they solve other significant world problems, including racism?

Careless Beauty: The Racist Roots of Modernism

Skin color has no value in determining phylogenetic relationships among modern human groups, yet it has been used to persecute and enslave entire nations. In this instance, no amount of care can prevent an ignorant observer from seeing the color of someone else's skin. The observer is using an irrational aesthetic code that is detrimental to the survival of our species. Racists only care for themselves or people of their apparent outward appearance or phenotype. In scientific terms, this makes no sense because we are all derived from a common human ancestor pair. In fact, there is more genetic identity between a black Ugandan and a white Norwegian, than between a black Ugandan and a black Kenyan---We all came out of Africa, and it is migration and UV index (i.e. geography), not genetics, that determines skin color. Skin color is not a determinant of race. Race is a fabricated construct. If we truly care, we must fully reject this type of racist self-care, especially in this aestheticized form. But from where did these notions arise in the modern era, and did design play an active role?

Examples of the way that racism, a conscious and deliberate positioning of one group of people over another based on skin color and/or ethnicity, has manifested in acts and eras of violence and oppression both great and small abound in human history. What may not be surprising, but is not typically legible outside design academia, is that early expressions that form the basis of an argument for Modernism in design are also rife with racist delineations that separate the cultured (white and Anglo) few from the backwards (black and brown) many.

The Viennese architect Adolf Loos' 1908 essay *Ornament and Crime* is a canonical piece that simultaneously asserts the superiority of an emerging, unadorned

Modern aesthetic (naturally enjoyed by a cultural elite) that elevates the worker through reduced labor time and casts aside the ornament-encrusted aesthetics of history and diverse cultures, along with the tastes, traditions and intellect of applied artists, indigenous people and people of color who are too "childlike" to be expected to embrace the new aesthetic. Loos famously observes the tattoos and object adornments of the Papuan people with characteristically forgiving paternalistic condescension and adds that any "modern person who tattoos himself is either a criminal or a degenerate."[23] Contemporary readers condescend to Loos, in turn; forgiving his racist argument at least in part on the basis of historical cultural context in much the same way Loos forgives the Papuan his tattoos that would be a mark of criminality on any modern person. This forgiveness, in combination with a willingness to look past Loos' intensely racist claims due to his other contributions to the early formation of Modernism in design, results in the passage of these claims into the design canon that still forms the basis of our tastes today.

Although there are designers, scientists and engineers whose critical collaborations step away from a reliance on Modernism's core aesthetic tenets (e.g. Achim Menges, Cecil Balmond, Neri Oxman, Philip Beesley, Sabin+Jones LabStudio, Jenny Sabin Studio and Immersive Kinematics), the prevailing aesthetic preference, and the most highly valued contemporary design (whether in the form of architecture, or objects for everyday life) still conforms to the principles of unadorned Modernism that Loos was among the first to champion publicly. Loos was mocked in his own time and sparked outrage with his writing in such a way that the contemporary reader tends to see him as being 'on our side' – a revolutionary against the golden volutes and bejeweled finery that were the privilege of the elite in his time. While *Ornament and Crime* does contain an almost socialist concern for the valuable time of the worker, it simultaneously preaches to "the aristocrat…the person at the peak of humanity, who yet has a profound understanding of the problems and aspirations of those at the bottom."[24] Given the persistence, even at the birth of Modernism (with all of its experimental and revolutionary aspirations) is it any surprise, then, that the most beautifully sleek and Modern objects available today are accessible only to a privileged few? Even though many of us have access to a Modern aesthetic via aspirational consumer goods available at IKEA and its ilk, these products violate the conditions of quality that Loos puts forth as one of the critical characteristics and benefits of Modern design. The aesthetic that we are all familiar with,

whether or not we know it, and that represents perhaps one of the most energetic breaks with history we know of in design, the new digital turn notwithstanding, still carries with it a perniciously traditional ethic of care, one that marginalizes and discards people's contributions, intellect and values on the basis of skin color, ethnicity and in this case aesthetic preference as an indicator of cultural aptitude, as well.

Conclusion

In conclusion and via this summit, we will further discuss and contemplate ways to re-configure and even improve how we care, regardless of how we are viewed by ourselves, or others. This may rely upon designing systems that actively promote ways to alter our perceptions of one another, creating an empathy machine of sorts, while gaining a better understanding of the neurobiology of care. Perhaps a new Design Science revolution will allow us to eventually match care and aesthetics in ways that are more careful, so that we can begin to embrace difference or otherness. Based upon the notion that design, via biology, can actually persuade us to "Judge a book by its cover," we posit that design has the power to enact the opposite. After all, the recent description of *Homo prospectus* indicates that as part of our survival strategy, humans tap into their forward-thinking and optimistic selves, which encourages us to imagine care for ourselves, and others in a future place within which current aesthetics have no meaning, or at least not yet. Only then might we return to the starting point, and ask again, but this time with science and a little more experience in hand, "How can we live with care, once it has been aestheticized?"

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Note: Additional ideas, comments and conclusions made about this position paper after it is presented can be sent to and read on social media using #**DoesDesignCareLancasterUKUSA** or using the same # on Twitter via @MEDstudioJEFF

In conversation: Is care in opposition to design?

Chris Fremantle and Lynn-Sayers McHattie

We need to challenge underpinning assumptions of design including 'Who does it?' 'What's it for?' and 'How do we learn to do it?' are brought into sharp focus by the question of care. Care might even be something conceived to be in opposition to design. Care isn't a discipline whereas design might still think of itself as one.

CF: Merle Laderman Ukeles' 1969 Manifesto for Maintenance Art argues that the Avant Garde is "individualistic", characterised by "doing your own thing" and "dynamic change".[50] She calls this the "death instinct". She contrasts this with the "life instinct" which she defines as "perpetuation and MAINTENANCE of the species; survival systems and

operations; equilibrium". Care might be understood to be formless in itself, deriving its form, wrapping around, the thing being cared for.

Ukeles gave form to care in her project Touch Sanitation (1979-1980), shaking hands with all 8,500 sanitation employees of the New York City Sanitation Department. This iconic act of care for the carers challenged assumptions about art. Care fends off death. But care can also objectify the thing being cared for. Continuing to explore Ukeles work for a moment, the sanitation workers are disposing of things which have been categorised as rubbish (objectified), but Ukeles by her acts enters into a relationship with each sanitation worker as a human being. She precisely counters the objectification of the 'sanmen'.

LSMcH: It's interesting you bring up that care may be understood to be formless in and of itself, that is, in tension to design, which as a discipline, particularly through design practice purports to give form - material or immaterial – deriving its form, wrapping around, the thing being cared for. In this conceptualisation design is aligned to clinical and care contexts that emerge from practice rather

50 http://feldmangallery.com/media/pdfs/Ukeles_MANIFESTO.pdf

than theory. Ukeles work in giving form to care challenged assumptions about art. Does design care? equally, challenges the assumption that design gives form to care, rather, care is derived by the context care is found in. This brings forth methodological considerations whereby method is mediated between practitioners and researchers through consideration and contemplation of the specific context care is found in – through paying attention – in doing so we are attendant to the possible reification of care.

CF: If Ukeles offers one way of thinking about art, care and maintenance, Chris Dooks' recent PhD offers a different way, focused by making art specifically in the context of his long-term condition CFS-ME.[51] Dooks talks about himself as 'exhausted'. His question basically rotates around whether he could develop ways of making art which were achievable with his condition. Obviously one of the challenges Dooks confronts is the amount of attention he has at any particular point. He frames his practice-based approach as 'bricolage', making work from what is at hand. His research proposes that making art might help him cope with his condition. He turns the constraints imposed by his condition into creative constraints, self-imposed as part of the process and practice of making work. His reflexive approach is embodied in caring for himself.

LSMcH: In continuing the thread of care being deeply contextually located and, as such, aligned to practice rather than theory and your challenge that artists and designers working in health and care settings could benefit from a practitioner-led (such as Dooks), rather than theory- or polemic-led discussion as a means to explore the potential for creativity, innovation and different ways of thinking it's interesting to take a moment to think about these disciplinary divides. Whilst design and art may be viewed as disciplines, care would not be considered under this nomenclature. As the boundaries of these 'so called' disciplines become increasingly permeable it opens up the possibilities of innovation in care and maintenance through transdisciplinary collaborations. Our work then becomes a mode of expressively capturing a series of noticings (Shotter, 2011) and a gradual process of attunement.

51 https://chris.fremantle.org/2017/05/10/no-maintenance-chris-dooks/

CF: It is not my intention to challenge the relevance of theory, but I do think that theorizing around concepts like 'care' is vital.[52] Care is a form of practice and is relational, but has been invisible until recently. Feminist theorists have identified care as part of a hidden economy and have sought to explore alternative methods of valuation beside monetary.

LSMcH: I think it is interesting to think about care in a post-capital economy; care has largely been invisible and often informal care, which is highly gendered, that is, it is women who care and often have two generations to care for – children and ageing parents. If care is relational how do we value care? Care is performed and therefore it is currently valued at an hourly rate.

CF: Yes, care is performative in many ways. I've heard it suggested that performance is one of the key challenges to design. By performance I understand the thing that takes place after design has finished, whether that is the use of a piece of kitchen equipment or the operation of an online booking system. People (including designers) have to use designed objects and systems to perform tasks. The performance of everyday tasks is also the place where the French theorist of the everyday, Michel de Certeau, locates resistance. De Certeau suggests that commercial and governmental organisations work with strategies, metaphorically operating with an aerial perspective, but people in their everyday lives have tactics which are defensive and opportunistic, and can be related to a street-level view of life. He talks specifically of perruque, the practice of using an employers' resources for personal use – stationery and photocopiers have been the most obvious examples. Of course, both design and care exist in these contexts too and they are sometimes engaged in resistance.

LSMcH: As design has moved from the design of products, or to your previous point of giving form, to addressing complex social challenges – such as care – they can be held in tension. Design and care in this manner can be engaged in resistance. Care and maintenance, for example, are not diametrically opposed.

CF: I have recently sought to provoke a discussion about care and maintenance in a public art context through a piece just published in the Design for Health

52 The Design Research Failures project https://designresearchfailures.com has a significant number of references to a disconnect between theory and practice.

Journal and the associated blog on the London Arts in Health Forum.[53] The intention is to challenge artists and designers working in healthcare settings, to use 'no' and 'low maintenance' rubrics found in every Brief as a creative constraint. I might be asking can care and maintenance inspire design (and art)?

LSMcH: I think it is an interesting way of thinking about how we define innovation challenges within care contexts. If 'failure demand' approaches can be conceptualized at the beginning of designing care and maintenance pathways then perhaps we can not only inspire art and design but new civic and community approaches around the sufficiency of care.

CF: Yes, art and design need to be brought into a new discursive relationship challenging each other's disciplinary parameters and opening up new avenues to think about care and maintenance, both of the human and the environment (including potentially the other-than human). Care can provoke art and design to judge the imposition of form on the formless. Rather than assume that form is automatically a good thing, care asks us to judge when we objectify. It requires attention to relationality. Performance can be used to measure care and limit its valuation. Equally performance can be a space to both challenge design, but also one in which design can engage in resistance. The different faces of these various concepts form new configurations when brought into relationship with each other, each usefully destabilising our assumptions.

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Impossible care

Stephanie Carleklev

I. Introduction

Care towards people and nature is at the heart of practicing and teaching design for sustainable change. But do we ever take the time to talk about of what kind and quality this care is? Are we accepting it as a universal good that is always well intended and executed?

In matters of teaching design for change, we are still in a situation which demands us to explore new ground and to debate the pillars our education and practice is resting on. Sustainability is no add-on to an existing design curriculum or design process, but demands not only new tools and methods, but also for a careful and critical examination of attitudes and norms. While it is widely understood that focusing on technical solutions will not be sufficient, the material on how to address attitudes and norms is still thin.

Care is needed. Consequences of human activity on the ecosystem we entirely depend on, are severe and nowadays well documented. According to an international research team at the Stockholm Resilience Centre, we have crossed four of nine important planetary boundaries: land system change, biosphere integrity, climate change and biogeochemcial flows. (Steffen et al. 2015). At the same time social problems like poverty and inequality are still too appreciable. The challenge we are facing is to achieve a life in dignity for all human beings (and coming generations) within the planetary boundaries.

So the question is not what should we care for, but rather how should we care. It should not be forgotten or underestimated that life is not only a question of mere survival. It is the pre-condition for living and longing.

Having this in mind, I wonder if we have gotten the idea of care partly wrong. Like we sometimes get the idea of sustainability wrong. Maybe an "inconsistent, unpredictable and ever-changing care" would be a rather more desirable and appropriate approach.

II. Statement of the Problem

My background is in Design - to be precise in Design for Sustainable change which I teach on university level. I have witnessed the development of the field from the middle of the 90's (it was hardly present or considered strange) to my present situation in which I am fortunate to teach in a design department that focuses entirely on Design and Change. Despite, or maybe because of this fortunate situation that allows me to implement sustainability in a great variety of courses, I am confronted with the complexity and difficulty of the task ahead.

Sustainability or sustainable development are often used to describe adequate and desired responses to the environmental and social challenge of our time, but it is important to note the vagueness and complexity of the term. Originally the term referred to the ability that something could be maintained over a long period, but describes nowadays almost automatically something that prevents environmental and social degradation and is better than other alternatives. Nevertheless, the path into this sustainable future nor how this future actually should look like, are not clear at all. (Engelman 2013)

At the same time, the problems sustainability is supposed to address and solve are often complex, complicated, and highlight conflicts between "humanity's wide ranges of achievement goals" (O'Brien et al. 2013). One interpretation of our current situation is to see our fundamental problems rather as social and/ or political, while the environmental degradation we are witnessing are only the symptoms. (Vare and Scott 2007) Therefore, many advocate for shifting the focus from presenting technical solutions to an education that address attitudes and norms.

Throughout the literature of sustainability and design for sustainability, care is either mentioned directly or described indirect by using synonyms like protection, responsibility or awareness.

"*If we do not operate from love, acceptance, and care, we will continue to dominate others and the world as we do now, with all the negative consequences we call unsustainability.*" (Ehrenfeld and Hoffman 2013) While not completely identical, both concepts depict a lot of similarities.

Care is defined by the Oxford English Dictionary as the "charge; oversight with a view to protection, preservation, or guidance". Asked for a definition of care, Maureen Sander-Staudt writes "*One of the most popular definitions of care, offered by Tronto and Bernice Fischer, construes care as "a species of activity that includes everything we do to maintain, contain, and repair our 'world' so that we can live in it as well as possible."*

It would be no problem to exchange "care" by using "sustainability" in this quote - it still would make perfectly sense.

III. Recommendations

In matters of teaching design for change, we are still exploring new territories. While the amount of literature, courses and practical examples within design is constantly growing, it is important to continue the process of exploring and critical evaluating our work. One particular difficult aspect is the work with values, attitudes and norms in this process.

Is Care Universally Good?

In his book "Sustainable by Design" Stuart Walker compares sustainable development to an "*important, but never less limited, mythic story that attempts to give meaning to some of our principal modern-day uncertainties.*" (Walker 2006) He is not questioning the need and good intentions, but offers this comparison as a different perspective.

Thinking of religion, we get reminded that while also needed and well-intended, it has and still is used to exercise power over people and behaviour. Tronto and Bernice Fischer express the same concern and highlight responsiveness, as a dispositions as the requirement for "consideration of the position of others as they see it and recognition of the potential for abuse in care." (Fischer in Sander-Staudt) It is a fine line between one wanting to protect and support somebody and acting as a moral judge over behaviour that is not considered appropriate.

While I would never advocate for not exercising care, I find it important to address this dilemma in the work with students. While we will not find the perfect solution, being aware that care (like sustainability) can be "political in the sense that care, as a gesture, is persuasive and persuading someone to do something changes their behaviour" is the first step towards evaluating one's own work. It also prepares for a dialogue about the foundation of our values – something done way too little.

What is Care Actually About?

As a teacher who works with design for sustainable change, I often witness incredible devotion and seriousness in students. So serious, that projects that inspire, charm and challenge us are becoming few and fewer. Not to speak about work that makes one laugh.

There is no shortage of design projects that succeed to express care for the planet in an inspiring way, but it is easy to get deadly serious in the face of the environmental and social challenges we are facing. It becomes so easy to focus on problem solving rather than possibilities - probably missing a lot we would care for in this world.

"But without some greater aspiration or vision of human existence and purpose, it is hardly enough to inspire us, let alone sustain us. Sustainable development yields only a partial and, ultimately, a rather meagre picture of the human condition. …. "it is largely bereft of ideas that nature and develop the inner person - the inspirational, the imaginative, the transcendent and the struggle for self-knowledge. These are aspects of our existence that fuel the artist, the composer, the musician and the poet…. Sustainable development must embrace these vital aspects of human culture if it is to make a meaningful and lasting contribution. (Walker 2006)

Like clowns in hospital wards and refugee camps, there is a place for a definition of care and sustainability that goes beyond leaving the patient alive. It will need to ask the question what makes life worthwhile. And address that life never will be safe and perfect, but that life as includes the acceptance of light and shadow.

Therefore, we have to ask us, if we have gotten it partly wrong? Maybe an "inconsistent, unpredictable and ever-changing care" would be a rather more desirable and appropriate topic to teach our students today.

IV. Recommendations for Further Study

Care is an essential part of sustainability. It is well-intended and desperately needed. The profession of design has to address the needed step to move from Having to Being as well as from Needing to Caring. (Ehrenfeld and Hoffman 2013) This should not stop us to critical examine and challenge our concept of care. It should also not stop us to learn from other professions addressing care - as well as our patient(s).

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Care is transitional

Alessia Cadamuro

> “Time is a sort of river of passing events, and strong is its current; no sooner is a thing brought to sight than it is swept by and another takes its place, and this too will be swept away.”
> Marcus Aurelius

Within the time society disclose new needs for care. People that where not considered as active receivers, but confine as mere receiver of most of the time unwanted care and forces drugging, such as people with mental illness, mental disabilities and degenerative diseases, now started to rise their unique voices. In a timeline starting from the ancient Greeks where care was not even conceived for people with mental and physical impairments, passing by the compulsory institutionalization, up to these days where personalized care is shyly taking place, humanity has made great strides. However, what will the future of care be and look like?

What have we learnt about care from the past?

What if, in the next century, people will be able to intervene on their unique genetic patterns and rearrange and cure diseases that we are now struggling to understand? At the core of this work is the question of how a narrative mode of writing can be used to reflect upon different approaches to care. A conversation between four women coming from different historical eras and the narration of their life experience is the pillar of this intervention, which interlaces fiction and historical facts with a speculative approach about the future of care.

Introduction

– Do you need help?

– Yes, Please! I don’t understand where I am… I… I feel confused.

– Come let’s sit down here, what’s your name?

– Thank you! I feel confused, I, I am… I’m Clio. What’s your name?

– Agata, nice to meet you!

Sitting on the bench they notice the presence of another woman. The woman sitting on a bench swung back and forth, without noticing the presence of Clio and Agata.

– Tell me Clio, where do you come from?

– I come from Anficlea, in Greece!

– Greece must be beautiful!! Said the mysterious woman who did not seem to care about them.

Agata asked her: What's your name?

– My name is Christina!

– I've heard you do not know where you are… for me it's the same, I also do not know where I am.

At that time a girl with a strange item in her hands approached the three women.

Instead of talking to them, she began to tap the object, as is she was pressing some sorts of invisible buttons. Clio and Christina looked at each other, what was happening was for them a complete mystery, however Agata's reaction was different, she gave the impression to perfectly understand what was happening.

The girl showed her mysterious object to the three women. While Clio e Christina couldn't understand what was written and kept looking at each other, Agata grabbed the object and read aloud:

– Hi! I'm Andra I can't speak with my voice because of my autism!

– I'm coming from 2017 and I should meet with three women: Clio, from Greece comes from 423 BC. Christina is from 1932, and, lastly I should meet Agata, who's coming from a far future, 3020.

Central Body

When Agata finished reading, the three women were startled and frightened.

Agata timidly asked about the purpose of that strange meeting. Clio wondered who the Autism was and why this Autism had brought them together. Andra smiled and began to write again in her strange object.

– Dear friends today we are here together to share our life and care experiences. Autism is not a person but a condition that I live with, and because of it I can't speak and I can't stand in crowded places or I can't hear high and sudden sounds (Lai, Lombardo & Baron-cohen, 2014; Grandin, 2010) Autism is the reason why sometimes I do weird things and is the reason why sometimes people are afraid of me, and isolate me.

Christina bitterly smiled.

– I know what you mean… I don't know Autism, but since I was ten, I live in a psychiatric hospital. I was refused by my family because I was acting strangely. I learned to speak at the age of five. After my repeated crises, the doctor advised my parents to get me interned. I did not have a choice, and still live there today. Many people live in the same hospital where I live. The majority of us are treated with sleep therapy treatment. At the beginning the doctors used drugs and medicines, but lately they are using electrical stimulation to force us to sleep (Noll, 2000).

Christina's voice flickered, and from her sad and weary face was visible her pain.

– The electrical stimulation is a torture, I have never felt such a pain in my whole life. After the treatment I am not myself anymore. I feel nothing, with an exception, fear… but with my friend we started to protect each other. Yes, we protect each other.

In Christina's eyes there was a different light, when she started to talk about her friends.

– We've figured out how to run away from those electrical discharges… Yes! There are times when one of us has a crisis, but crises are always passing after few minutes. The important thing is to hide the person with the crisis from doctors and nurses. This is not always easy and sometimes we fail… but when we are capable to handle the crisis of a friend is a victory for everyone.

After Christina's story, the initial shock disappeared leaving room for empathy. Clio felt particularly emotional after Christina's story, and this gave her the strength to share her story.

– In the age where I come from, there are no treatments and cures for women with mental and physical problems. We are isolated from the

community because the gods didn't like us. It is so painful for me to be rejected by my loved once and from the majority of the people that I know. Long time ago it was different, I was healthy. When I was fourteen, I had my first child. When he was two, I started to have strange fixations and I couldn't sleep at night I was always worry for something, but I could not explain what scared me. Once I went to the temple to offer sacrifices for all my problems to come to an end, but on my way back home I had an incident and fell violently on the ground. That accident left me partially paralyzed, for this reason I cannot move my left hand. Also my appearance, with time and the paralysis, has changed. At the beginning my neighbor told me about the Hippocratic medicine and she tried to help me using some principle derived from the philosophy of Hippocrates. My neighbor was not a doctor, but the husband of her sister was a doctor and she had heard a conversation about Hippocrates theories concerning mental health and diet (Kleisiaris et al,, 2014).
The first positive results came through the cure and I started to sleep again and the strange fixations passed. However, for the rest of my community I was the woman who did not like to the gods and they all avoided me. Despite my improvements, the community's opinion has had a great influence, and my family has rejected me away so that the bad luck would not fall on them too. Even my neighbor stopped helping me.

– So the only help you received is that of your neighbor? Why did she stop helping you?

Christina exclaimed full of anger.

Andra wrote on her mysterious object:

– The stigma that mental health is capable of creating is incredibly powerful. Perhaps you Christina didn't know this because you lived your entire life inside an institute. Even so there have been moments in recent history where people with mental and physical disability were killed in the name of extreme eugenics. However nowadays, in 2017, things are changing for people with disability. I was able to go to school and I was the unique autistic person in my class. Some professors and classmates did not accept me but others did. It is not easy for me to have

friends and I also see the fatigue of my parents to take care of me. Until I attended high school I had relationships with my non-autistic peers and had some activities to do during the day, but when I graduated, all this was over. My parents needed to hire two therapists and had to create activities to keep me busy during the day. There is not cure for autism and the unique things that I can do is to cope with my condition for the rest of my life.
For me it's difficult to find a job because I am not independent, and everything is on my parents' shoulders.
I am grateful to my parents, because I do not live in an institute, nor I do take drugs. Thanks to them I have done various experiences around the world, which helped me sometimes to overcome the limits created by my condition. Now, thanks to my parents, in my country my story is used to raise public awareness concerning autism and disability. Many things have yet to be done, it is still difficult in 2017 to accept diversity, but our voice now began to be heard too (Antonello, 2015; Abram et al., 2017).

Christina asked:

– How did you learn to use that strange tool that allows you to express yourself?

Andra:

– This is what we call 'tablet'. The technique that I use to write is called 'facilitated communication' (Garcia-Zapirain, 2014; Farr, Yuill, Raffle, 2010; Hourcade et al., 2011; Tentori & Hayes, 2010). At the beginning, a therapist helped me to type single words, letter by letter, and after few years I learned to write by myself.

Until then, Agata remained silent, she just helped Andra reading her personal story. Agata comes from the future and she had already heard about what women and people with disabilities had lived in the past. She did not know how to talk about her experience, as that was together so different from the three other stories and at the same time so similar:

– In the time I live, everything is medically treated by modifying damaged genetic combinations. This happens even before our birth. In our lifetime, by using microchips, we can manipulate our genetic combinations to solve the health problems that arise, without the help of a doctor.

Engineers work closely with doctors and we all use codes to alter compromised genetic combinations. There are also unofficial groups that create codes to cure outside the care provided by the official healthcare system. If you are smart enough you can create or modify your own codes. However, even though we can prevent cancer or stroke, we are not a healthy population, because to avoid a disease we create another one. It is as if it is impossible to escape from our human condition. Gods, communities or social inclusion are not problems nowadays, however it does seem to me that, when we get sick, we set to turn away the eventuality to die, and we do this in complete solitude.

Andra wrote

– Wow! It sounds fantastic! Does that mean that, in the future, I will be able to cure my Autism on my own?

Agata answered:

– Yes!

– However, you can cure Autism and after few months develop early signs of dementia or Schizophrenia or other type of illness, and you can spend all your time to cure yourself from several diseases. Using a metaphor, our generation is similar to a woman who tries to repair a hole in her dress using patches cut from that same dress, thus creating a loop of holes in different parts of the garment.

Conclusion

Andra wrote:

– … our time together seem to be about to end. Although the reason for our meeting is shrouded in mystery, I learned a lot from listening your stories, and I feel grateful for this experience. I now have the feeling to understand better the time where I come from. If I had to summarize it in a few words, I would say that my time is about the *beginning of social inclusion.*

Clio:

– Well… I would say: my time is the time of *social and cultural stigma*

Christina:

– Mine is the one of *denial and destruction of disability*

Agata:

– My time is the time of the *extreme personalization becoming individualization*

Author Notes

This investigation wishes to project a glance into far away past, a recent historical time, a present and a possible future. The dialogue enacted in this paper exploits design fiction as a lens through which we considered and could view in the future the notion of care. What we know from the writing is that the experiences of these four women highlight the evolution and the transitional characteristics of care in four different historical periods and how that influenced each mode of care practice. The four sentences that identify the experience of each woman aim at open a broader discussion about the transitional elements of care, especially useful if we consider the past as a warning to keep in mind and learn from. Previous mistakes, but also positive facts could facilitate an understanding of what should or could be included in the present and in the future of care systems.

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Magical agents: The powers of care are not ours alone

Jen Archer-Martin

A Problem...

"We must be careful, as we consider... how the nonhuman enters philosophy... to leave room for the multiplicity of the world's magical agents."[54]

In this position paper I offer a response to the notion that "care is universal"[55], which I suggest is both true and problematic: true, in that *universal* is defined as "relating to or done by all people or things in the world"[56]; problematic, in that an ethic of care (as proposed by Carol Gilligan in 1982[57]) is inherently contextual, and *not* an abstract universal rule that is "applicable to all cases"[58]. I contend that, in order to craft a framework for the ethical practice of care through design, we must relinquish the idea that care is only a *human* gesture. Gilligan first alerted us to the different, feminine, voice of human caring that had been overlooked. Taking this further, I assert that the different voices of care are both human and *non-human*. This assertion follows a set of theoretical perspectives referred to collectively by Amanda Yates[59] as eco-ontological, including vital materialism, new materialism, material feminisms, agential realism, post-humanist theory and critical ecological thinking[60]. Common to the strands of eco-ontological thought

54 Ogden, L.A., Hall, B. and Tanita, K. (2013). Animals, plants, people, and things. *Environment and Society*, *4*(1), p.17.

55 *Does Design Care...?* call for proposals, Problem 2.

56 *Oxford Dictionary.* Retrieved from https://en.oxforddictionaries.com/definition/universal

57 Gilligan, C. (1982*). In a different voice.* Harvard University Press.

58 *Oxford Dictionary.*

59 Yates, Amanda. (2017). Mauri-Ora: Architecture, Indigeneity, and Immanence Ethics. *Architectural Theory Review*, 1-15.

60 Key theorists include Jane Bennett (vital materialism); Bennett, Rosi Braidotti and William Connolly (new materialism); Karen Barad (agential realism); Braidotti and Donna Haraway (posthumanism); Timothy Morton (critical ecologies).

is the understanding of *being* (or rather, *becoming*) as ecological – an emergent system of inter- or intra-actions – and ecology as pan-ontological – encompassing human, non-human and material in a rejection of the nature-culture binary[61]. This understanding encounters resonances with existing worldviews in many non-Western and indigenous cultures, including *Te Ao Māori* (the worldview of the Māori of Aotearoa, New Zealand).

In *Te Ao Māori*, identity is understood in terms of a pan-ontological *whakapapa* (geneology) that reveals all entities as interrelated, part of a living world of *mauri* (life-force). A person will introduce themselves by first naming the mountain and river of their *whenua* (homeland); the Whanganui River was recently the first in the world to be granted legal personhood, with the "rights, powers, duties and liabilities of a legal person"[62]. A contemporary conceptual framework for care outlined by Yates as *Mana Kaitiakitanga* (care for 'spiritual power') comprises care for not only human wellbeing (*hau-ora*) but spiritual wellbeing (*wai-ora*) and the wellbeing of *mauri* (*mauri-ora*). Yates positions *mauri-ora* as an ethic of care and immanence[63]. Care in *Te Ao Māori* is a mutual, relational act, as exemplified in the words for hospitality (*mana-aki-tanga*; *aki* indicating a reciprocal action to build the *mana* of both hosts and visitors) and *ako*, which means both to teach and to learn[64]. If we consider care as *mutually* occurring in the relationships between humans and non-humans, we recognise that the powers of care are not only human but belong to all of the world's agents. Furthermore, we start to make visible the complex ecologies of care that are deeply embedded in *matter* and *place*, and thus *not* universal, but situated and situational.

A Position...

Care must be decoupled from anthropocentrism – we need an eco-ontological ethic of care that builds on existing feminist and indigenous understandings.

61 Yates, 2017.

62 Hutchison, A. (2014). The Whanganui river as a legal person. *Alternative Law Journal*, *39*(3), 179-182.

63 Yates, 2017.

64 *Māori Dictionary*. Retrieved from https://maoridictionary.co.nz; Kukutai, T. & Rata, A. (2017). From Mainstream to Manaaaki: Indigenising our Approach to Immigration. In Hall, D. (Ed.). Fair Borders? *Migration policy in the twenty-first century.* Wellington: Bridget Williams Books, 10-18.

In *Animals, Plants, People, and Things: A Review of Multispecies Ethnography*, Ogden, Hall and Tanita define multispecies ethnography as "ethnographic research and writing that is attuned to life's emergence within a shifting assemblage of agentive beings. By 'beings' [they] are suggesting both biophysical entities as well as the magical ways objects animate life itself"[65]. If non-humans—including animals, plants, materials, things, places and machines—are the 'world's magical agents', invested with powers of care, they hold value (*mana* or *mauri*) as co-creative partners in care, rather than inert material or passive biological or technical resources. I offer this concern, that we may bear it in mind as this conversation around care proceeds: that any theory of care that operated in a human-centric vacuum would neglect to acknowledge the deep, sustainable resource of knowledge and expertise embodied by these non-human others.

Rather than the gesture of care being lost, as suggested in the provocation for this paper, perhaps we have simply forgotten how to recognize these gestures or acknowledge the agency of the others with which these caring gestures are co-produced. Multispecies ethnography may offer one way of listening to these other voices in order to frame an eco-ontological ethic of care. Adeline Johns-Putra, however, in her 2013 notes toward a new materialist critique for environmental care ethics that draws together many of the threads discussed here, cautions that "in willing the nonhuman to speak *to* us, we make it speak *for* us"[66]. Ogden et al point to a possible approach in their concept of 'leaving room', which would appear to have some affinity with the popular notion in mainstream care discourse of 'holding space' without expectation of a particular result. My recent work *taking note(s)_performing care*[67] might be seen as an attempt to *leave room* by setting up a framework for taking notice of small acts of care performed by (human and non-human) others. Once we start looking for gestures of care we find them everywhere. If a cultural amnesia about care exists at all, it is certainly not universal. Human and non-human experts in care abound, their voices often marginalized or ignored in theoretical discourse – *kaitiaki* (guardians), parents, caregivers, caretakers, cleaners, maintenance workers. Perhaps, as suggested by

65 Ogden et al, 2013.

66 Johns-Putra, A. (2013). Environmental care ethics: Notes toward a new materialist critique. *symploke*, *21*(1), 125-135.

67 Archer-Martin, J. (2017). *Taking note(s)_performing care*. Digital archive at http://takingnotes.performingwriting.com

Two Bears in Donal Carbaugh's article about the North American Blackfeets' communication with the landscape[68], we need to "just listen".

A Proposal...

A toolkit[69] of ticklish reminders – mnemonic devices that, through sensation, provoke recall of non-human agents and their human collaborators in care.

In response to the call to 'tackle' a problem of care, I propose an alternative approach. The notion of tackling implies an assault against an opponent or subject of pursuit with the intention of pinning them down. A relational, contextual care is by nature impossible to pin down or reduce to a universal truth. Tackling would thus seem futile and, I would suggest, unnecessarily violent. In what began as a slightly tongue-in-cheek resistance to tackling, I turned instead to the idea of tickling. While tickling can also be an act of violence[70], it is more often associated with playful aggression or sensual pleasure. It is an intimate act that has a biological purpose in the construction of self in relation to others, and to the maintenance of close social and familial bonds. It is difficult to tickle oneself without the aid of some other thing or material – in this sense, tickling takes one outside of oneself in an intra-action that is made tangible through sensation, presence-ing the sensing body as part of a lively material assemblage. The intensity of the sensation is amplified as it becomes lighter, gentler. The radically soft, gentle work of Jessica Worden and Rhiannon Armstrong bear mention here[71]. While the actions undertaken in the course of caring are not always gentle, I would argue that the power of care lies in its gentle nature – care cannot be forced, it only *becomes* through intra-actions with agents-as-they-are. The paradox of care is perhaps that care accepts things just as they are, and in doing so, facilitates things-becoming-more-than-they-are.

Could tickling, as a powerfully gentle approach, be taken seriously as a tool for thinking and discussing care? In exploring what an eco-ontological theory of

68 Carbaugh, D. (1999). 'Just listen'. *Western Journal of Communication, 63*(3), 250-270.

69 Inspired by Julieanna Preston, Dear Rosa. *IDEA Journal: Design Activism*, 2014, pp. 4-13.

70 Farrier, D. & Reeve, D. (2016). *Tickled* [motion picture]. New Zealand: Vendetta Films in ass. with NZ Film Commission / MPI Media Group and Stephen Fry.

71 See Jessica Worden's performance lecture *Soft Approaches* at https://soundcloud.com/jessica-worden-1/soft-approaches and Rhiannon Armstrong Public Self Care System at http://rhiannonarmstrong.net

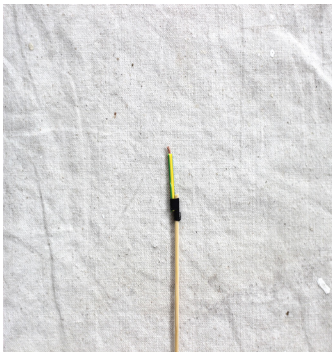
care might look and feel like, remembering to actively make space to listen to nonhuman agents and their closest human companions might be easily lost in the babble of human voices attempting to demystify care. I therefore propose to call upon the powers of things to trigger memory—to register the presence of absent voices through enlivening bodily sensation, and thus remind us to care. In order to test this idea, I created a set of speculative tools – tickling sticks – with the intention of using them[72] to disrupt a train of thought or conversation that may have forgotten to leave room for the voices of non-human agents. These material agents may interject and make themselves known through physical sensation as a form of communication. I selected for this task three found objects – a feather, a leaf and an offcut of electrical wire. The first set of tickling sticks (pictured) was situated in the context of my domestic environment. The feather has escaped from a much-slept-on pillow, the leaf dropped from a slightly uncared-for house-plant, and the wire left behind after maintenance work to upgrade old wiring to a light fitting. The objects serve as both the things-themselves and mnemonic devices that recall human-nonhuman ecologies and caring intra-actions.

The feather is the ticklish reminder of the animal kingdom and the ability of its citizens to care. It is the provider of comfort, warmth and coziness; of uplifting flight and dreams. It is the feather on the *korowai* (cloak) worn by the *kaumatua* (respected elders) of the Māori people of *Aotearoa* (New Zealand), who carry the deep knowledge of the land that cares for me[73].

72 on myself, although I'm happy to share

73 My ancestors are both Pākeha (Scottish and English) and Māori (Ngā Puhi). In reconnecting with indigenous knowledge, lost to me through the forces of colonisation, I hope to re-learn practices of mutual care.

The leaf is the presence of the plant kingdom and the earth in which it grows—of caring vegetable and mineral matter. It is the fibre that is woven to become a vessel for food; a garment for the body; the lining of a shelter. It is the practices of weaving, of healing, of feminist discourse and the world-making knowledge of makers and carers.



The wire reminds me that our caring ecologies also include machines, systems, networks, artificial intelligences, flows of energy and information. It is the embodied knowledge of machines and the people who care for them—cleaning, maintaining, mending, repairing, dismantling, hacking and repurposing.

These materials are bound to place; prevented by airline security and biosecurity from crossing borders for fear of their dangerous agentic capabilities to transport pathological microbes or be put to some violent use. I intend to produce a second set of tickling sticks from found objects in the environs of Lancaster University. I

imagine that these local objects may also be ticklish reminders of my own alien relationship to that place and that place is entangled in the agentic assemblages from which care is co-produced. Place, as an agent of situated care, should also be part of the conversation.

A Provocation...

A theory of care should be co-constructed as an open, living thing in which we are learners, not experts. We must leave room for the world's magical agents.

The knowledge of care is democratic in that it cannot be gate-kept; rather, it manifests through caring practices. Any being, thing, place or material capable of performing a gesture of care, as part of a caring assemblage, therefore contributes to the embodied knowledge of care. In this way, care is both universal and contextual. I suggest that we might rediscover care by learning to listen to the different voices of care and their particular gestural languages, allowing us to recognise, nurture, perform and facilitate care through design. Taking a careful approach to crafting a conversational framework for care means remembering to leave room, which may require tickling, rather than tackling.

Weird design weirding care designed

Karl Logge

Weird has become the go to word for anything odd, unusual or strange: *Inside the Weird and Wonderful World of Pet Portraits*; *North Korea mocks Trump's 'weird, ego-driven' tweets*; *Glitter tongue: The weird beauty trend going viral on Instagram*.

Back in the 1400s 'weird' had more gravitas. It meant "having power to control fate" from the Old English *wyrd* "fate, chance, fortune; destiny; the Fates", literally "that which comes". Proto-Germanic *wurthiz*, Old Saxon *wurd*, Old High German *wurt* and good ol' Old Norse *urðr* are rooted in Proto-Indo-European **wert-* "to turn, to wind" with the source of German *werden* and Old English *weorðan* meaning "to become", from the root **wer-* "to turn, bend."

Weird Fiction, Weird Science, Weird Media — within the discursive fields weird is used to define a thingly, absolute quality of the unknowable — be it alien, cosmic or divine. Currently I am researching whether it might be possible to use weird as a verb to help us understand 'other' dimensions in design and so I wanted to see if using weird as a verb could also activate care.

Turning first to the etymology of CARE, alongside the familiar origins there is another apparently overlooked source that the OED emphasises is in "no way related to Latin *cura*." From Proto-Germanic and Old Saxon**karo, Karâ, chara* or *karon* remind us that 'to care' is to make a *sound*, an expression of being in pain rooted in the PIE **gar-* "cry out, call, scream."

The work of Elain Scarry (*The Body in Pain: The Making and Unmaking of the World*, 1985) reminds us that to design is also to deal with pain whereby objects materialize the maker's dance of "perceived-pain-wished-gone". In the article *What Things Know: Exhibiting Animism as Artefact-Based Design* (2006) Tonkinwise and Kasunic flip Scarry's theory, such that "if the artefact responds to a problem that the designing-as-research has revealed anew, then design researchers need to stage an experience of what is most problematic about the problem – those examining the artifact for evidence of new knowledge should be made to suffer pain, in order to sense the knowing carefulness that the designer has facilitated the artefact to enact."

How might design deal with this turn of events? More importantly are we sure that designers are really so careful in the first place? Whilst this or that innovation might claim to make someone's life easier, cleaner, convenient or pleasurable — taken as a whole our increasingly complex, designed world seems to be making life on Earth increasingly volatile. In this sense care and design is a tricky business.

"The designer is a cunning plotter laying his traps" according to Villem Flusser and the ubiquitous spread of the word *design* (along with *art*, *machine* and *technology*) should make us aware that "all culture is trickery, that we are tricksters, tricked and any involvement with culture is the same thing as self-deception."

By critically thinking about care and design are we adequately confronting what is most problematic about the problem? As the 10 Problems illustrate, there are definitely limits to care so maybe there is something more to be understood by delving the darker spaces of care designed.

Design and Eros

In his book *The Eden Project: In search of the Magical Other* (1998) the Jungian psychologist James Hollis examines relationships and love as an expression of the primordial force of Eros.

Today, Eros has been whittled down to a basic eroticism, but to the ancient Greeks he has been there from the very beginning, the force of Love born from the very earliest of the gods — Chaos, Nyx, Darkness and the Abyss. For Hollis, Eros embodies any yearning for the Other, mortal or immortal:

> "Defined elementally Eros is the desire for connection. As he is a god, divine Eros is always present, at least implicitly, when connection is sought, though the god himself may be forgotten, ignored, violated, trivialized or paradoxically, adored. Music is erotic; prayer is erotic; language is erotic … the permutations are infinite because the gods are infinite."

Design, then, must also be erotic. Projection, ideation, imagination — each of these terms could be used to describe the act of design. As it happens each of these terms are used by Hollis to describe various psychic phenomenon that emerge from Eros's dynamic shape-shifting energies. Without going into full-

blown psychological analysis, there are some useful elements here that could help weird designed care.

For example, in the chapter titled *Taking care of the caretaking business* Hollis ascribes the projections of the 'care-taker' to a very specific 'Eros wound' where one feels "obliged to fix or heal the Other, in the hope that then the Other would be more responsive" and therefore love us more. Erotic Ideation stems from the process of projecting onto the Other that which we must actually confront within ourselves. Does design care activate the ideation and projection of the 'care-taker' thereby creating the complex of issues identified so far?

To weird care is to turn this attention inwards, looking to the 'self-deception' identified by Flusser as a cue to say "what am I asking of this Other that I ought to be doing for myself?" Taking the 10 problems as an expression of a collective design psyche crying out in pain, instead of posing these questions to things 'out there', I began looking at them in connection to each other. Each question posed by care was asked back towards design.

This revealed that care could also be caught up in the need for the 'Magical Other' and the perpetual search for erotic connection — Universal, Friendly, Obtrusive and Political Care suggests this. On the other hand, Aesthetic, Inconsistent, Useful and Inevitable Care hint at the possibility of a more reflective stance. Weird Care also created two additional dimensions to bring to the workshop:

Infinite Care: If design assumes the continuous responsibility of caretaking, endlessly creating things-that-embed-care-in-stuff then care itself becomes useless. A weird product of care in this situation would be that designers, after taking care of everything, will be eternally left to wail and lament the constant suffering of an empty, care-free worldly existence.

Worthless Care: If design admits its psychic uselessness with respect to care, maybe we can weird care itself and open up the possibility of seeing those who have maintained a constant, totally disinterested care. A weird product of care in this situation would be that any such person would not care much for the care-design-business. What do we cry for here?

Infinite Care, Infinite Design and the Pain of Everything

"*Everything* is a dance through objects and space, a playful — and mindful —waltz through a simulated space. In trying to approximate something

unfathomable and infinite, it conjures something deeply emotional…O'Reilly told me that *Everything* is designed to run forever."

Everything*, a Must-Play Game Like Nothing You've Seen Before*

Julie Muncy, WIRED Magazine, March 2017.

To develop the theory of Weird Design I have drawn from the thinking behind Weird Media proposed by Eugene Thacker in *Excommunication: Three inquiries in media and mediation* (Galloway, Thacker and Wark, 2014).

Using examples from fiction such as the *Weird Tales* of H.P Lovecraft, Thacker explains that with weird media "all objects inevitably withdraw into things. What results is a negative mediation, the paradoxical assertion and verification of the gulf between two ontological orders." Weird mediation occurs in devices or technologies, not so much when they are dysfunctional, hacked or repurposed, but when objects start "working *too well*". Here we get more than we bargained for, when that some*thing* usually beyond our ken steps momentarily into the breach — entering via the minimal separation, gap or lacuna, our blind spot.

Extending this to the constant striving of design to make things better, to fix and heal the world, what happens when design not only works well — it works *too well. The Continuous Monument*, *Supersurface* and *No-stop city* by the Italian Radicals, *New Babylon North* by the Situationist architect Constant Nieuwenhuys or the recent *Speculative Everything* of designers Dunne and Raby identify a trajectory towards the weirdness of an Infinite Design. "There will be no further need for cities or castles… every point will be the same as any other" proclaims *Superstudio* in their work for *The New Domestic Landscape* in 1972.

Infinite Care is also on the agenda of the design and technology sector, their sights set on the very core of suffering — birth, sickness, old-age, death. For example, the Alphabet company Calico 'hopes to cure death' with "some longer term, moonshot thinking around healthcare and biotechnology." 'Infinite care' — 'OK, Google'.

To cheat death we just need to find the right lever. Infinite Care names the end-game of every vector of care duly pursued and accelerated in every direction. This project of a better life through better design recalls Flusser when he says "the design that is the basis of all culture, to deceive nature by means of technology, to replace what is natural with what is artificial and build a machine out of which

comes a god who is ourselves." Exit Eros, wounded or otherwise, there are new gods in town.

But what if pain persists? Could being totally cared-for, and thus absolutely carefree, produce other problems? Does the 'profound boredom' of Heidegger discussed by Giorgio Agamben in *The Open* (2004) await us… "In being left empty by profound boredom, something vibrates like an echo of that 'essential disruption' that arises in the animal from its being exposed and taken in an 'other' that is, however, never revealed to it as such. For this reason the man who becomes bored finds himself in the 'closest proximity' — even if it is only apparent — to animal captivation."

The concept of Infinite Care is a trap. As gods we become boring, bored animals in a zoo. In the freedom of infinite life, having finally wished-away the pain of everything, we are reduced to something less, suffering the endless boredom of the transit lounge, stuck playing a beautiful game designed to run forever.

Worthless Care, Reclaiming Design Beyond the Devaluation of all Values

If designing everything creates the trap of Infinite Care, what happens if we design nothing — no more design, no more projections, problems, objects or solutions — no more tears? Worthless Care names a project of withdrawing from design, akin to what Hollis calls *withdrawing projections* where we become conscious of our Eros wounds and start caring for our own self-worth: "More commonly, we only begin to reclaim our purchase on consciousness when the Other fails to catch hold and reflect our projections. If there is a central law to the psyche it is that what is unconscious will be projected. This is why Jung observed that 'when an inner situation is not made conscious, it happens outside as fate.'"

Examples of design that move towards Infinite Care proliferate — so far I have only one satisfactory example of Worthless Care.

I got the idea of Weird Design when my original focus on Radical Design failed to really take hold. By fate or chance, this crisis led to an encounter with another, totally weird and radical dimension of design. While in Italy researching the Radical Period, I was taken to visit the island of Sant'Anitoco in Sardinia where I met Chiara Vigo, the world's last and only Master Weaver of Bisso.

As fascinating as it is rare, the *Bisso* is an extremely fine silk that comes from the sea. From fibres collected from the endangered Mediterranean *Pinna Nobilis* shell — this raw material is painstakingly transformed into a thread that literally becomes like gold when held up to light. Many are captivated by the unique qualities of the *Bisso*, a sacred thread of Biblical provenance, made rarer still by the fact that it remains something that resolutely cannot be bought and never, ever be sold. It is protected by a secret and esoteric oral tradition, passed from one Maestro to the next for over 30 generations, it is only ever a gift — passing from the sea and the *Pinna*, through the hands and life of a Maestro, through time itself, to and for everyone.

What many seem to miss is that there is something far more precious and rare to be found within the story of the *Bisso*, and that is the Maestro herself. Neither an artist or an artisan, '*il Maestro*', the Italian form of the Sardinian '*Su Maistu*', is the custodian one of design's deepest roots — the art and act of weaving.

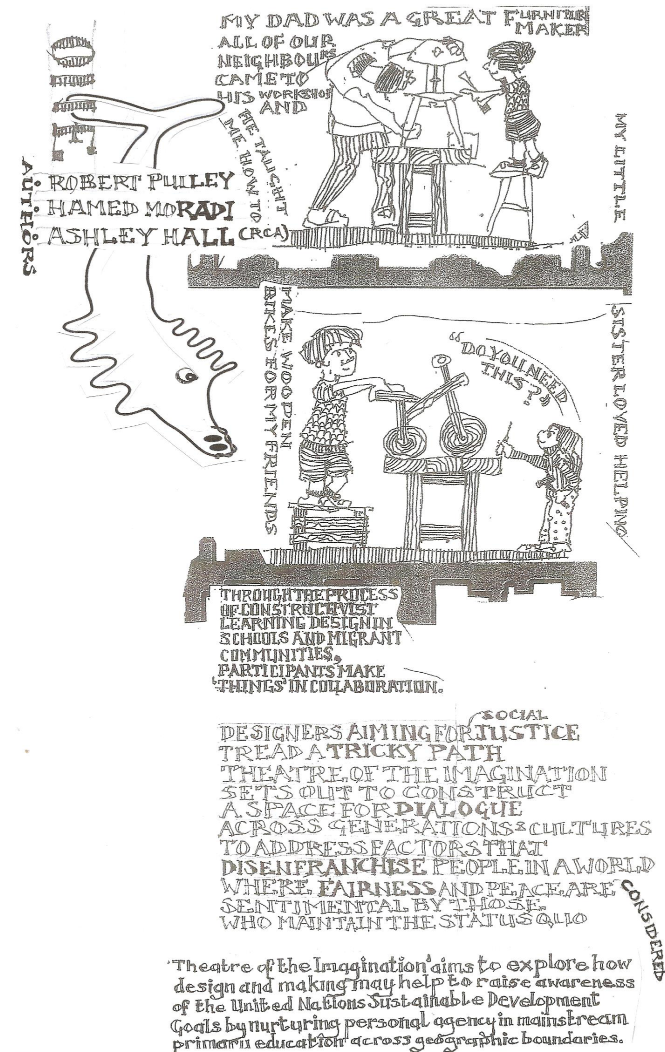
It has been almost three years now, and I am still here on the island of Sant'Antioco, I have come to know it's rhythms and patterns — of the wind and the sea, the turning of the seasons marked by the waxing and waning of the moon while I watch for this or that plant to appear so I can collect just what I need to prepare the ancient dyes that will color linen or the wool I spin patiently by the small 'fuso' that, one day, when she saw I was ready, the Maestro said, "Toh'!" — 'take this'.

In this way learning to weave from a Maestro is first and foremost to be shown how to weave '*la anima*' — to weave is to weird, turning like the 'fuso', performing the same gestures and movements that remain, unchanged for millennia. In this sense it is radical, coming from the roots, connecting to a continuity that spans time and space and slowly creates another sense of being made by design — of being 'signed', cut out, sacred, other. This generates a knowing that gives care, a care that also carries a sound — perhaps the very sound found at the beginning of creation.

Each thing that I have woven since becoming a student of the Maestro is Worthless. Just as the Maestro, who lives with offers, in turn offering her life and knowledge as a gift to the future from the past, I offer here another story of care, one that, in turn, you might come to care for. Not by or for design but by asking: Does Design Care?

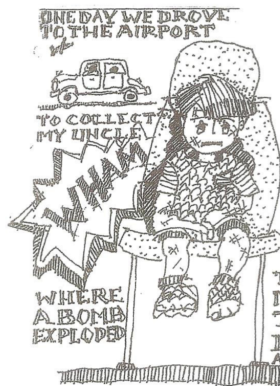
My Dad was a great furniture maker

Robert Pulley, Ashley Hall and Hamed Moradi Valadkeshyaei



TWO

ONE DAY WE DROVE TO THE AIRPORT TO COLLECT MY UNCLE



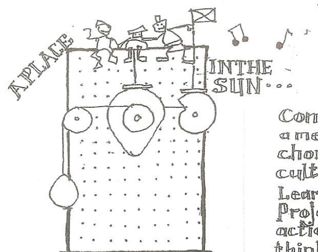
WHERE A BOMB EXPLODED

THEN A MAN PICKED ME UP AND PLUNKED ME ON A DUSTY CHAIR - IT WAS NOTHING LIKE THE CHAIRS MY DAD MAKES.

THE MAN TOOK MY PHOTO AND TOLD ME THAT I WOULD BE FAMOUS AND THAT HE WOULD MAKE ALOT OF MONEY.

I DID NOT WANT MY PICTURE TAKING BECAUSE I WAS DIRTY AND MY FAVOURITE JUMPER WAS TORN.

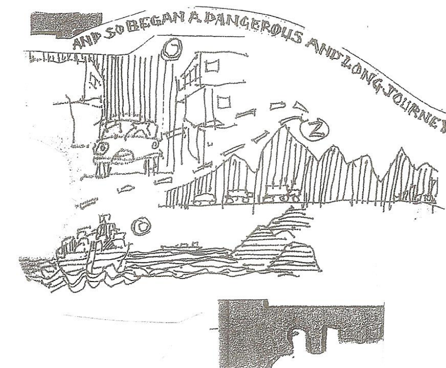
CHILD DEVELOPMENT AND **CULTURE** ARE CONNECTED AND HOW CULTURAL DIFFERENCES ARE ARTICULATED AND FRAMED IS **SIGNIFICANT** TO THE PROCESS OF CULTURAL SYNTHESIS. UNDERSTANDING FACTORS IN THE HOST SOCIETY AND THE **MIGRANT** FAMILY THAT CREATE **OPPORTUNITIES**, BENEFITS AND **DIFFICULTIES** IS FUNDAMENTAL TO CHILD DEVELOPMENT.



- CONSTRUCTIVIST LEARNING DESIGN
- PARTICIPATORY ACTION RESEARCH
- RESEARCH THROUGH PRACTICE
- DRAW, WRITE AND TELL
- METACOGNITION

Constructivist Learning Design (CLD) provides a methodology through which the researcher 'acts as choreographer, teaches basic steps and shares cultural traditions in order to organise the production.' Learning Circles, Pilot Workshops, and Whole-Class Projects engender improvement through participatory action research which applies the skills and creative thinking of designers and makers in a coherent manner.

THREE



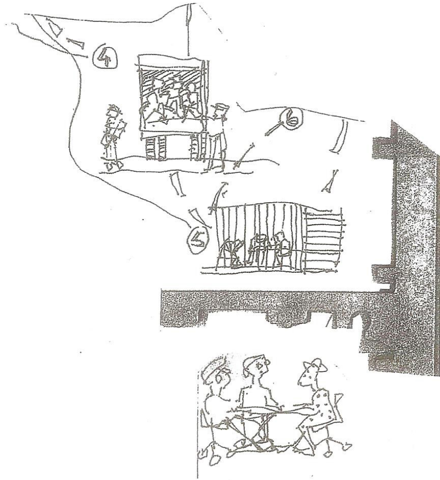
A GROUP'S **SHARED ATTITUDES**, BELIEFS AND PRACTICES ARE CARRIED FORWARD FROM ONE **GENERATION** TO THE NEXT AND CROSS-CULTURAL RESEARCH SETS OUT TO DEVELOP PROCESSES THAT HELP SHAPE MIGRANT EXPERIENCE. ALTHOUGH INDIVIDULISM AND COLLECTIVISM **COEXIST WITHIN** NATIONS, IT IS ASSUMED THAT SOME CULTURES ARE MORE INCLINED TOWARDS ONE THAN THE OTHER. THIS ALLOWS RESEARCHERS TO UNDERSTAND WHY THE SAME **BEHAVIOUR OR PRACTICE** CARRIES DIFFERENT **MEANINGS**. AN 'EMIC' ACCOUNT COMES FROM A PERSON WITHIN THE CULTURE...

ARE YOU

SURE ABOUT THAT?

FOUR

• • • AN 'ETIC' ACCOUNT IS A DESCRIPTION OF BEHAVIOUR OR BELIEF BY A SOCIAL OBSVER OR DESIGN RESEARCHER FOR EXAMPLE



WHEN THESE TWO APPROACHES ARE COMBINED THE RICHEST VIEW OF A SOCIETY OR CULTURE CAN BE UNDERSTOOD •

- AGENCY, EMPATHY & COGNITIVE DEVELOPMENT
- REFLECTION ON SUSTAINABLE GOALS
- CULTURAL EXCHANGE ACROSS GEOGRAPHIC SPACE
- LEARNING THROUGH MAKING
- SKILLS DEVELOPMENT IN CHILDREN & TEACHERS

Does (social) design care…?

Diogo Pereira Henriques

Abstract

Recently, several news media reported an unusual circumstance where 70 to 80 strangers formed a 'human chain' from the shore to reach a family stuck in a rip current in the sea, in Florida (U.S.A.). Although we are all living in a sea of information and social networks, many of us are also stuck in currents of loneliness and despair while consuming irresponsibly on the one planet we share. If the future is to last forever how can design take care of it? Can the design of social networks enhance care? In a world where everything is connected and some people are lonelier than ever, the design of things and services should enhance social networking in both virtual and physical spaces, for example in the international trend of repair and calibrate workshops. Furthermore, we also need novel legislation that benefits the act of repairing, thus preventing waste and promoting possible and responsible lifestyles for (designed) things and people of the 21st century.

Introduction

Recently, at Panama City Beach in Florida (U.S.A.), several news and social media reported an unusual circumstance where 70 to 80 strangers formed a 'human chain' from the shore to reach a family of nine people stuck in a rip current in the sea. While police and parametrics waited for a boat to rescue the group in danger, several '…people watching from the shore decided to take matters into their own hands,' thus forming a chain and facing strong waves, '…all holding hands and stretching to reach the trapped group.' At the end, after saving the family that included several young kids, '…they all started clapping and cheering because they were so happy over the fact that [they] accomplished it.' The mother of the saved family would later say "[a]s a mama, I'm supposed to be able to protect them and do everything, and I couldn't do it that day (…) I had to have help, which I was eternally grateful for that." (Moshtaghian and Coleman, July 12 2017).

In the following paragraphs we compare the experience of digital media with a flow of water, following the essay 'Tarzans in the Media Forest' by Toyo Ito, from 1997. Then we argue that nowadays the design of things and services should enhance social networking in both virtual and physical spaces. Finally, we highlight the international trend of 'repair and calibrate workshops', and we also mention new legislation in Sweden that benefits the responsible act of repairing to prevent waste.

In the Sea of Information (and Waste)

In the essay 'Tarzans in the Media Forest' , the Japanese architect by Toyo Ito (1997) describes a conversation with a graphic designer Asahi Shimbun, who '… has the odd sensation that part of his body starts to flow into the screen whenever he sits at a computer. (…) As we step into their world, as the designer says, "a strangely comfortable sensation surges up inside me". And he goes on, "when I am sitting at a computer, I feel like I'm wading in the water's edge, that I am being linked with another world" '(1997, pp. 118-119).

Ito (1997) reflects about the ' …serious question [posed by Shimbun] when he says, "just as water makes us realise that a human being is part of a greater nature, electronic media may modify or change the meaning or boundary of a human being, especially of the individual". By entering into the computer screen, he became aware of the possibility of orienting the self toward the outside, a self that used to be excessively introverted. In other words, recognising the flow of electronic media inside him made him realise once again that the human body is part of nature (1997, p. 119).

Still far from the social networks development, but already in full bloom of the proliferation of electronic devices as mass consumption products, Ito (1997, p. 121) adds that '[e]lectronic devices such as personal computers, fax machines, mobile phones and car navigation systems alter our physical sense from day to day'. And particularly referring to the younger generations of high-school students (and most probably only in Japan at that time), Ito writes '[m]obile phones are an essential tool for today's high-school students. They carry them wherever they go and are constantly communicating with their peers. For them, talking with their friends over the mobile telephone is like chewing gum.' Ito highlights that [b]y hearing the voices of their friends at all times, they seek to

avoid being left alone. Their bodies crave the flow of electrons just as hey nee water and air' (1997, p. 121).

Nowadays, the use of electronic devices is expanding worldwide. More than 1.4 billion smartphones and 268 million tablets were connected by 2013, and the number of IP-connected devices is expected to reach 50 billion by 2020 (a ratio of more than 6:1 with human beings), thus enhancing connectivity between people, processes, data and things, in what is currently called the Internet of Things (IoT) (see Henriques 2014, 2013). Nonetheless, many people highly connected on this sea of information are not only feeling lonelier than ever, but also consuming irresponsibly, considering the planet Earth's resources: the data generated in the networks, only now possible through the number of connected devices worldwide, has given rise to a new data economy that substitute the previous oil economy (The Economist May 6 2017). And this new economy has also given rise to a tremendous generation of electronic waste, both inland and in the seas: the results are everywhere.

Caring for the Present and Future Generations

Following the 'Does Design Care…?' Workshop call, and particularly the 'Problem 9. Care needs to take as much care as possible…', we try to show that '[d]espite all the energy and effort thrown at sustaining life on the one planet we share, now all we can do is constantly recalibrate downward earth's carrying capacity.' In parallel to this new data economy, a novel international trend of repair and calibrate workshops, cafes, and so forth can do this. We believe that it can bring a new dimension of care for the (designed) connected things. And it can bring also a calibration for social design: connecting in physical spaces distinct generations stuck in currents of loneliness and despair, both the ageing and the booming… It would be interesting to observe if this could enhance new creativity flows as well (see for example Rodgers and Jones 2017 for an intergenerational study in higher education).

Furthermore, some exceptional new legislation that aims to give tax breaks for repairs in Sweden (for more information see Orange 2016), might bring new hope for the present and future generations, thus preventing waste and promoting possible and responsible lifestyles for (designed) things and people of the 21st century.

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Does Design Care…?

Biographies

Jonathan Ventura is a design anthropologist, specializing in design theory, research and practice in the fields of social and healthcare design. Jonathan is a senior lecturer at the Department of Inclusive Design at Hadassah Academic College and the Graduate Program of Design at Shenkar - Engineering, Design, Art and a visiting researcher at the Royal College of Art's Helen Hamlyn Centre for Design.

Dina Shahar, a graduate of the Royal College of Art, London (MA RCA), is Head of the Inclusive Design Department, at the Hadassah Academic College, Jerusalem. Her academic interests span the methodologies of Inclusive Design and the evolving roles of the design discipline as a whole. Her creative work focuses on design for public spaces.

Saurabh Tewari is Assistant Professor at the School of Planning and Architecture Bhopal. He studied Architecture (B. Arch, 2003-08) at SSAA Gurgaon and Communication Design (M. Des, 2008-10) at IDC IIT Bombay. He has been teaching Basic Design, Graphics, and Architectural History for eight years. He is a PhD candidate at Design Programme, IIT Kanpur researching on design, its history in India.

Heather Wiltse is Assistant Professor at Umeå Institute of Design, Umeå University, Sweden, where she is also currently serving as director of PhD studies. Her transdisciplinary research centres around trying to understand and critique the role of digital, networked, computational things in experience and society in ways that can inform design.

Peter Lloyd Jones PhD is a scientist and Associate Dean of Emergent Design in Medicine at Thomas Jefferson University. In 2013, he founded MEDstudio@JEFF, an agency dedicated to design research and practice in health and wellness. Previously, he co-founded the Sabin+Jones LabStudio@UPenn, recently described as "Inseparable from a profound evolution of our vision of life" by Harvard's Graduate School of Design.

Trudy Watt is an architectural designer, a Fellow in Emergent Design and Associate Director of MEDstudio@JEFF: an agency that uses research, education and practice to amplify creativity, connectivity and compassion within healthcare. She earned her M.Arch at Princeton University in 2013 and started the Waxwood Investigative Group in Philadelphia in 2016.

Mashal Khan is a strategic designer and visual researcher currently working for Kaarvan Craft Foundation, a NGO based in Pakistan, striving to empower women in low-income communities through life skills. Mashal sees the world through a sense of wonder, humility and respect – ever ready to confront complex social issues by designing new ideas, tools, methods and action agendas.

Sarah Kettley is Chair in Material and Design Innovation at Edinburgh College of Art at the University of Edinburgh, and researches design methodologies for embedded technologies. She recently led the EPSRC project, *An Internet of Soft Things* (IoSofT), working with Bassetlaw Mind to investigate Person-Centred and experiential design research approaches to the IoT in the mental health sector. Sarah's doctoral study was in craft as a methodology for the development of wearable technologies, and she continues to collaborate across disciplines to deconstruct and rebuild design processes in response to new technologies.

Emmanuel Tsekleves leads research at the intersection of design, health, wellbeing and technology at Imagination@Lancaster at Lancaster University. He conducts design research by working with communities to develop new ways about health, wellbeing and technology to create a "culture for health" that is knitted into everyday community life. He is the co-editor of the Design for Health book published by Routledge.

Richard Kettley is a person- centred counsellor and psychotherapist, practising in Nottinghamshire. He is also a tutor at Sherwood Psychotherapy Training Institute. He has previously been a Research Fellow at Nottingham Trent University, working on the EPSRC-funded 'An Internet of Soft Things' interdisciplinary project, and as a tutor with Product Design students.

Robert Pulley was subject leader for 3D Design at Ravensbourne College, Dean of Art and Design at Falmouth College of Arts, Principal at West Dean College and Head of School at the University for the Creative Arts. He is now a PhD candidate and visiting tutor at the Royal College of Art. His research interest focuses upon design education.

Kwan Chan is an MFA Design Cultures candidate at the Manchester School of Art. She has worked in project management and curating for more than five years at the MaD (Make a Difference) Institute, a cross-disciplinary cultural platform in Hong Kong. Mediating between creative disciplines, she finds gratifications in the ingenious and careful use of resources for positive change. Her research interest focuses on the design outside of the design studios, evolving around the concept of users and design as activism. Her other interests include the curatorial practice of design museums and the interplay of things and objects in design activities. She has a Bachelor of Arts degree in Art History from the University of Hong Kong.

Clive Dilnot is a professor of design studies in the School of Art and Design History and Theory at Parsons. He has taught at Harvard University, the School of Art Institute of Chicago and in England and Hong Kong. Recent publications include the co-authored *Design and the Question of History* (2015) and edited editions *The John Heskett Reader: History, Design, Economics* (2016) and *John Heskett*: *Design & The Creation of Value* (2017). He is preparing a four volume series of collected papers, *Rethinking Design (On History, On Ethics, On Knowledge, On Configuration*). He is founding editor of a new series of polemical texts in design *Designing in Dark Times/The Urgency of the Possible* and of *Radical Design Thinkers*.

Gemma Teal is a Research Fellow at The Glasgow School of Art. Working in the field of health and wellbeing, her current projects explore how people-centred digital and service innovation can support self-management of diabetes, digital health records, and out-patients services. She designs for meaningful participation using innovative community engagement, insight gathering tools, workshops, visualisation and digital and service prototyping. Through this work, she is researching how design-led methodologies can create spaces for participatory innovation.

Cara Broadley is a Research Fellow at The Glasgow School of Art. With a background in ceramic design and illustration, her research explores the role of participatory design, visual methods, and reflective practice in engaging with communities. Working in contexts of wellbeing and equality, she is interested in the use of asset-based approaches to identify existing strengths and capabilities from within communities, and devising creative ways to share these with others.

Chris Fremantle is Senior Research Fellow at Gray's School of Art. Recent publications include 'What poetry does best: the Harrisons' poetics of being and acting in the world' (with Prof Anne Douglas) addressing ecological art practice and 'Impact by Design'

developing ways to evaluate the effectiveness of Design in Knowledge Exchange. Fremantle established ecoartscotland as a platform for research and practice and brought the Land Art Generator Initiative to Scotland.

Lynn-Sayers McHattie is a designer and researcher with over 25 years experience in the fashion and textiles industry. Prior to her academic work she directed research assignments in the Creative Industries nationally and internationally. She is Programme Director for: Design Inquiry at the Institute of Design Innovation (InDI); Post Graduate Research; and the Creative Campus practice-based PhD and is Co-Investigator for Design in Action (DiA), an AHRC funded Knowledge Exchange Hub, in the focal area of wellbeing.

Cathy Treadaway is Professor of Creative Practice at Cardiff Metropolitan University and a founder member of the Centre for Applied Research in Inclusive Arts and Design (CARIAD). She is Principal Investigator on the AHRC LAUGH design for dementia research project. Cathy is a Fellow of the Royal Society of Arts and a Fellow of the UK Higher Education Academy.

Jac Fennell is Research Assistant on the AHRC LAUGH design for dementia research project at Cardiff Metropolitan University. Jac holds an MA in Interaction Design from the Royal College of Art. Her PhD from Goldsmiths, University of London, explored how design could support moments of unexpected and involuntary reminiscing.

Stephanie Carleklev is a graphic designer and senior lecturer at Linnaeus university in Sweden. Her work is driven by a strong interest in life and what sustainability could mean. As a course and former programme leader, Stephanie primarily exercises her design skills by designing education. Her most recent work and research focuses on time and its potential in design for sustainable change.

Euan Winton is a Lecturer (Edinburgh Napier University) and PhD Student (Lancaster University). Euan has developed and delivered undergraduate and post graduate programmes in design. Nationally and internationally he has undertaken design research practice in areas of installation design and public engagement. Euan embeds inclusive approaches in his work developing co-design practices with non-designers such as his PhD work with people living with dementia.

Alessia Cadamuro is currently a PhD student at the Open University – Department of Engineering and Innovation. Her work touches relevant design and social issues, such

as the role which design could play in relation to sensitive areas such as; care, social inclusion, human rights, and to the new possibilities that this could create in a future society.

Jen Archer-Martin is a spatial designer, thinker and educator. Her transdisciplinary practice encompasses design, writing and performance, exploring spatial and material ecologies of care. Recent work includes *taking note(s)_performing care* and collaborations *Make/Use* and *bit-u-men-at-work*. Jen is a lecturer and coordinator of Spatial Design at Massey University, Wellington, New Zealand. She is of English, Scottish and Māori (Ngā Puhi) descent.

James Fathers is Director of Syracuse University School of Design and the Iris Magidson Endowed Chair of Design Leadership. Fathers' teaching and learning activity focuses on sustainability, universal design, and design in a development context. His research interests lie in socially responsible design; his doctoral research focused on the role of design in a development context, which led to a 12-month research sabbatical to India, where he worked alongside local crafts groups to develop appropriate design training strategies to facilitate enterprise development.

Karl Logge is Karl has worked as a designer, academic and artist for many years and is currently a doctoral candidate at Charles Sturt University, Australia.

Tara French is a Research Fellow at The Glasgow School of Art. Her work is predominantly focused on health and care, enabling multidisciplinary, collaborative partnerships to address current and future challenges using a design-led approach. She has a background in Psychology and has expertise in mixed methods and creative approaches in research design, and extensive experience of engaging a diverse range of stakeholders in the design process. Her research interests are centred on the role of design in developing care 'ecologies', creating innovative and sustainable models of care delivery.

Diogo Pereira Henriques is a PhD student, and previously a research assistant, at the Faculty of Engineering and Environment, Northumbria University, UK. He has studied and worked in the fields of urbanism, architecture, design, software, and higher education in Europe (Lisbon, Barcelona, Rome, and Eindhoven). He is interested in interdisciplinary research - future studies, urban data, social media, information, creativity and innovation.

Giovanni Innella is a designer and an Assistant Professor at the Advanced Institute of Industrial Technology in Tokyo. Among other directions, his research explores the growing presence of design in the media – and the media in design – and the way it has impacted the design industry.

Paul A. Rodgers is Professor of Design at Imagination, Lancaster University. He has recently taken up his 3-year post as the Arts and Humanities Research Council Leadership Fellow for Design in the UK. He is a co-founder of the Design Disruption Group who strive for positive change in health and social care and elsewhere.

Craig Bremner is Professor of Design at Charles Sturt University. His research deals with developing methods to discover and to value why 'not-knowing' is an essential beginning point of design practice.

Ian Coxon is currently Adjunct Professor, Charles Sturt University, Australia. After a career in Marketing and Project Management, mainly within the services sector, he re-entered academic life with a degree in Industrial design. His research into the structure and epistemology of human experience formed the basis of his doctorate and guides his current research and teaching which centres on the development and dissemination of an Ecology of Care as a field of study and practice.

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