

# Re/Staging: Critical Design And The Curatorial

An analysis of emerging product design  
practice and the museum as context

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# Abstract

The principle objective of this study is to examine the conditions and contexts of critical design practice, specifically as it pertains to methods of identifying, presenting and producing critical design within the space of the museum exhibition. The analysis in this study seeks to reveal a better understanding of the working practices that underpin museums' creative engagements with critical design practice while recognising the significance of critical design's behaviours of questioning, possibilising, probabilising and activating that inform such engagements.

A case is presented for combining several theoretical perspectives into a multi-layered conceptual framework for examining the ideas, approaches and conditions of both critical design and its circulation through the museum exhibition. In calling upon concepts from the art world as a means of developing a philosophical understanding of design, the concept of a 'work of design' is proposed to understand the shift in practice that has occurred over the past fifteen years. Furthermore, the emphasis on a 'work of design' is explicated through a conceptualisation of critical practice as both a design of reflexive modernity and a para-model of practice – a notable device for social and cultural research. Design's circulation in the museum is problematised drawing upon theories of the curatorial to develop a model of the exhibition as a speculative activity that privileges critical thought, discourse, speculation and production. In this sense 'the curatorial' offers a space for multiple viewpoints and experiences which together create a collective endeavour that remains forever open to contestation and adjustment.

Empirically, the study contributes insights into the diverse and contingent curatorial practices involved in communicating and disseminating critical design practice. The findings suggest that the new relationships that are being formed between critical design and the museum are reframing the exhibition as a tool for research – a transdisciplinary studio space whereby

ideas are tested and projects take form through the performativity of multiple agents. Thus the museum is being approached as a context for experimentation; a space that exposes rather than displays, presents rather than represents, a performative space that points to a recoding of practice as production. In this way we can begin to consider the museum and its exhibitions as a model of emergence as they enter a discourse of performativity that actively engages with their subject rather than merely offering it for consumption. The result is a collective space for knowing and experiencing via the performativity of both critical design and the curatorial.



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# Author's Declaration

During the period of registered study in which this thesis was prepared the author has not been registered for any other academic award or qualification. The material included in this thesis has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.

Gillian Russell  
06 January 2017



. . . . Chapter one

# Introduction

## A Shift to a Critical Practice

### 1.1 Introduction to the Chapter

The following chapter serves as an introduction to the study. It will present the questions and arguments that informed the overall research while opening up some very basic philosophical and methodological overtures that served to contextualise my principle research question – *How are contemporary museum exhibitions being used to disseminate critical design practice?* It will also provide a brief description of the theoretical aims and the overall structure of the study in order to make clear what the thesis attempts to do, and how it proceeds to go about it. To begin, an understanding of critical design warrants further explanation; therefore before moving on, section 1.2 will orient the reader by situating critical design through the work of British designer and educator Anthony Dunne, in particular his project *Hertzian Tales* (1999) where critical design was first articulated as a coherent design approach and set of ideas. (RCA 2014) In truth, many of the projects attributed the status of critical design have emerged from the work that Dunne and his partner Fiona Raby first developed as research fellows in the Computer Related Design Studio (CRD) at the Royal College of Art (RCA) in the early 1990s under the direction of Gillian Crampton Smith. (Malpass, 2012) As a result, the definitions of practice put forward by Dunne and his colleagues at the CRD have come to be representative of the field. It should be stressed, however, that much debate continues to exist as to the origins of critical design practice. In a 2005 article, Cilla Robach identifies two main sources for the emergence of critical design arguing that few agree as to whether critical design started with the Dutch design collective Droog in their 1993 Milan

<sup>1</sup> In April 1993 the conceptual design company Droog design – founded the same year by design historian Renny Rammakers and product designer Gijs Bakker – made their debut at the International Furniture Fair in Milan. Exhibiting 14 works by young Dutch designers, the exhibition was hailed a great success with the works on show considered evidence of a genuinely new approach to design.

exhibition<sup>1</sup>, or from Dunne & Raby’s practice at the RCA. (Robach 2005: 34) She suggests, however, that researchers who choose either of these options as the starting point of critical design too easily gloss over the impact of historical precedents, such as Italian Radical and Anti-Design of the 1970s, which were themselves highly critical of the prevailing social values and design ideologies of their time. Throughout the thesis I suggest that it is only possible to understand critical design as a practice that responds to contemporary social, cultural, and political contexts. Thus, to recognise the aim, purpose and meaning of critical design there is a need to situate it in the contemporary. This study is therefore concerned with the specificities of the contemporary context of critical design, but before discussing this I will first turn to Dunne’s original conceptions of the field developed through his PhD and practice at the RCA.

## 1.2 Situating Critical Design

In his 1999 book *Hertzian Tales*, Anthony Dunne identified an emerging strain of design –critical design– which he described as a research strategy for linking the internal imagination of possibility with the external world of reality. He argued for using design as a way of “provoking complex and meaningful reflection on the ubiquitous, dematerialising and intelligent artificial environment we inhabit.” (Dunne 1999: 12) He continued:

While mainstream industrial design is comfortable using its powerful visualization capabilities to propagandise desires and needs designed by others, thereby maintaining a society of passive consumers, design research in the aesthetic and cultural realm should draw attention to the ways products limit our experiences and expose to criticism and discussion their hidden social and psychological mechanisms. (ibid)

<sup>2</sup> In *Hertzian Tales* (1999) Dunne uses the concept of a post-optimal object, derived from Italian designer Marco Susani, to position critical design outside of the art world. His argument was that now that products in general had reached an optimal level (i.e. they could not be bettered) designers could focus their attention elsewhere. They could look to design new experiences through conceptual products.

Design research, he argued, should explore a new role for the design object (a post-optimal object)<sup>2</sup>, one that visualises alternative future scenarios while seducing the viewer into a world of ideas rather than objects. He states, “In a world where practicality and functionality can be taken for granted, the aesthetics of the post-optimal object could provide new experiences of everyday life, new poetic dimensions.” (ibid: 28) Dunne saw in the poetic the opportunity for design to provide critical and subversive experiences for the public in order to foreground the taken-for-granted in our world, while giving back to design its futuring agency (a concept that will be further

discussed in the following two chapters). Moreover, he saw an opportunity for design to contribute as a form of social commentary, to stimulate discussion and debate between the public, designers and industry. Critical design, as Dunne suggests in *Hertzian Tales*, seeks engagement rather than assimilation. It is a conceptual practice that aims to capture the imagination of the public while drawing them into a reflective and critical space. (ibid: 72) Importantly Dunne notes that this form of conceptual design can use its independence from the marketplace to develop more challenging design ideas than commercial design would allow for. But in order to do so it must establish the contexts and conditions for engaging a public if the work is to connect back to everyday life. (ibid: 69)

At present, critical design is most often disseminated through design exhibitions, conferences, academic journals, and the design press. Considered an academic discipline, growing predominantly out of the RCA (UK), and to a lesser degree institutions like the Design Academy Eindhoven (NL), and Goldsmiths (UK), critical design is often framed as research carried out within this context. (Malpass 2012: 32) Additionally, it should be stressed that much of the work has been produced through externally funded multi-partner research projects and museum and gallery commissions. It is unsurprising then, that critical design is often understood in relation to the work coming out of the RCA under the direction of Dunne and Raby.

Of course, any attempt to define critical design from the perspective of one person's practice carries inevitable risks and limitations. Even Dunne's own definition has shifted over time. For example, in 2005 with the restructuring of the CRD department and its renaming as Design Interactions, his approach to critical design shifted from a focus on using design as a vehicle for critical reflection on the role of design and technology, to one that included broader societal issues. But Dunne's insights on critical design are important for this study for two reasons. First, his insights deal with critical responses to the ideological nature of design. Second, they develop approaches to engage a public in discussion and debate rather than unthinking consumption. In short, Dunne shows us that critical design can draw a public into a reflective and critical space, but how it achieves this depends on the way it invites a public to participate. This invitation, I want to suggest, is crucial for determining how critical design is understood and engaged. In a similar vein, my examination of how designers

are using the museum exhibition to produce and disseminate works of critical design, and how the museum is engaging with this form of practice, is intended to yield a broad appreciation of how the circulation of critical design can be rendered productive for both its practice and its publics.

To explore this further, let us continue to examine what is meant here by critical design. Much of the discussion to follow is informed by designers' own accounts of their practice. As it stands there is a lack of theoretical reference points for critical design. Instead much of the literature and history of its emergence has come from critical designers themselves in reference to their own working methodologies and practice: Dunne's *Hertzian Tales* (1999), Dunne & Raby's *Design Noir* (2001) and *Speculative Everything* (2013), Ball and Naylor's *Form Follows Idea* (2005), Mazé and Redström's *Difficult Forms* (2007), Beaver, Kerridge & Pennington's *Material Beliefs* (2009), Ward and Wilki's *Made in Criticalland* (2009), Bleecker's *Design Fiction: from props to prototypes* (2010) and Auger's *Speculative Design: crafting the speculation* (2013), to name a few. Among these the most frequently cited are the works by Dunne and Raby, who regularly write about their projects as part of their academic standing. What emerges here is an introverted discourse sustained in a closed community void of any critique and problematization of critical design practice. The British designer and theorist Matt Malpass, for example, observes that "In design research critical design has not been viewed as a serious form of design where ideological basis and theoretical grounding are a requirement." (Malpass 2012: 6) for this reason he believes that as a practice it is in danger of losing any usefulness as part of a larger disciplinary project, calling for more constructive input from a broader community to legitimize the practice as a useful form of product design in both disciplinary and professional contexts. (ibid: 7) Through much of his recent work developing a taxonomy focused on the differences in the practice and methods employed by critical designers, (Malpass 2009, 2011, 2012, in press) Malpass has undertaken to correct this lack of constructive input opening the way towards the development of a theoretical grounding for critical design. This thesis intends to build on his work with a particular focus on problematizing critical design's mediation and dissemination through the museum exhibition.

## 1.2.1 What is Critical Design?

<sup>3</sup> In *Design Noir: The Secret Life of Electronic Objects* (2001) Dunne defines ‘complicated pleasure’ as a key driver in the success of critical design. Complicated Pleasure, Dunne states, is a type of experience defined by Martin Amis in his introduction to *Einstein’s Monsters*. It is achieved through ‘provocative artefacts which set out to engage people through humour, insight, surprise and wonder.’

From the late 1990s onwards alternative forms of design – such as Jurgen Bey’s *Tree Trunk Bench* (NL, 1999), James Auger and Jimmy Loizeau’s *Audio Tooth* (UK, 2002), Thomas Thwaites’ *Toaster Project* (UK, 2009), Jaemin Paik’s *When We All Live to 150* (UK, 2012) and Ilona Gaynor’s *Under Black Carpets* (USA, 2013) brought ideas and critique to the foreground to provide ‘complicated pleasure’ as the very function of their work.<sup>3</sup> While just a sample of the rise in conceptual approaches that use design as a vehicle to engage in ideological and intellectual questions, in each of these examples, the designers present alternative roles for product design to those driven by technological and capitalist concerns. As such they create projects more amenable to the museum and gallery than the conventional modes of market consumption.

Figure 1.1 – A demo model of an audio tooth implant fixed with a miniature audio output device.

image: auger-loizeau website.



In *Audio Tooth* (Fig. 1.1) for example, Auger and Loizeau designed a tooth implant equipped with both a micro-vibration device and a wireless low frequency receiver to offer a form of electric telepathy for personal communication. Capable of communicating with mobile telephones, radio and the internet, the tooth was designed to transfer sound through the inner

<sup>4</sup> Alongside write ups in *Wired* magazine and the *BBC News*, among others, *Audio Tooth* was featured as one of *Time Magazines* Best inventions of 2002.

ear by bone transduction enabling information to be received discreetly and around the clock. While never intended for production, *Audio Tooth* was conceived as a conceptual proposition to encourage debate on the possibilities of in-body technology and its potentials and ramifications on society and culture. The work, first exhibited in *Future Products* at the Science Museum, London (2002) was subsequently picked up by mainstream media<sup>4</sup> where it precipitated great debate about the potential of biotechnology and its implications for our lives.

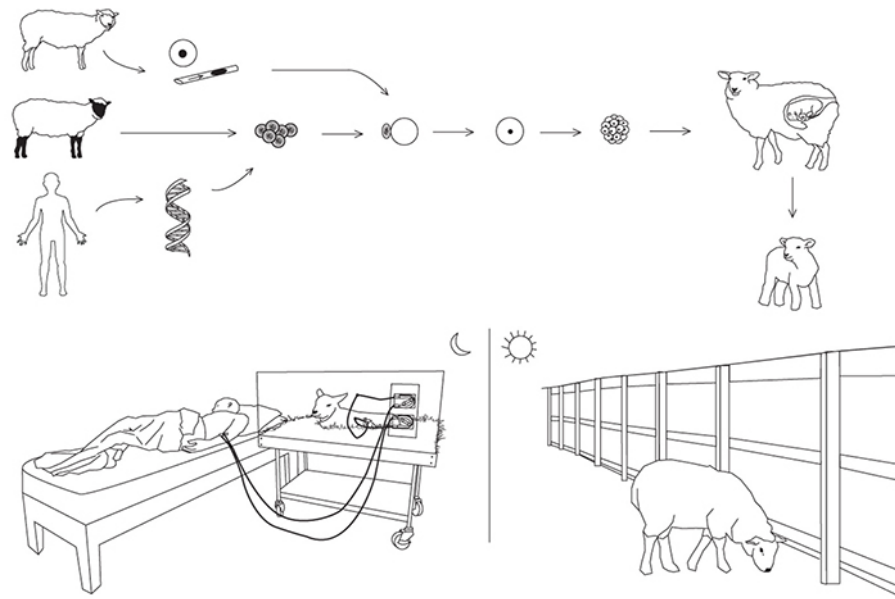
Broadly speaking projects such as *Audio Tooth*, produced as small-scale or one-off productions, represent divergent approaches to industrial design practice that together question the validity of the historical conventions of design characteristically driven by the discipline's Industrial Age logics of form, function, mass-production, market consumption, and economies of scale. (Mazé, 2011) Designers working within this emerging field of practice provide a critique of the status quo through designs that exemplify alternative social, psychological, cultural, technical, and economic values. (Dunne, 2001) Their purpose is not to pander to or present the dreams of industry, attract new business, anticipate new trends, or test the market. (ibid) Nor are they attempting to extend the medium of design through progress and aesthetic experimentation. Instead, their practice is centred on the production of system-oriented works with a conceptual focus as a means to foreground and question near-future scenarios, social contexts, politics and the self. (Dunne 2013) *Life Support* (Fig. 1.2) by Revital Cohen (2008), for example, imagines a world where animals can be transformed into medical devices. The design uses commercially bred animals as external organ replacements offering an alternative to our dependance on the lifeless machine. As she describes it,

This project proposes using animals bred commercially for consumption or entertainment as companions and providers of external organ replacement. The use of transgenic farm animals, or retired working dogs, as life support 'devices' for renal and respiratory patients offers an alternative to inhumane medical therapies." (Cohen Van Balen 2016)

Importantly, with *Life Support* no problem is solved. The project instead employs the language of design as a mode of critique where possibilities are revealed and made available for interaction and engagement. Its purpose is not to prescribe the future, emphasising scenarios of how to get to our

Figure 1.2 – A diagram by Revital Cohen that plots the workings of Dialysis Sheep. A kidney patient gives a sample of blood. A recombinant DNA is then inserted into the nucleus of a pre-prepared sheep egg cell. A surrogate ewe gives birth to the transgenic lamb who is given to the donor patient. At night the donor is hooked up to the lamb like a dialysis machine. When the donor's blood circulates through the lamb's kidneys the blood is cleaned and then returned. During the day the lamb is free to roam in the patient's yard where it discards the toxins through its kidneys.

[www.cohenvanbalen.com](http://www.cohenvanbalen.com)



desired outcome, nor to create an object to be realised and put into practice. The work is instead intended as an instigator for debate – a tool to help the public engage with, and question the possibilities of science. Developed as a graduate project in Design Interactions at the RCA, *Life Support* went on to be exhibited at the *WHAT IF* exhibition in the Science Gallery, Dublin, 2009, *ISEA* Belfast, 2009, and Design Museum, London, *Designs of the Year, 2009*, as well as being included in numerous design blogs and publications.

As with Cohen and her colleagues, many designers today are operating in the academy, the museum, the science centre, the laboratory, the art world and the public sphere, broadening the fields reach in relation to its audience, scope and breadth. (Mazé, 2011) This shifting landscape around design has raised questions regarding the boundaries of the field, its contexts and practices and by extension how it is both framed, and expressed.

### 1.2.2 What is Design

In discussing these new emerging models and paradigms it might be useful to rehearse some definitions of design. As early as the end of the nineteenth century, the word 'design' began to be employed to refer mainly to industrially produced goods. Historically, design has been associated with a process of creation generated through drawings, sketches, prototypes or

models — concerned primarily with form, function, technology and manufacture. However, widely considered both verb and noun, designs multiple meanings have grown exponentially from these earlier conceptions of practice. The design critic Stephen Bayley, in his 1989 article ‘The Future’, argues for the dual nature of design, stating:

When people talk about design they are talking – more or less consciously – about two things. The first is the simplest to grasp. Design is what a certain group of professionals and artisans do when they engage in making creative decisions about the function and appearance of the things we buy and use. The second is more abstract, but places design on a par, as we have said, with literature and the fine arts in its status as an activity which defines man’s relationship with the material world.” (Bayley 1989:113)

More recently, Judy Attfield in her book *Wild Things: The Material Culture of Everyday Life* defines design as: “both the product and the process that conceptualises an aesthetic and functional solution to industrially produced goods – from garments to potato peelers and from cars to buildings.” (Attfield 2000: 04) Perhaps it was Herbert Simon who best described design when he defined it as “courses of action aimed at changing existing situations into preferred ones.” (Simon 1988:67) While sympathetic to Herbert’s definition, I would argue for a change in wording from preferred to possible, the equivalence to what Ken Friedman and Erik Stolterman describe in their series forward to *The Aesthetics of Imagination in Design*, as industry-related design: “thought and action for solving problems and imagining futures.” (2013: xii) Friedman’s and Stolterman’s quote is important for drawing attention to another dimension in design, one which embraces grammars of provocation, questioning, and debate. Dunne & Raby’s text *a/b* (2009), extends this idea further by juxtaposing design as it is commonly understood with the characteristics that frame the type of design that they practice. By contrasting variables such as *Design as solution* and *Design as medium*; *Design for production* and *Design for debate*; *Problem solving* and *Problem finding*; *Innovation* and *Provocation*; *Makes us buy* and *Makes us think*; *a/b* emphasises the pluralist potentials of design’s engagement with the world.

At present, these defining criteria of design are drawn from a number of distinct categories of practice. These include, but are not limited to, industrial design, product design, furniture design, fashion design, textile design, graphic design, web design, service design, interior design, urban



<sup>5</sup> The master narratives of product design are used here to describe the taken for granted characteristics of how what is often termed ‘mainstream’, ‘traditional’, or ‘conventional’ design operates. In this framework product design is considered a field concerned with progress, problem solving, mass manufacture and utility, with tight connections to industry and the market.

design, environmental design, interaction design as well as architecture and engineering, each of which comes equipped with its own traditions, contexts and vernacular. It would seem that from where we stand today design is too pluralistic in intention and realisation to be expressed under one single definition. In fact, enough of what constitutes design today, such as system design, social design, political design and design activism, is inconsistent with the great master narratives that historically defined the field<sup>5</sup>, that one might argue we have arrived at a philosophical coming of age of design, a point which will be addressed in chapter 2.

### 1.3 Outline of the Argument

From a disciplinary perspective this thesis deals primarily with contemporary work that owes much to the practice and discourse of furniture design (associated with industrial production and the market.) Perhaps more than anyone else this view is clearly expressed by Dunne & Raby. For them critical design owes much of its existence to what was happening in design in the early 1990s. In the exhibition *Designing Critical Design* at Z33 in Hasselt, Belgium (2007), they state: “During the 1990s there was a general move towards conceptual design which made it easier for noncommercial forms of design like critical design to exist, this happened mainly in the furniture world, product design is still conservative and closely linked to the mass market.” (Dunne & Raby 2007)

The work discussed in this thesis goes beyond what is conventionally understood as industrial design, problematising many of the assumptions that we take as given, but has grown from within its discipline. This new mode of design currently falls under a variety of nomenclatures, which are used to connote new fields of practice and questioning. These include, but are not limited to: *Conceptual Design*: a movement in which concept overrides the importance of straightforward function. (Miller, 2011); *Critical Design*: which uses design proposals as embodied critique to challenge narrow assumptions, preconceptions and givens about the role products play in everyday life (Dunne & Raby, 2013a); *Speculative Design*: imaginative projections of alternate presents and possible futures using design representations and objects (DiSalvo, 2012b); *Adversarial Design*: A contestational approach that uses the means and forms of design to question

conventional approaches to political issues (DiSalvo, 2012b) and *Fictional Design*: the deliberate use of diegetic prototypes to suspend disbelief about change (Bosch, 2012) For the duration of this thesis I will be referring to these tendencies as critical design since this suggests the development of critical perspectives in design. A view of design as an expression of criticality (as we will see in Chapter 3) suggests that it involves a mode of embodiment whereby problems are experienced rather than analysed and solved. Critical design in this understanding is a form of ontology that erodes the boundaries between theorising and making, moving design away from intention, illustration and exemplification. Its raison-d’etre is alternatively to insight questions, challenge, and enable action. As such, my understanding and use of the term is framed within Dunne & Raby’s writings on critical design that situate it as: “critical thought translated into materiality.” Critical design, they state:

is about thinking through design rather than through words and using the language and structure of design to engage people... On the most basic level it is about questioning underlying assumptions in design itself, on the next level it is directed at the technology industry and its market-driven limitations, and beyond that, general social theory, politics, and ideology. (Dunne & Raby, 2013:35)

Design curator Paola Antonelli draws on and extends this understanding:

The Critical Design process does not immediately lead to useful objects, but rather to food for thought whose usefulness is revealed by its ability to help others prevent and direct future outcomes. The job of critical designers is to be thorns in the side of politicians and industrialists, as well as partners for scientists or consumer advocates, while stimulating discussion and debate about the social, cultural and ethical future implications of decisions about technology made today. (Antonelli 2011)

A generalisation that can too easily be drawn from these definitions, however, is that critical design is directly tied to a concern with technology. As Graham Pullin notes in a statement of practice published in the journal *Design and Culture* (2010): “The term is so associated with the *Design Interactions* course at the Royal College of Art and its subversive, often dystopian visions of technological futures.” (Pullin 2010: 324) I instead want to emphasise critical design as a mode of practice that is not inherently tied to technology but that functions as a form of critical language for a range of socio-cultural and technological concerns. Through this I will argue

that it is imperative to focus more on the discourse and debate afforded for the public by such work, as a corrective to this generalisation. As such, this study is framed within a critical thinking tradition which focuses on situating critical design as a practice intent on increasing freedom and enlarging the scope of human possibilities for interaction and critique. (Burbules and Berk, 1999) As previously mentioned there is a paucity of interpretive literature surrounding critical design. With no major survey to date, the view continues to exist that what Dunne defines in *Hertzian Tales* (1999) as critical design is illustrative of the field. What stands against this model is a select few critical discourses that contest the dominant understanding of critical design as being directly tied to Dunne's assertions. While falling under various labels such as adversarial design, associative design, speculative design and critical design each of these discourses examine the conceptual specificities of critical design not in terms of its concern with technology, but rather in relation to how it operates – its behaviours. For example, in his book *Adversarial Design* (2012), Carl DiSalvo examines critical design as a practice that serves to challenge beliefs and values while striving to question conventional approaches to political issues. Exploring examples ranging from Natalie Jeremijenko's *Feral Robot Dogs* (2002) to Laura Kurgan's *Million Dollar Blocks* (2005) DiSalvo argues that the purpose of such works is to do the work of agonism: to act as spaces of confrontation and to provide resources and opportunities for others to participate in contestation. He goes on to suggest adversarial design as both a kind of inquiry and a practice. By this he infers that adversarial design as inquiry enables both thought and action, making problematic situations apparent and known and thereby better able to be addressed and acted on. (DiSalvo 2012: 116) Alternatively, considering adversarial design as practice he positions the work as a process through which the behaviours of the work produce a shift toward action that models alternative presents and possible futures in material and experiential form. (ibid: 118) In this reasoning critical design takes on an expanded role compared to the one developed by Dunne in *Hertzian Tales*. (1999) While still inherently tied to technology, DiSalvo's model of adversarial design positions critical design as bound to specific tactics and behaviours rather than through a particular technological focus. Similarly in their book *Design Act*, Ramia Mazé and Magnus Ericsson (2011) explore contemporary modes of socially and politically engaged design, positioning the work as a

‘criticism from within’ – that is, societal and political engagement through action within a designers own practice. (Mazé & Ericsson 2011: 6) They identify an open-ended set of tactics – suggestive of acts, actions and activities – which they argue shape much of today's critical design: Representing constituencies, (De)signing Social Interactions, Materializing Societal Structures, Transforming Modes of Production, Relocating the Design Agency, Making Common Ground, and Occupying the Margins of Design. (ibid) Mazé and Ericsson further argue that these tactics taken together with the examples of designs presented in the book work towards developing a common vocabulary relevant to critical design practice. The key point in this argument is the importance of understanding critical design through its actions (behaviours) not only for practitioners, but also for curators and publics who are not fully immersed in the conventions of critical design practice. These comments take us back to Malpass’ taxonomy which suggests a prescriptive model to critical design practice. In his PhD research, *Contextualising Critical Design: Towards a Taxonomy of Critical Practice in Product Design* (2012), undertaken at Nottingham Trent University, Malpass problematizes the concept of ‘critical design’ situating it among three types of critical design practice: Associative, Speculative and Critical. In his view Associative Design draws on techniques of subversion and experimentation in conceptual art while addressing concerns familiar to design discourse, for example, sustainability, and consumption. Speculative Design uses product design as a vehicle to comment on emerging technologies and Critical Design is used to make social comment and critique through the processes and practices of product design. He goes on to further differentiate these three practices by the types of Satire, Narrative and Object Rationality used in each practice. Such a model is expected to enable users to map the territory of critical design practice offering a theoretical tool to help navigate the field of critical design. At the same time it emphasises once again the need to approach critical design through its tactics and behaviours rather than through any definitive ties to technology. All of this is not to denigrate Dunne’s role and understanding of critical design but to draw attention to a series of proposals that work to challenge the field to adopt a more fluid notion of critical design that does not hinge on a definitive concern for technology.

In this logic, once the capacity of critical design to create generalised spaces of debate and discussion (not just directed at technology) is acknowledged, there comes a recognition of the importance of the specific behaviours of the work. It follows that through a careful analysis of the above definitions we could argue that critical design exhibits a set of distinctive behaviours associated with how each work operates, which may present themselves in any combination. I consider these to be:

- a) Questioning: to raise issues for further discussion and debate
- b) Problematising: the performance of a problem
- c) Possibilising: changing our sense of the actuality of the world and its multiple new possibilities. (Dilnot 2015: 134; Folkmann, 2013)
- d) Activating: to incite engagement with an audience.

These four fluid and overlapping behaviours, which situate critical design as being concerned with verbs, rather than nouns of object types (which themselves respond to type-needs: ‘a chair to sit on’ or ‘a table to eat at’), set up a demand for new ways of approaching and understanding a work of critical design. This emphasis on behaviour helps to destabilise any sense that the work- even when it is an object - is merely a thing to be put to use. Additionally understanding critical design through a set of distinct behaviours, rather than as a category of practice, allows us to approach various objects, scenarios and situations as critical design that would not have been previously understood as such. As I have discussed, these new practices and ways of working task themselves with engaging in and enabling new perspectives on reality – drawn not from the actual but the possible. Indeed, through displaying behaviours of questioning, probabilising, possibilising, and/or activating – diffusing any notion of a stand for or against an issue – works of critical design attempt to liberate themselves from design’s commercial and utilitarian applications to instead focus their attention on the social and with it the potential for construction and change that lies in their reception. In this respect, the efficacy of these works is dependent on a context that speaks to their unique behaviours. As the chapters that follow will make clear this shifting landscape around design clearly enables a search for new contexts and forms of mediation, providing a variety of options for carving out a new territory for curatorial,

educational, and institutional actions, transforming the very nature of our investigations as presenters, educators, makers and critics of critical design.

As it stands, much of the work of critical design continues to be confined to a small community of people interested in what might be termed avant-garde, radical or experimental modes of working. Born from the academy, critical design remains mostly within its confines, as Malpass has noted: “There are already utterances of critical design being, ‘design for designs sake,’ ‘design for designers’ or perhaps more appropriately ‘design for critical designers.’” (Malpass 2012: 6) In his study, *Contextualizing Critical Design: Towards a Taxonomy of Critical Practice in Product Design*, Malpass argues that there is a need for a greater analysis of critical design, while engaging a broader community in the discourses of practice. Recounting an incident he experienced at a conference in Montreal, where critical design was introduced as a niche practice for a small community of practitioners, he warns that there is a risk that critical design becomes overly self-reflexive and introverted. As it stands critical design is often sustained in a somewhat closed discourse. Published in academic journals, design magazines and blogs, or exhibited in grad shows, design festivals, museums and galleries, much of the work of critical design remains in this introverted state. (Which seems in stark contrast to its overall aims of engaging a wide public through the language of design) (Mazé and Redström 2007; Malpass 2012) Thus there is a need for more research into where and how works of critical design can operate to engage a broader public. Given critical design’s stated intention to move beyond the commercial imperatives of conventional design practice, we need to be very clear on what contexts of operation and dissemination can function as productive spaces for thinking *through* design. This study aims to consider the museum exhibition as one such context which holds the potential to foster frameworks for greater interaction with critical design practice.

There is, I would argue, much to be gained from looking specifically at the museum exhibition. Given that over the past 15 years the exhibition form has become one of the main mediums through which people have come to experience critical design, this thesis will serve as an overview of the emerging relationships that are being formed between critical design practice and the exhibition as a ‘legible’ framework for mediation. It will consider how the exhibition has structured the experience of the work of critical

design and affected the ways in which critical design is both made and communicated to an audience. The exhibition is considered, here, not only as a showcase for critical design, but also as a form of research process. The exhibitions and exhibited works under consideration throughout this study are used as evidence of critical design processes, intentions and outcomes, to the point where the exhibition can be considered a ‘work’ of critical design, not only a platform for its presentation. As such, one of the arguments of this thesis positions the museum exhibition as having the ability to become one of the key influences in critical design’s relevance to society. The central project of this study is therefore, to find ways that the museum can overcome the challenges presented to it by critical design. By focusing on the behaviours of critical design, rather than attending solely to its objects or processes, I will argue that critical design offers the museum the opportunity to reassess its curatorial practice, to reconsider everything from how curators engage with a work of design to how they develop relationships between a work of design and its audience.

The possibility of defining a new set of criteria (discussed in chapters 7, 9 and 10) by which to approach the curation of critical design and its discourse was the main inspiration behind this study. The motivation for this research was the author’s direct experience with curating exhibitions and events that incorporated works of critical design – ill-fitted to the plinth and vitrines of the museum and in desperate need of new measures to understand and describe their characteristics. In an exhibition catalogue<sup>6</sup> from 2012 I wrote that “In spite of where the burgeoning field of design practice and research currently stands, there remains – nevertheless – a deficiency of critical discourse.” (Russell, 2012: 4) One of the principle arguments of this study is that there is in fact a burgeoning critical discourse in design, but that it finds its roots in practice. By this I mean that critical discourses in design are not constrained to the written word, but can be generated through design itself, and through the relationships that are established between works. What is lacking are the spaces for critical design which can provide practitioners with a support structure to produce, consume and debate these critical discourses with a more general public (outside the academy, and closed circle of peers and colleagues).

The principle narrative that emerges from the examples surveyed in this study is that how a work of critical design is disseminated - its mode of

<sup>6</sup> *The Black Book Interview Project* was an exhibition I co curated in 2012 with Dani Admiss. The work presented as a series of conversations held in a London gallery space over the course of one day. A selection of designers, including Julia Lohmann, Revital Cohen, Bahbak Hashemi Nezhad and Jerszy Seymour were given an hourly slot in which to host a critical conversation about the state of design. Interpreted through critical writing, visual cartography and illustration, the days event culminated in a publication exploring the very nature of design discourse and critique.

engagement – becomes as important to its success as the actual work itself. At the same time it must be emphasised that the experimentation and theory that characterises much of critical design practice has yet to find its equal with regards to the methodologies of its circulation and discourse. If critical design is to be subject to inquiry through circulation, interpretation and dialogue, a new language and a new space for its expression is required. This study is symptomatic of these aims. It will examine the museum as a key influence in design's legibility, and the ways curators are contributing to design's discursive potentials. As described in this thesis, an under-discussed and under-theorised element of critical design is the relationship that curators and museums can develop with this emerging practice.

From a disciplinary perspective one of the goals of this thesis is an exploration of the development of this emerging form of design which has gathered momentum since the late 1990s, when the parallel flux of design activities alternative to the prevailing methodologies began to emerge. It is my opinion that it is imperative that we understand how the characteristics of critical design transpired in order to understand the challenges and opportunities it sets forth for the museum. Although we can see glimpses of this shift the world over, the core of this study is the rise of critical design practice within Europe, with a particular focus on the UK and Netherlands, where this form of practice first gathered momentum, as described previously. As the chapters that follow will make clear, the rise of critical design in the 1990s has set in motion a demand for a reconsideration of our existing understanding of the discipline, and the ways design is produced, consumed and debated. Again, this thesis will make clear that works of critical design have ruptured design's conventional focus of progress and problem solving, focusing its efforts instead on any or all of the four behaviours of questioning, problematising, possibilising and activating. It will also argue that there is sufficient evidence to approach this new breed of design as a para model for the field of design, a development brought about by designers who have continued to question the limits and boundaries of the work of design. Their efforts place the entire field of practice in a broader focus extending design's conventional remit into uncharted territories, creating a moment where design opens itself up into a kind of immanent critique – a meta-reflection. This emphasis on a self-reflexivity will be examined further in chapter 4 by explicating the notion of critical design as a



design of reflexive modernisation as theorised by Ulrich Beck, Anthony Giddens, and Scott Lash (1998). Through this, the main proposal of my thesis will be to rethink design's specificity and performance through a conceptualisation of critical design in the current cultural arena as well as to reconfigure our knowledge of the systems involved in critical design's production, interpretation and dissemination.

Although design from 1999 onwards is the primary focus of this study designers' preoccupation with employing design as a vehicle for debate is not without precedent. From a Western frame of reference, critical design can be grounded by two major historical movements: radical design in Italy in the 1950s, which advocated for conceptual design as a way to challenge designers role in the service of industry, and Anti-Design in England, Austria and Italy in the 1960s and 70s (primarily Superstudio, Studio Alchimia and Archizoom<sup>7</sup>) who temporarily removed themselves from the market, producing works that served to introduce an intellectual discourse in design. (Sparke, 2000; Coles & Rossi 2013) The reasons for taking 1999 as the starting point are many. First, 1999 marked the year Anthony Dunne formally coined the term 'critical design' in his book 'Hertzian Tales' published in that year. Secondly, it was in 1999 when London's Institute of Contemporary Art (ICA) presented: *Stealing Beauty: British Design Now*. The exhibition, curated by Claire Catterall, featured the work of 16 young British-based designers whose common ground resided in their desire to communicate and experiment through the object. While raising questions about the very nature of design, and what happens when designers act like artists (Catterall, 1999) *Stealing Beauty* attempted to characterise design's shift from a practice centered on slick aesthetics and overt functionality toward a prioritisation of communication over product. (ibid:7) Third, 1999 was the year the exhibition *Lost and Found: Critical Voices in New British Design* was mounted by the British Council, marking the beginnings of critical designs valorisation through international exhibitions. (RCA 2014) The exhibition addressed the clear shift away from designs reliance on the market as context, emphasising a new breed of designers whose critical work embraced a landscape of ideas. As stated in the catalogue "This new wave of designers uses concepts, ideas or questions as the starting point for design. How should we best make use of advances in technology when we are already surrounded by electronic pollution? What is the role of the product

<sup>7</sup> For the reader interested in these earlier design practices please refer to historical works such as: *The Italian Radical Avant-Garde*, ed. Alex Coles and C.Rossi (Berlin: Sternberg, 2013) and *Italy: the new domestic landscape: achievements and problems of Italian design*, Emilio Ambasz (N.Y.: Museum of Modern Art, 1972)

designer in a world already dogged by over-production? How can designers play a responsible role in using the earth's scant resources? Fourth, it was in 1999 when Droog Design exhibited the installation *Couleur Locale* at the Salone di Mobile in Milan. After 6 years of presenting a section of stand alone objects at the fair, it was the first time the group presented design as a tool to uncover and reassemble our reality. Revealed as a coherent project aimed at revitalizing Oranienbaum, a small town in the former East Germany, the exhibition invited visitors into a mise-en-scene which considered the idea of a cultivated landscape where nature and culture meet. While exploring key issues of history, art and culture, nature and ecology, trade, economy and employment, *Couleur Locale* presented design not as a question of making new objects but as Aaron Betsky states in his article re: droog "of finding more ways to experience, explore and expand the possibilities of existing objects, images, spaces and ideas" and ultimately, he continues, as a way of "using the elements of daily life to reflect on and criticize the structures controlling that inhabited landscape. It is a way of exposing hidden structures in the blandness of what is all around us through irony, rhetoric, misuse and deformation." (Betsky, 2001:16)

Whilst challenges to design's dependence on utility, mass-manufacture and the market can be identified at numerous points in the history of modern design, the end of the 1990s signalled a significant shift in the conceptualisation of design. From this decade onwards critical design is featured prominently in international exhibitions while joining several key museum collections worldwide, including MoMA, the V&A, and FNAC (Fonds National d'Art Contemporain). These developments were a key backdrop to the emergence of critical design. However, this thesis is not intended as a design historical analysis of these conditions. Rather, it situates the emergence of a new kind of practice at this moment, and then moves on to focus on the ways in which these practices were mediated and enacted.

#### **1.4 Research Questions and Objectives**

This inherent transformation in the production of design, its institutions and audiences, and the reinterpretation of the designer and his relationship to the user raises two foundational questions that this thesis attempts to deal with: Firstly, If the task of critical design is to alter design's relationship to society how is a legibility of this new form of practice developed? And, secondly,

can we find a context capable of enabling and responding to these emerging practices and imaginaries, one which is fully open to not only nurturing but, ultimately, fuelling this form of design – providing a space for critical design’s new and sometimes difficult discourses to flourish? At the same time it must be stressed that one of the objectives of this study is to establish the inadequacy of approaching works of critical design as art.

As indicated, the conceptual and gallery-based mode of much critical design practice can, by default, lead to it being considered as a variant of contemporary art practice. For example in this 2003 catalogue essay, *The Strangeness of The Familiar in Design*, written for the exhibition *Strangely familiar: design and everyday life* (Walker Art Center) Aaron Betsky defines critical design as a hybrid practice between fine art and design. Alternatively in their 2008 exhibition catalogue for *Wouldn't it be Nice: Wishful thinking in Art and Design* (2007), Emily King, Katya Garcia-Antón and Christian Brändle celebrate works by critical designers Dunne & Raby, Noam Toran and Onkar Kular (among others) defining them through metaphors of border crossing and the dissolution of boundaries between the two fields. (Emily King et al 2007) I would argue that this is not only reductive, but also assumes that critical design is primarily concerned with the dissolution of boundaries between the disciplines of art and design. This misses the point that critical design, through its works, is intent upon establishing a philosophical discourse firmly placed within the historical category of design. That said, my thesis draws upon historical, philosophical and practice-based approaches to curating which are much more developed in relation to art practice than design. The understanding of the philosophy and practice of design curating is, to date, a very under-developed discipline, something that my thesis seeks to redress. Therefore, the thesis will explore recent histories of curating this distinct form of design in order to address the complexities of contextualising and representing this emerging field of practice with the intention of addressing the following research questions:

*How are contemporary museum exhibitions being used to disseminate critical design practice?*

*How is the role of the designer, museum and audience being redefined by critical design's characteristics?*

The framework will therefore represent an attempt to find a productive relationship between critical design and the museum exhibition. The principle contribution of this study is to establish new conceptual and methodological bridges between critical design, the museum exhibition, and its audience. I seek to know how designers and curators are employing the museum exhibition for the circulation and/or production of critical design in order to gain insight into the potential roles the museum can play within this emerging practice as well as to gain a clearer understanding of how critical design can be distributed in a way that moves its audience toward a state of self-realisation.

I wish first and foremost to reveal to curators what is most significant about critical practice, and to begin to unravel some of the biggest challenges of curating it. But as well I hope to uncover some of the latent potential of the museum exhibition for those researching, teaching and practicing critical design.

Reading this, one may interpret the attempt to define a space and methodology for the production and circulation of critical design as a dogmatic pursuit. In response to that potential criticism I think it is important to outline that this project is not about creating a new design history, but a design future.

## 1.5 Thesis Structure and Methodology

Consisting of two lengthy sections, an interduction and a conclusion the thesis examines the emergence of critical design as a distinct mode of practice against a wide range of dimensions, from the individual drives and behaviours (chapter 2 and 3), to social and political control structures (Chapter 4), through to issues pertaining to its communication and mediation (Chapter 5, 6 and 7). The study is aimed at bringing each of these fragments together to begin building a wider context in which to place and discuss the role of this emerging practice within the field of design, its position within society, and the potential for curating to play a productive role in its legibility.

Discussions from within the design world continue to be motivated by an interest in ‘what is’ critical design: Bardzell and Bardzell’s *What is ‘Critical about Critical Design?’* (2013), Prado and Oliveira’s *Questioning*

*the 'critical' in Speculative & Critical Design* (2014), and Knotty Objects' debate on Critical Design (2015), to name just a few. Often plagued by seemingly unending criticisms on its elitist white western focus and tendencies, and its inability to lead directly to positive, substantive change, the literature and discourse surrounding critical design tends to yield a particular field of inquiry that focuses specifically on the foundations of the work but not its mediation. If, as Dunne and Raby suggest, the role of critical design is to raise awareness and debate of issues through the creation of 'material tales' (Dunne and Raby 2001; 2013) then one could rightfully argue that the work of critical design hinges on its dissemination and communication to a public – which becomes an inseparable component of the work itself. With this in mind this thesis is intended to investigate both the behaviours of the work of critical design and more importantly how it is articulated and disseminated to a public. As previously described, the aim of the thesis is not to write a chronologically grounded history, but to capture a moment in design while stimulating discussion of the various approaches to practice and their re-presentation, and contextualisation through the medium of the exhibition. It is a critical qualitative study which supports a social constructivist method of inquiry which subscribes to a relational theory of social meaning. (Gergen 1994) The methodology is akin to what American psychologist Kenneth Gergen refers to as relational research, which questions the idea of 'objective' knowledge and truth, while positioning dialogical practices and embedded experience as primary modes of inquiry. (ibid; Aceros 2012) As such it incorporates such data collection and analysis methods as observation, discussion, and textual and visual analysis. Alongside a review of current and historic literature on critical design and exhibition practice – publications, statements of practice, exhibition catalogues – a series of discussions were conducted with leading critical designers and curators. These discussions were employed as a research tool and as an exercise in examining both thoughts on, and approaches to, current design practice and its mediation through exhibitions. (Molotch 2003) Each open-ended discussion served as a means of collecting information about key issues in critical design practice as well as gathering information on particular exhibitions, publications and events. Visits to critical design exhibitions provided a key support for understanding current trends in museum practice by allowing a personal account of events, practices and

discourses. What it offered the research was a primary interpretation of the exhibitions observed and, therefore provided me with a deeper understanding of how works of critical design functioned within the museum exhibition context. Evaluating each exhibition allowed me to develop a number of practical insights and questions that informed the approach and criteria proposed in chapters 7, 9, and 10. In this study, 25 exhibitions were visited of which 10 incorporated works of critical design to support a theme (for example: *Design and Violence*, MoMA, NY, 2013; *All of This Belongs to You*, V&A, London, 2015), 8 featured critical design as display (for example, *Toaster Project*, Science Museum, London, 2013; Design Gallery, MoMA, 2014) and 7 were exhibitions of critical design (For example: *How Things Don't Work - The Dreamscape of Victor Papanek*, Anna-Maria and Stephen Kellen Gallery, NY, 2014; *I Cling to Virtue*, V&A, London, 2010) Further to this, three case studies were produced that incorporated an ethnographic approach offering the chance to develop deep grounded observations through the extended, direct study of critical design exhibitions in context. (Macdonald and Silverstone 1992; Burawoy 1998) The research design employed 'Constructivist Grounded Theory' as a mechanism of study. (Charmaz 2000, 2006) Its qualitative analysis is based on a belief that "Data do not provide a window on reality. Rather, the 'discovered' reality arises from the interactive process and its temporal, cultural, and structural contexts" (Charmaz 2000: 524) I approached the case study as an immersive research tool to assist in a formulation of concepts and theories relating to building a productive relationship between critical design and the museum. Through this the research considered two strains of questioning. First, the micro-scale was considered raising questions of the perceptions when entering the project: The positions from where the design and curator speak, what are the expectations of the project? What are the conditions needed to get the project done? What is the play between roles?, What was the brief? What is the site of planning and negotiation vs. site of production vs. site of exhibition? It questioned the relational and situational of the curatorial. Secondly, it questioned the role of the museum: What is the discourse function of the museum exhibition? Which contexts and what conditions make it possible? How do institutional projects and exhibitions inflect our understanding of contemporary design? How do they influence design

direction? This macro-scale of inquiry questioned the idea of the museum as a third space for design, (alongside the academy and the market)

Each case study – *United Micro Kingdoms*, *Risk Centre*, *Timescape* – was chosen as an incidence of ‘museum rupture’ in the sense suggested by Michel Foucault (1972), where the rules of exhibition are purposely subverted, challenging the contextual strategies, procedures and situations of the set ways in which museums and their exhibitions function. According to Foucault, new knowledge and discourse emerge through relationships defined as much by ruptures and discontinuities as they are by unified themes. He elects the polemic of continuity and discontinuity as a working concept for history, highlighting the importance of sudden and abrupt changes to the shifting patterns of knowledge and thought. (Foucault 1972) In *The Archaeology of Knowledge* (1972), Foucault argues that although new rules are formed, redefining the boundaries of previous knowledge and truth, there exists continuities from the previous order as well. (ibid.) This dynamic capacity of ruptures to be both new and old, makes them attractive options. They function as a sign of shifting power/knowledge formation, and can therefore be used to track the reinvention of patterns through which new knowledge is produced in a field of practice. From this perspective, an analysis of incidences of rupture or institutional interventions becomes significant, not only for archival purposes, but also as a way to chart the changing character of experience within the institutional gallery and its relationship to critical design practice. Importantly then, by focusing specifically on three examples of rupture within the museum exhibition, it is my hope that we can start to trace the affinity of different forms of curatorial gestures to critical design’s vocabulary of practice, as well as to problematise the distinct roles played by curator and designer with respect to the production and mediation of critical design. This may in turn provide a glimpse into the role museums will play in relation to this emerging design practice.

The research for this thesis was undertaken first as a series of critical writings about the design projects and exhibitions which formed the major case studies. These reviews were the basis for an emerging criteria for how the mediation of critical design could be considered according to three key measures: embodied criticality, epistemic environments and intellectual emancipation. Led by the case studies, the research identified overarching

themes and approaches which were then situated within a wider discourse of design and contemporary curatorial practice. It was never intended that the thesis become a ‘survey’ of the contemporary design history of critical design. Rather it sought to establish an appropriate way of writing about design which synthesized academic writing with forms of critical, academic review, informed by curatorial practice. It is important to note that the study emerged from a funded doctoral research project which was situated in the department of design at the RCA and the Victoria & Albert Museum. The hybrid nature of the PhD allowed for a dual approach to research examining how both designers and curators working with designers employ the exhibition as a tool for the production and mediation of critical design. The combination of insights from both sides allowed me to weave together concepts from critical design with theories of the curatorial in order to build a model for understanding the relationship museums can build with critical design practice.

### **1.5.1 Writings**

The following section addresses the specific structure of the thesis in more detail including the challenges posed by the specificities of the study. The first component of this volume, comprises a theoretical introduction to the context, ideas and concepts behind the works belonging to critical design practice. The second section is concerned with how museums are currently engaging with critical design through their exhibitions. The latter comprises a series of exhibition reviews that specifically consider how the museum constructs ideas about critical design, while focusing on three key measures – embodied criticality, the epistemic object, and intellectual emancipation – for building a productive relationship with critical design. Overall, the structure varies in form from academic essays, critical reviews, to more general reflections on both the work of critical design and the methodologies that frame the curatorial propositions within this emerging practice. The issues discussed within these two segments can be further summarised as follows.

The first of the chapters, dedicated to a theoretical introduction to the field, begins with a discussion of the intellectualisation of design through an analysis of Arthur Danto’s seminal essay ‘*The Artworld*’. Using the example



of Thomas Thwaites' Toaster Project, the chapter argues that the project constitutes design's shift away from an exclusionary core where design no longer adheres to the constraints of utility, function (in the normative sense) and beauty, but serves a new purpose as reflexive criticality. This understanding leads to a call for a change in the expectations and traditions of approaching something as a 'work of design'. The following chapter examines traditions of critical thought as a way of conceptualising a broader understanding of the concept of critical design. What will be foregrounded here is that although quite similar in their underlying formations, principles and strategies, there is concern that a direct correlation to critical theory could potentially cut critical design off from its original impetus. I will instead invoke the notion of a para-model, as a more design-centric conceptual framework through which to understand this 'critical turn' in design. The last of the chapters in section 1 focuses on situating the movement in a broader theoretical context of societal change. Turning to Reflexive Modernisation and the Risk Society to help clarify the basis for identifying the practices and themes of critical design, this chapter argues for an understanding of critical design as a practice defined by its 'futuring agency' which opens ourselves and our world, not simply to reflection, but to reflexivity.

Chapters 6, 7 and 8, forming the second section of the thesis, build on the concept of critical design as a form of practice that tasks itself with enabling a new reality while focusing its attention on the potential for construction and change that lies in its reception. Thinking of critical design in terms of its reception this segment seeks to demonstrate how this shifting landscape around design raises questions regarding its development, dissemination and experience. One of the important concepts underpinning this study is how design is defined and recognised, and what roles associated institutions play in its development. As Mazé argues:

Institutions play an important role in defining experiences and conceptions of design, including those held by designers. Design educations, exhibitions, associations and cultural forums (as examples of some kinds of institutions) develop and disseminate particular ideas about what design is about, its objects and objectives, conditioning the expectations of potential clients and audiences of design as well as the self-perception and professional definition held by designers. (Mazé, 2011: 278)

In this light it will be argued that the museum exhibition has the potential to become a key player in critical design's legibility. Building off a growing body of literature that considers the museum exhibition as an object of cultural enquiry rather than simply a tool for representing predefined ideas and principles (McDonald, 1996; Whitehead, 2007) it will trace the shift in exhibitions from textual models, to the shaping of disciplines, laboratories and epistemic objects. Design's circulation in the museum will be further problematised drawing upon theories of *the curatorial* to develop a model of the exhibition as a speculative activity that privileges critical thought, discourse, speculation and production. These chapters will focus on three prevalent modes of using critical design in the museum – 1) as theme (in which works are exhibited to explore an overarching thesis or subject), 2) as production (in which the exhibition itself is used as a medium and as a genre of critical design practice) 3) as a device for interpretation (in which works of critical design are used as tools to deepen experiences in museums). Three of the chapters exist as exhibition reviews which offer a critical analysis of a chosen case study while questioning how critical design is being produced and enabled from within the curatorial field. The remainder chapters are presented as a series of speculative essays which present alternative criteria for dealing with works of critical design in the museum.

## 1.6 Conclusion

This study is devoted to identifying issues concerned with defining and disseminating critical design. It undertakes to find ways of accounting for designs like that of James Auger and Jimmy Loizeau whose purpose is to question, possibilise, probabilise and activate rather than problem solve. At the same time it endeavours to ask what role the museum exhibition might play in fostering a discourse between critical design and its audience. As Mazé contends “As contemporary design is changing, so must the relevant platforms for debating and participating in such change.” (Mazé, 2011: 278) One of the main motivations for this study is therefore to consider the museum exhibition as a fundamental context for identifying, presenting and producing critical design. Anchored in practice this publication hopes to contribute to an understanding of design's shifting landscape and to shed light on what it might take to curate and circulate emerging forms of critical design practice.

The aim of this chapter was to provide a brief overview of the study and to present some of the arguments that underpin the spirit in which it was written. The following chapter will build on the specificity of critical design practice while scrutinizing the concept of 'a work of design'. Focusing on the Toaster Project by Thomas Thwaites (2009) it will provide a means of disputing critical design as a practice set within the confines of art in order to generate a deeper understanding of the structural and motive force behind the 'critical turn' in design.



. . . . Chapter two

# A Work of Design

## The Toaster Project by Thomas Thwaites

### 2.1 Introduction to the Chapter

Figure 2.1 – The Toaster Project exhibited at the Science Museum, London as part of Ten Climate Stories, a series of exhibit interventions which formed part of the Museum’s three year Climate Changing Programme.

image: author’s own



The image I have chosen (Fig. 2.1) to sit prominently at the start of this chapter is a photograph of an installation which, at the time of writing (2013), sits in the *Making of the Modern World* gallery at the Science

Museum, London. Forming part of *Ten Climate Stories*, a series of interventions that reveal a fresh perspective on historic inventions and everyday objects, *The Toaster Project* by Thomas Thwaites (2009) chronicles Thwaites' attempts to build an electric toaster from the ground up.

The project underscores what I speak of in the following chapter as 'design's ascent to a level of philosophical self-reflection'. *The Toaster Project* becomes the unmaking of the traditional narratives of design. It acknowledges that design can no longer be assigned a clear purpose nor a specific space. Which is to say that Thwaites' toaster project while engaged in a design-specific inquiry and critique, ultimately challenges the very foundations, histories and roles of design while becoming the very expression of a 'work of design'.

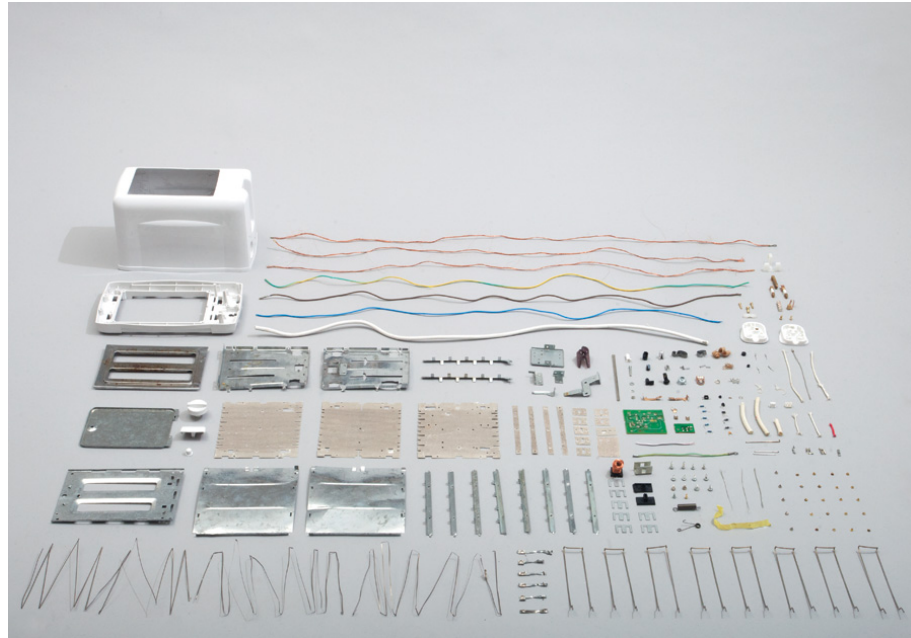
Naturally, *The Toaster Project* requires little imagination to see it as a comment about industrial design, but it demands much more to understand it as a work of design. This chapter is devoted to presenting a case for the latter. In so doing it will emphasise a shift in the rules and regulations governing design while attempting to find a more nuanced language to address how works such as this can be read as design. At present, the discourse of design has relied far too heavily on the logics of industrialization: Is it good design? Does it function? Is it beautiful? How much does it cost? These questions need to be taken to task, and with them the overarching argument that too often follows designs like *The Toaster Project*: How is it design? The following undertakes to introduce a series of reflections aimed at understanding the turn to a new theory of practice with an emphasis on the concept of a work of design – that is that there is an emerging discipline of design that has freed itself from the constraints of capitalism demanding new conceptual frameworks and forms of communication, understanding and engagement.

## 2.2 The Toaster Project

*The Toaster Project*, a graduate project in Design Interactions at the Royal College of Art, 2009, is a record of Thwaites' solo attempt to fabricate an electric toaster from the ground up. Inspired by the Douglas Adams quote: "Left to his own devices he couldn't build a toaster. He could just about make a sandwich and that was it." (Thwaites, 2011) Thwaites set out to replicate a mass-produced run-of-the-mill toaster available at the British

Figure 2.2 – An image of the deconstructed Argos Value Range two-slice toaster that Thwaites modelled his project on.

image:  
thomasthwites.com



retailer Argos for £3.94 (Fig. 2.2). By extracting the raw materials needed to construct this simple appliance and processing them himself Thwaites undertook the task of unveiling “the grand scale processes hidden behind the smooth plastic casings of mundane everyday objects, and to connect these things with the ground they’re made from.” (Thwaites, 2011: 5)

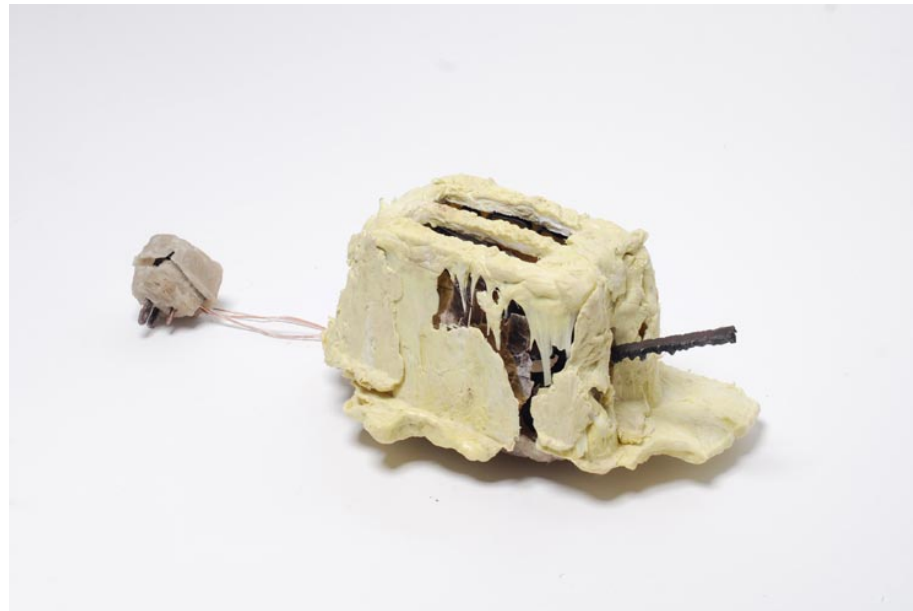
Although the intention was to create a functional model as a reaction to the romance of self-sufficiency and the desire to accumulate more stuff, more cheaply, the practicalities of the project proved to be overwhelming. (2011) Building it took 9 months and cost £1187.54, over 250 times more than the original product. In the end Thwaites’ Toaster did not even work and used a mere five materials: iron, copper, plastic, nickel and mica – a far cry from the near 100 materials he would have needed to find and process in order to construct a true likeness of the Argos toaster he modelled his project on. (2011)

But what Thwaites’ makes clear in the title of his work is something that is true of most critical design: that the heart of the work is not exclusively captured by the object. In Thwaites’ case it is not only the final toaster that matters (Fig. 2.3) but the entire process that is both the designer’s means and the viewers invitation to engage in the debate.

This is perhaps most evident in the series of videos that document Thwaites’ journey to extract and process the five raw materials of his project. The first is iron (for the grill) which Thwaites’ collects from a display case in

Figure 2.3 – Thwaites' final toaster

image:  
thomasthwaites.com



the visitor centre of an abandoned mine and smelts in his mother's microwave (after a failed attempt at making a 'bloomery' furnace from a chimney pot, dustpan and leaf blower). The second, copper (for the pins of the plug and the wires), sees Thwaites retrieve water from mine tailings in the North of Wales. He later extracts the metal via electrolysis and casts it in cuttlefish shell moulds. He scavenges for the third, plastic (for the casing, plug and wire insulation), at a dump, and proceeds to melt it down and mould it in a hand carved tree stump. This is a final compromise after rejecting initial plans to use a pressure cooker to create polypropylene from crude oil collected from the North Sea (which proved an impossible task in the end) as well as a failed attempt to make bio-plastics from potato starch (which ended in a snot like substance too weak for moulding). The fourth involves a hunt for nickel (for the heating elements) which Thwaites attains by melting down 11 Canadian commemorative coins purchased on ebay (the timelines were tight at this point and left no room to humour the idea of going to nickel mines in either Finland or Siberia). The fifth and final material is mica (around which the heating element is wound) which required that Thwaites trek into the remote hills of Scotland after having failed to locate an abandoned Mica Mine in Knoydart.

By mapping an extensive field of reference to situate the journey of making a toaster from scratch, the videos reveal a kind of liminal space where failure, frustration and getting lost point to one of the most important



elements of the project, that the very idea of 'from scratch' has long vanished from the realities of our world.

The snags Thwaites encountered through-out his process were in fact the very nature of the success of his design. As Steve Furlonger, the former Head of Sculpture at Central Saint Martins College of Art and Design, describes:

Under [Thwaites'] toaster making project he is saying profound things, of a different order. The 'failures' he encounters, during his toaster making, point to the success of his real message; that we have become disconnected from how our world is supported and sustained. (2011)

While acting as a testimonial to the monumental journey that a toaster takes, from raw material to finished product, *The Toaster Project* draws awareness to the mysteries concealed within the everyday objects that surround us.

### 2.3 Conceptual Cores

Here it helps to consider how the work acts. *The Toaster Project* is characteristically an investigation into the production of a toaster rather than its fetishization. It does not celebrate the toaster as object, or the love of toast, but rather focuses on the provenance and fate of this 'simple' appliance. In this critique of productivism the emphasis is on process over the final object. In fact Thwaites' project has a multiple ontology. As previously mentioned, it is not just the 'handmade' pastiche of a toaster that makes up the work, but also the meticulous recordings of his process in both blog form and video, and the series of objects and equipment used to create the final object. This insight can be extended to the argument that the long periods of research, the consultation with experts as well as Thwaites' resourcefulness and imagination formed as much (or more) of the design than the final toaster. What, in fact, makes the project so valuable sits within what it reveals through the careful documentation of its coming into being. The work creates a map of the invisible, it charts the circumstances of the coming to life of a toaster while creating a space to question both the systems of capitalism and the romantic ideal of a pre-industrialised time. What is notable is that *The Toaster Project* aimed not to deliver a concrete proposal or optimal solution, but rather a provocation for reflection and debate. It is not through the works potential to toast bread but instead through its ability to call attention to the unquestioned faith in the

institutionalised practices of modernism: to unveil truths about the complexities of the modern world, the material and practical origins concealed within the everyday objects that surround us, and the hidden costs embodied within the commodification and disposability of modernism's culture of consumption. While defying the three major concepts on which the edifice of Industrial design was built: aesthetics, utility, and commercial appeal, the project engages critically with design as a discipline. In short, *The Toaster Project* provides designers and their publics with a space of possibility in which to reflect on the world of design and the social, cultural and economic realities embedded in its networks.

This emphasis on the project's ability to problematise the issues surrounding the systems integral to the existence of a toaster feeds into the theory of lash ups put forth by sociologist Harvey Molotch. (2003) In 'Where Stuff Comes From' (2003) Molotch uses the example of a toaster to illustrate his point that a variety of things come into place in a given time and space, and this act determines the pattern of stuff that exists around us.

Like a toaster. It does not just sear bread, but presupposes a pricing mechanism for home amperage, government standards for electric devices, producers and shopkeepers who smell a profit, and people's various sentiments about the safety of electrical current and what a breakfast, nutritionally and socially, ought to be... There are merchandise critics, trade associations, advertising media as well as the prior range of goods and hardwares within which it must fit – wall outlets for its plugs, bread slicers calibrated for a certain width, and jams that need a crusty base. There is a global system that yields a toaster's raw materials, governments that protect its patents, a labor force to work at the right price, and a dump ready to absorb it in the end. (Molotch 2003: 1)

The problem is that many of us are completely unaware of the existence of this networked system and its implications for our culture and society on a whole. As David Crowley so aptly writes in the forward to Thwaites' book about *The Toaster Project*:

We rarely ask these kinds of questions. Perhaps the nature of our consumer culture makes us averse to them. Consumer goods play a clever game of "hide and show" with us: they call our attention, promising to satisfy our wants. Yet, at the same time, they veil their origins. Appearing to have no history or past, they materialize on the shelves of our shops as if by magic. This is what Walter Benjamin described as the "phantasmagoria" of commodity culture. Modern societies, it seems, not only forget the material and practical origins of the commodities they consume, they seem to have elevated them to minor deities. (Crowley: 2011:1)

By bringing to light this very idea, Thwaites' project comprises both a platform for questioning the method through which things are made as well as a resource for the analysis of the systems integral to its existence. It is a questioning of its own identity evidenced through a self-reflexive, self-conscious design which offers a profound set of stories that raise issues of sustainability, industrialisation and mass-consumption. In other words Thwaites' toaster project operates as a mirror held up to the world of design, insofar as a mirror allows us to see what we could not otherwise perceive – our own image. From this standpoint the work reveals our world to ourselves, it plays to an illumination of a toaster's inherent systems of reference, rendering them visible and subject to both discussion and analysis. In this context, design becomes a form of language through which a designer may speak to a user or a user to themselves. Indeed what we are talking about here is a changed concept of a work within design.

In effect, what appears to be an industrial design exercise ultimately ends philosophically, leaving us with the possibility that design itself has reached a certain maturity, not in the Kantian sense of purity, but in a manner whereby design has opened itself up to conceptual acts, signalling a rupture with its traditional narratives while becoming a space of intellectual consideration.

The past few decades have in fact witnessed what might be described as a broad conceptual turn in design practice. As British design historian Judy Attfield argues: "More recently the genre of objects called 'design' has diversified to encompass many new regimes of things well beyond the structures which only allowed the useful and the product of mass industrialised manufacture." (Attfield, 2000, pg. 30) Contemporary design, as it has evolved, has come to signify far more than pure functionalism and aesthetics. It is here to make a statement, to challenge assumptions, raise awareness, and to foster debate. It allows designers to express their opinions through the language of design, revealing a pluralism of perspectives, purpose, methods, actions, and potentials, which overturn the prevailing functional, formalistic, and market-centric narratives of design practice.

Yet, while many forms of concept-led design have previously existed, with works by the radical designers of the 60s and 70s, Ron Arad in the '80s, Droog in the '90s to the myriad of examples that exist today, *The Toaster Project*, while being conceptual also marks a veritable collapse of the

traditional conventions that have dominated industrial design since its beginnings. It is in *The Toaster Project* that it seems the most relevant to say that the very foundations of design have been challenged. For, under the standards by which a toaster is judged to be design, *The Toaster Project* fails: it does not toast bread, it is not aesthetically pleasing, it was not produced by industry and it is not commercially viable. Ultimately, to perceive *The Toaster Project* as design, and not just inept design, requires theoretical changes. What *The Toaster Project* proclaims is that it is no longer sufficient to enfranchise an object as design merely through formal, utilitarian, commercial, problem solving and progress driven functions. What is needed is a new theory of practice capable of providing a conceptual understanding of design works that exhibit few cues for formal and utilitarian interpretation.

## 2.4 A Work of Design

This crisis in the basic concepts of design parallels Arthur Danto's beginnings of the philosophical question of the nature of art, which "...was something that arose within art when artists pressed against boundary after boundary, and found that the boundaries all gave way." (Danto, 1997, pg.14) By Danto's account "the end of art" refers to a moment in art history where artists such as Andy Warhol were challenging what came before with works such as his *Brillo Box* of 1964, which boldly put into question "What is Art?". By creating indiscernible art works from objects that existed in the everyday, it became impossible to tell whether you were in the presence of art or not, without further knowledge of what was before you. Danto claimed that from the moment when anything could be art (but not everything was) the idea of the history of art as an unfolding narrative ceased to exist, and an appreciation of art become a matter of philosophy. (1964) What Danto was in fact implying by declaring 'the end of art' was not that art had ceased to exist literally, but that at this exact moment in history there was no single direction left in art, indeed no directions that must be met. To quote Danto at some length :

To use my favorite example, nothing need mark the difference, outwardly, between Andy Warhol's Brillo Box and the Brillo boxes in the supermarket. And conceptual art demonstrated that there need not even be a palpable visual object for something to be a work of visual art. That meant that you could no longer teach the meaning of art by

example. It meant that as far as appearances were concerned, anything could be a work of art, and it meant that if you were going to find out what art was, you had to turn from sense experience to thought. You had, in brief, to turn to philosophy. (1997, pg. 13)

If we accept the idea that *The Toaster Project* has broken design's protocol of medium-specificity eliciting a moment whereby design can be understood to uphold critical self-reflection, then we might also agree with Danto that these conditions of transfiguration indicate a shift to a philosophy of the subject, and in our case a philosophy of design – where philosophy is defined by the state of questioning one's own identity evidenced by the current shift to a self-reflexive, self-conscious practice.

This does not imply, of course, that the history of design is devoid of examples that challenged the foundations upon which the narratives of design were built. We could draw many examples from the works of the Bauhaus to Russian Constructivist material experiments. But of all the works that came before, *The Toaster Project* raises most vividly the question of the fundamental nature of design since it necessitates entirely new concepts in order for it to be interpreted as design. In this way, the defining question for design might then follow Danto's shift away from the modernist narrative, which asks the question 'What is it that I have and no other kind of art can have?' to one of 'Why am I a Work of Art'. (1997, pg. 14) From a philosophical perspective Thwaites' toaster project poses that very question "Why am I a Work of Design?"

What Danto contends through his "Artworld" essay is that in order to see an object as art, we must look past the visual, we must see the work within an artistic framework, with a pre-conceived knowledge of the history of art. (1964, pg. 581) "What in the end makes the difference between a Brillo box and a work of art consisting of a Brillo Box is a certain theory of art. It is the theory that takes it up into the world of art, and keeps it from collapsing into the real object which it is." (1964, pg. 581) Of course, unlike Warhol's *Brillo box*, with *The Toaster Project* we are not talking about an art/reality paradigm. It is not the question of the difference between a toaster as art and a toaster as industrial object, but more so an inter/design paradigm. It is a comparison of one toaster with another toaster, raising the question of the definition of what constitutes design – the philosophical problem of design itself. What is similar however is the need for a certain theory. In line with Danto's beliefs, what makes *The Toaster Project* design is that it

instantiates a theory of the nature of design. One could simplify this even more by stating it is design on account of its reference to the field. The fact that it has not only entered design discourse but has also been collected by the Victoria & Albert Museum confirms this.

Couched in this assertion is the assumption that design is no longer compelled to adhere to the constraints of utility, beauty or problem solving tactics, but can serve instead as a framework which enables a self-reflexivity and an expansion of a field of vision. This very idea points to the notion that design has expanded the significance of the object towards a notion of an ‘autonomous work’. This does not mean that design is becoming art. As Tido von Oppeln confirms in his article *Design and Art: A Love Story*:

Design has now given rise to a self-reflective creative praxis and found ways of engaging critically with itself as a discipline. To those who wonder whether design objects might actually be art, we respond that while they may aspire to be autonomous works, they nevertheless remain located within their discipline. (von Oppeln, 2013: 19)

This idea follows closely with Tido von Oppeln’s concept of the ‘work of design’ which he discusses in his essay *For a Concept of the Autonomous Work of Design*. In it von Oppeln defines the concept of a work of design as a way to conceptualise the shift in practice which has occurred over the past twenty-five years. While identifying three features of the work of art that exhibit true likeness to the work of design he concludes:

Firstly, with reference to Kant and Adorno, the work can be described as resistant to usage, being marketed, and the purely functional quality of commodities. Secondly, the texts of Benjamin and Danto point out that a work is “about something” and can be a commentary or a critique of that something. Thirdly, according to Heidegger’s definition, it is self-referential and refers to its own world, a world it creates for itself (von Oppeln, 2010: 30)

For von Oppeln, the concept of ‘the work of design’ is detached from its modernist heritage, whereby design was attributed new value through its accessioning into the museum, taking on the elevated status of a work of design. He argues that design has brought forth its own concept of ‘the work of design’ (2010: 19) which itself relates to a self-reflective understanding of design. Following this argument Thwaites’ toaster project could in fact constitute a work of design. The project’s clear resistance to usage and commodification points to the fact that it is much more than a conventional

appliance designed to toast bread. What the work exposes is a relatedness to the history of product design. It brings to light economies of scale in modern industry, while highlighting the material and practical origins of the things we consume. In this sense Thwaites' project is about what it embodies. It is a toaster about toasters and can therefore be read as a direct commentary and critique on the design industry, and its technological, economic, global and cultural infrastructures and economies.

This very notion of a work of design is core to art historian Klaus Spechtenhauser's theory of the shift to design as critical praxis. For Spechtenhauser, the coming into being of a work of design stems from designers deep dissatisfaction with the master narratives of their own discipline. He states:

designers, fed up with established market mechanisms and calls for properly and functionally designed products, intervene via their objects in social, political, ethical, ecological, and aesthetic discourse. Or they use these objects to make critical statements on their own discipline. (Spechtenhauser, 2010: 71)

He notes that much of this critical practice is marked by the making of objects replete with multiple and varied messages, allusions and references.

These may reach back into the past, but also into the future; they may operate within the discipline or allude to a specific aspect of life; they can critique their own discipline or deliberately avoid being judged by existing criteria. Here, design becomes critical praxis and can acquire the character of a work. A work of design, of course, and not an artwork. (2010: 83)

This notion that design can exist at the level of ideas, that it is not 'for' the everyday but 'about' it, continuously puts design at risk of being enfranchised as art. The design researcher Ramia Mazé has commented in relation to works such as *The Toaster Project* being too easily dismissed as pedagogy, policy or art:

Many designers today are operating outside the confines of the design office, inventing alternatives to the 'client service' model of the profession, producing things that might not be recognized if design is reduced to the 'object' or 'objectives' of industrial production and market consumption. (Ericson and Mazé, 2011: 282)

Mazé goes on to argue the importance of understanding these works as design not only for accepting designers' efforts in altering the conditions of

their practice, but more importantly for acknowledging the ‘criticism from within’ that is happening and its impact on transforming our very understanding of design, designers and their audiences. (2011: 282-283) Indeed, while *The Toaster Project’s* behavioural structure is albeit similar to that of an art work –a strong argument for the blurring of the boundaries between disciplines– its references to the field of art are lacking. In this perspective, the projects relatedness to the history of design directly reflects its engagement with the field itself, thereby ascertaining that its self-reflexivity is itself situated in the context of design and it is from within this context that it sets itself to work. Furthermore, as Dunne & Raby suggest in their book *Speculative Everything*: “If it is labeled as art it is easier to deal with but if it remains design, it is more disturbing; it suggests that the everyday life as we know it could be different, that things could change. (Dunne & Raby, 2013: 43)

This privileging of a use-value in the real, ‘that things could change’ indicates a form of purposive aesthetics which lies in direct opposition to the values underpinning the autonomous work of Art largely determined by Kant’s assertion of purposeless purpose and disinterested spectatorship. (Kant, 1911) What we are seeing is not simply the case of strategies from conceptual art being adopted in a different context. Works such as *The Toaster Project* represent a significant renewal and expansion of the concept of an autonomous work of design while implying a regime of engagement and relationality entirely at odds with the Kantian spectator. These works and ways of working, as von Oppeln contends: “[seek] not so much proximity to art as the opportunity for a distanced, reflective observation and appraisal of its own work. In so doing, design is developing a discourse about itself as a discipline and offering a critical counterpoint to the unquestioning faith in progress that still characterized modernism.” (2013:19) In reality this shifting status of a work of design censures any concept of artistic autonomy as the very concept undermines the true purposes of critical design – to reveal and disrupt the invisible set narratives, beliefs and ideologies that surround us, and to instigate critical discussion while encouraging more active forms of intervention and agency. (Dunne & Raby, 2013) We might therefore argue that Thwaites’ toaster project engages in societal and political criticisms in and through action within the field of design. It is a criticism from within – it exists within the system of meanings of the design



world and it is in this context where its true power lies. If Thwaites' toaster was to be enfranchised as art it would lose the power of its language, or as Danto contends, 'its form of life'. (Danto, 1997: 202)

## 2.5 Mediating Critique

This expansion of design without departing from the historical classification of the discipline offers many challenges for the field, not least of which relates to matters of context and mediation. In fact one might argue that the essence of designs like that of Thomas Thwaites lies in their dissemination and engagement. As Dunne & Raby assert: "They are designed to circulate". (Dunne & Raby, 2013: 139) Indeed an argument can be made that *The Toaster Project* begs a new context that goes beyond the market and domestic environments. It is this context that becomes essential for fostering the true potentials of this form of critical research, raising issues relating to situated interpretations and conceptualisation. Dunne & Raby suggest the exhibition as an ideal context to consider. "The exhibition and, in particular, museum exhibitions" they write "are ideal places to explore and enrich our 'self-understanding.' We can build on existing conceptions of what exhibitions are and how they work to develop new approaches and presentation formats." (2013: 154) They go on to assert. "We fully agree with Paola Antonelli, senior curator of design at MoMA, when she suggests museums can become laboratories for rethinking society, places for showing not what already exists, but more important, what is yet to exist." (ibid.)

If in the past, the autonomous work of design was conceived as a construct of the museum (only within the confines of the institution would an object of design be elevated to the status of a work), today, in part due to design's withdrawal from the market as context, as well as its establishment as a work in its own right we require a refinement of the very discourse of design production and reception which inherently has huge consequences for the museum. At the same time, design understood as critical praxis raises a series of epistemological problems for the museum. As London based curator Jana Scholze states in her article *Immaterials and the Museum*, "One could argue that even design museums are not known as spaces for speculative thinking and dreaming." She continues:

Given current conventions of display it seems justified to question what methods and techniques might be appropriate to present such

concepts, critique and speculation. Might current museological practice hinder and obstruct communication, and foster misunderstanding and misinterpretation, as the audience expects results and definitions, not proposals and questions? Critical design challenges the visitors' expectations that the museum is a place of knowledge and authority. (Scholze, 2016: 67)

Unlike many designs, to present the final object (Thwaites' toaster) as *The Toaster Project* is to miss the work entirely. To reflect this, for his degree show at the RCA, Thwaites chose to display not only the final toaster, but as well a selection of the equipment used to create it, and a compilation of process videos displayed chronologically. What visitors saw was a form of documentation, a representation of the performance of the project rather than a discrete object. (Fig. 2.4).

Figure 2.4 – Part of Thwaites' display at the RCA degree show 2009.

image: [dezeen.com](http://dezeen.com)



Implicit in Thwaites' mode of display was the idea that *The Toaster Project* was a collection not a single object. It was as much about the designer's quest and his understanding of the theoretical context for his work as it was about the final outcome of his project. Moreover, in the educational context of the RCA what comes through in Thwaites' display is his proficiency with and creative take on design thinking, as well as his understanding of processes and parameters of industrial design. (Williams, 2013)

Similarly, in the aforementioned *Ten Climate Stories*, a three year long exhibition curated by Hannah Redler at the Science Museum in London, UK

(April 2011 - March 2014), *The Toaster Project* was presented as a documentation of a design process rather than a discrete object. Taking the form of a trail around the museum, the exhibition, initiated as part of the Science Museum's Contemporary Art Programme, offered a fresh take on historic inventions and everyday objects, and their impact on the world around us. *The Toaster Project* was situated in the *Making of The Modern World* Gallery, a space dedicated to the development of industrialisation from 1750 to 2000. The display (Fig. 2.1) featured a blown up photograph of the deconstructed Argos Toaster mounted on the wall; a copy of Thwaites' book documenting the project framed behind glass; the final toaster elevated on a white plinth surrounded by a selection of the equipment used to create it; and a small plasma screen showing the process videos.

In this setting the project seemed to cast doubt on and even challenge the gallery's prevailing celebration of the major areas of technological evolution that have helped shape modern society. Sitting adjacent to the Stephenson's Rocket, an early steam locomotive and in near proximity to the command module of Apollo 10, Thwaites' work implied a different story which emphasised the problems induced and introduced by modernisation itself and the realities of the hazards and insecurities of our current state. But this was not the original impetus for its inclusion in the exhibition. While *The Toaster Project* addresses notions of mass-production, technology and consumption –the three factors environmentalists often point to as responsible for environmental pollution and climate change (Allyn and Bacon, 1999: 209-201), its installation in the *Making of The Modern World* gallery did not necessarily communicate this to the visitor. The selection of objects in Thwaites' display (and the emphasis placed on his journey to make a toaster from scratch) spoke more to the power of making than to the perils of our environment. They acted as a reflection upon one of the greater legacies of the industrial revolution: our diminishing knowledge, understanding and appreciation of the origins of the things we consume. Furthermore, the true complexity of the work was easily overlooked by both the presentation of the project as an art work and its reception within a gallery replete with highly conserved and decontextualised artefacts. In this schema, not only did this portrayal of *The Toaster Project* as Art grant the work greater artistic autonomy, liberating it from any notion of purposive aesthetics and the chance of being viewed in the context of design discourse,

it also gave off an overall impression of triviality compared to the sophistication and power that mark the surrounding works in the *Making of The Modern World* gallery (Fig.2.5).

Figure 2.5 – Making of the Modern World Gallery, Science Museum, London, UK.

image:  
sciencemuseum.org.uk



As Gareth Williams acknowledges, “[*The Toaster Project*’s] nature as a composite of peculiar archival fragments works against its comprehension in the context of a gallery of discrete objects, as it requires considerable more consideration and thought to decipher.” (Williams, 2013: 99) If anything the inclusion of *The Toaster Project* in the *Making of the Modern World* gallery implied a critical project with the function of disrupting the museum’s dominant celebratory narratives, liberating imagination in the spectator, and encouraging them to look at the surrounding works in the gallery in a different way. Still the installation acted as a didactic framework for knowledge production which fundamentally undermined the efficacy of Thwaites’ project.

What is revealed to us in *Ten Climate Stories* is one man’s journey to build a Toaster. In the context of the exhibition *The Toaster Project* was represented at face value leaving little room for viewers to uncover two core principles of the work: its emancipatory role and the critical sensibility of design. As Jeffrey and Shaowen Bardzell state in their article, What is “Critical” About Critical Design? “The specific critical goal is to leverage design itself in bringing about more critical attitudes in the public and critically innovating thinking in designers.” They go on to state,

critical design is a design research practice that foregrounds the ethical positioning of designers; this practice is suspicious of the potential for hidden ideologies that can harm the public; it optimistically seeks out, tries out, and disseminates new design values; it seeks to cultivate critical awareness in designers and consumers alike in, by means of, and through designs; it views this activity as democratically participatory. (Bardzell and Bardzell, 2013: 3298; 3300)

## 2.6 Conclusion

While often classified as critical practice Thwaites' project presents design as a space for reflexive action. It is a platform to open up new possibilities for both design and designers but also for the rethinking of everyday life. In this way it requires people to become involved in the dialogue and debate while it serves as a tool to question our own values, relationships and priorities to the everyday objects in our lives. What the science museum ultimately fails to do is to make this requirement visible, accessible and perceptible for the viewing public. As the title of the exhibition indicates, *Ten Climate Stories* is about climate change, and while Thwaites' toaster project offers a great critique on the overproduction and consumption created by much of the technological innovations honoured in *The Making of The Modern World* gallery, the display of the work did not make this critique clear. In this particular instance, framing *The Toaster Project* as Art and celebrating Thwaites' process positions the work as an introverted personal journey leaving little room for the critical enquiry and debate it intended to foster.

The Toaster Project therefore, foregrounds and crystallizes one of the most central problems to critical design practice: its mediation. It requires us to examine our assumptions about both fields: design and the museum and to question how curating is adapting to accommodate designs changing roles, forms and intentions. This thesis is therefore devoted to design's ascent to a level of philosophical self-reflection, to identifying the behaviours, contexts, and audiences of designs such as *The Toaster Project*, and to examining new methods of framing and expression for our curatorial, educational, and institutional actions.



. . . . Chapter three

# The Critical Turn

## From 1990s to present

### 3.1 Introduction to the Chapter

The concern of this section is the problematisation of a ‘critical turn’ in design practice. It examines what is arguably a tendency in contemporary design in which different modes of critical forms and structures are being written into a new vocabulary of practice. The first part of the chapter will build on the specificity of the works interpreted within the framework of a ‘critical turn’ by explicating and discussing differing modes of critical engagement. It will focus on the specific behaviours that critical design practice exhibits, rather than attending solely to its objects or processes. The second section will turn to traditions of critical thought as a way of conceptualising a broader understanding of the concept of critical design. What will be foregrounded here is that although quite similar in their underlying formations, principles and strategies, there is concern that a direct correlation to critical theory could potentially cut critical design off from its original impetus as described in the previous chapter. The last section will instead invoke the notion of a para-model, as a better model through which to understand this ‘critical turn’ in design. What I hope to emphasise is the potential of critical design to mount a critique of phenomena both inside and outside its practice, creating a moment where design opens itself up into a kind of immanent critique focused on emancipatory change.

### 3.2 Modes of Critical Engagement

In the previous chapter I introduced critical design as a specific design practice aimed at materialising questions around alternative visions and ways of life. It does not solve problems directly but instead focuses its efforts on

articulating issues for reflection, inquiry and debate. (Branzi 1984; Garcia-Anton et al 2007; Sparke 2004)

<sup>8</sup> A form of interpretation attached to the Frankfurt school of critical theory through which we are encouraged to be suspicious about our conscious understandings and experience. (Ricoeur, 1970: 33)

Paul Ricoeur, *Freud and Philosophy*, trans. D. Savage (New Haven: Yale University Press, 1970), 33.

Since its inception in the early 1990s, features of this new genre of practice like critical formats, interpretive modes of inquiry, ‘the hermeneutics of suspicion’<sup>8</sup>, ideology, and social emancipation have become pervasive. As I will show in the following sections, these features work towards a different kind of truth lined with anticipation of a realisable future possibility. While often employing techniques from high art and science fiction as methods and means to increase our critical distance to current paradigms, critical design offers a space for both designers and their publics to challenge, in Annie Gentès and Max Mollon’s words “the unthinking acceptance of the way things are” (Gentès and Mollon 2015: 81). In essence, critical design is a condition of contingency, where designed artifacts and scenarios not only articulate inferences and possibilities but force open traditional perceptions of design production and consumption under capitalism. Unlike problem-solving design, critical design practice is not concerned with answers but questions. Its purpose is, as Dunne states, ‘to seduce the viewer into a world of ideas rather than objects’ (2006: 147) More recently, the designer/researcher Daniel Fallmann, has likened critical design to what he has termed ‘design exploration’, a form of practice which,

often seeks to test ideas and to ask ‘what if’ –but also to provoke, criticize, and experiment to reveal alternatives to the expected and traditional, to transcend accepted paradigms, to bring matters to a head, and to be proactive and societal in its expression.” (Fallmann 2008: 8)

As such its outcomes are less likely to be products for consumption, than an array of scenarios, performances, digital renderings, events, workshops, or publications aimed at a public rather than users. (Gentès and Mollon 2015: 85)

A glance at Sascha Pohflepp’s *The Golden Institute* (2010) evidences this emphasis on narrative and reflection. The project envisions a world where Jimmy Carter defeated Ronald Reagan in the US Presidential election of 1980, enabling him to carry on with his energy-friendly initiatives instigated in his first term in office. Based on an alternative present, the design postulates the existence of The Golden Institute for Energy (Fig. 3.1),



Figure 3.1 – A still taken from Pohflepp’s *The Golden Institute*. The corporate-style video acts as an introductory presentation on the mission of the Golden Institute for Energy in Golden Colorado.

image: pohflepp.net



a fully-funded premier research and development facility for environmentally friendly energy technologies. Groundbreaking initiatives undertaken by the Institute include Project Quartz which declared the state of Nevada a weather experimentation zone responsible for engineering storms to harvest energy from wind and lightning, and modifications to the national infrastructure enabling lost energy on freeways to be harvested for commercial purposes. The project further imagines the impact of these initiatives at the level of the economy and the individual. For example, the offshoot of Project Quartz arrived in the form of a new gold rush where people are seen modifying their vehicles into lightning harvesters equipped with lightning rods and cells to store energy harnessed from a lightning strike. (Fig. 3.2) This energy is later sold at energy exchange sites found throughout the state. Presented through a series of videos, models, images and drawings *The Golden Institute* prioritises the development of imaginary outcomes that encourage contemplation of our current situation rather than the production of visually resolved and functional objects. The project provokes reflection on how our present is defined by the decisions of our past and ultimately how our future is shaped by the decisions we make now. (Revell 2015) As Pohflepp states: ‘Positioned at the right spot in the past, such counterfactual histories might offer an understanding of the forces at work as well as a fresh perspective on our present challenges.’ (Pohflepp 2010)

Figure 3.2 – Model of a modified Lightning Harvester, Chevrolet El Camino that has been fitted with a lightning rod to harvest electricity from lightning storms.

image: pohflepp.net



Similar to *The Golden Institute*, many works of critical design employ counterfactual history as a tactic to re-imagine pivotal historical moments in order to speculate on our present and future situations. As designer James Auger states in his article *Speculative design: crafting the speculation* “In Pohflepp's case, the potential peak oil crisis and related energy issues that we face today make the 1980 election and its consequential closing down of energy-friendly initiatives a particularly poignant choice.” (Auger 2013: 28)

### 3.3 From Preference to Possibility

Critical projects in the design field therefore seem to operate with a twofold gesture of possibility and agency. They work against dominant market imperatives channeling design’s energies toward fuelling new forms of relations, power and action within society. In the words of designer Jerszy Seymour “it is a paradigmatic shift in perspective that we need to renegotiate our relationship with the world around us and open existential potential and discuss life situations.” (Seymour 2009) In light of this, the proposed turn may be construed as a genuine query being made by designers on the role of design in society, and the larger socio-political and institutional contexts in which designers operate. This is not simply to propose that designers have taken a turn on their own practice, but, rather, to assert that design practice has embraced a range of new theoretical and methodological frameworks that seek to both explain and transform the social world. From such a

perspective, critical design can be appreciated as a practice that uses design to comment and reflect while enabling its public to be more critical about their everyday lives. It is about problematising what is taken for granted (Dunne 2009), while renewing the field of design.

Critical design in this sense unravels and translates what we think of as real. It re-negotiates design's powerful adherence to 'What-Is' while remaining true to the character of the possible. This translation of a given into uncertainty, which sits at the very core of critical design practice, reminds us that what is emergent in critical design is precisely its operation as an unbounded space for thinking which privileges an active engagement with its audience directed towards perception rather than understanding. In this sense critical works are perceived not as fixed things fulfilling finite use-values, but objects or scenarios with the potential to unfold indefinitely.<sup>9</sup>

<sup>9</sup> This notion of unfolding indefinitely is tied to Karin Knorr Cetina's defining characteristic of the epistemic object, which she believes to be a knowledge object that is open, question-generating and complex. (Knorr-Cetina 2001)

Figure 3.3 – Evidence Doll, with illustration by Åbåke based on one of the interviewers descriptions.

Image:  
dunneandraby.co.uk



All of this suggests that a key behaviour of critical design is not, therefore, its ability to change existing situations into preferred ones (Simon 1988), but instead its being a mode of design understood as unveiling the possible. Take for example the works Dunne & Raby. Many of their projects point to the importance of perception. The objects themselves are not intended to change reality or provide solutions to a particular design problem, but are instead designed to stimulate critical reflection in a manner which challenges our perceptions and interrelations with objects and their systems. *Evidence Dolls* (2005) is exemplary in this regard. Commissioned by the Pompidou Centre in Paris for the D-Day Modern Design exhibition, the project comprises a series of 100 custom dolls made of white plastic and

available in three penis sizes (S, M, L). Each doll was designed as a customisable storage device able to safeguard material from a male lover (hair, saliva, nails) and is intended to raise questions about the social, cultural and ethical impact of genetic technology. As part of the project, a sampling of young single women were interviewed and asked to reflect on how they would use the dolls, while speculating on the implications of DNA dating (Fig. 3.3). These testimonials were displayed with the dolls, indicating the primacy of speculation for engaging with the work. Instead of functioning on a practical scale, the dolls serve as hypothetical products to spur critical questioning. They gesture towards the role of design for debate tempting us into a consideration of what might be.

At present, much of the work of critical design is marked by this particular approach to practice, what Dunne has otherwise described as ‘poetic inventions’ with a critical function; these are scenario or process driven works rather than objects for passive consumption.<sup>10</sup> (Dunne 2006) He expands this category of object to include hypothetical products, services and systems driven not by desired solutions or answers, but instead by questions, thoughts, ideas and possibilities, explored through the language of design. Drawing from his own practice, he argues that these works all aim to:

probe our beliefs and values, challenge our assumptions and encourage us to imagine how what we call ‘reality’ could be different. They help us see that the way things are now is just one possibility, and not necessarily the best one. (Dunne 2009a: ii)

If design’s embodiment as critical practice is, as Dunne suggests in the above quote, bound to notions of self-reflection and enlightenment then it would follow that critical design does in fact align with Shaowen and Jeffrey Bardzell’s recognition of the field’s direct ties to traditions of critical thought. In their article ‘What is “Critical” about Critical Design?’ (2013) Bardzell and Bardzell build on current assumptions of critical design with a broader view of critical theory. They argue: “Critical design, like Frankfurt School critical theory before it, is a research strategy dedicated to transgressing the undermining social conformity, passivity, and similar values of capitalist ideology, in hopes of bringing about social emancipation.” (Bardzell and Bardzell 2013: 2) They further identify a series of affinities between key characteristics of critical design and the Frankfurt

<sup>10</sup> The notion of a passive consumption is a theory in cultural studies concerned with how we consume cultural objects: Passively (accepting things without thinking) or Actively (critically assessing before accepting, or maintaining a critical distance from the artefact.) (Noumenal Realm, 2007)

view of ideology: ‘suspicions of the potential for hidden ideologies’; ‘cultivation of critical awareness’; and ‘conditions of democratic participation.’

In the following section, the complex and historically constructed relationship between critical theory and the practice of critical design will be further examined to develop a conceptual framework for understanding the nature of critical design and how it is enacted. Starting with the Frankfurt school, I will argue that critical theory offers insufficient grounds for critical design while claiming that critical design is perhaps better aligned with Foucault’s notion of critique. Through this, I will attempt to define the main theoretical underpinnings of a critical approach to design while invoking a more design-centric analysis of critical design as a method of critical thinking more so than critical theory. As such I will argue for the notion of a para-model of design –a concept which suggests a way for a field of practice to work in response to itself– as perhaps a better model through which to understand this ‘critical turn’ in design.

### **3.4 Critical Design as Critical Thought**

In *Hertzian Tales* (1999) Anthony Dunne lays the foundations for critical design theory positing it as a form of social research which aims to not only question the fundamental conceptions about the practice and role of design, but to be a potential agent for social change and individual autonomy. Placing critical design practice within the discourse of critical theory, Dunne describes critical design as a process of materialising questions for thinking. It is about developing a ‘critical sensibility’ within an audience, which, “at its most basic, is simply about not taking things for granted, to question and look beneath the surface.” (Dunne 2009b)

This accords well with the discourse of critical theory, widely defined as the neo-marxist philosophy associated with the writings of members and affiliates of the Frankfurt school including, in particular, the work of Theodore Adorno, Max Horkheimer, Jürgen Habermas, Herbert Marcuse and Walter Benjamin. Simply put, Critical Theory is a school of thought directed at disrupting the ‘givenness’ of our world. It challenges our established forms of being hinting at oppressive power relationships and our taken for granted assumptions of the social world as fixed. As Horkheimer describes it, critical theory “has as its object human beings as producers of their own

historical form of life” (Adorno, Horkheimer 1993: 21) For Horkheimer a critical theory must describe the wrongs of our contemporary world. More specifically, it must explain the malaise of our social reality, while providing sufficient means for social transformation.

In his book on the idea of a critical theory, Raymond Guess echoes and extends this understanding: “Critical Theories aim at emancipation and enlightenment, at making agents aware of hidden coercion, thereby freeing them from that coercion and putting them in a position to determine where their true interests lie.” (Guess 1981: 55) Part of critical theory thus lies in the subversion of set beliefs or ideologies that reinforce oppressive social arrangements. It is about empowering people to espouse a critical perspective on current paradigms while positing knowledge as fundamentally pluralistic rather than matter-of-fact. (Gentès and Mollon 2015) Critical theory is here aligned with a reflective practice. It is a self-reflexive knowledge directed at changing the social world through changing the way we understand it. This intrinsic link between critical theory and reflection is affirmed by Tim Dant who states:

Criticism by theory does not lead to direct proposals for social change. It does not give rise to a revolutionary passion to overthrow social institutions and introduce a new political order. Neither does it propose social reforms that might be incorporated by existing political regimes. Cultural critique produces nothing – but texts. It is itself a reproduction of culture, stimulating the process of culture as reflection. What might arise from it, however, is a culture that is constantly questioning itself, resisting the tendency to accept and take for granted. Its impact, if it has any, is on individuals – those who engage with the texts. And if it has any effect, it is to stimulate a constant state of tension between the individual and the culture, to foster a sense of discontent, a sense that things could be better. (Dant 2003: 16)

For Dant, the act of critical theory resides not in definitive knowledge or solutions, but instead in the production of an open-ended argument. Its ultimate aim is the transformation of society into a culture of individuals free to make their own history through their choices, not those prescribed by the system. (Ibid: 136) It is for these reasons that critical design finds its counterpart with critical theory. In works of critical design there are no right or wrong meanings. No single, canonical, definite or final interpretation that must be reached. Likewise, arguments are never resolved but waged in order to open up possibilities. No longer is design wedded to the reinforcement of

global capitalist values, but instead critical design is built with uncertainties which fundamentally challenge the interpretive skills of its audience. It calls for an engaged form of thinking that is reflective by nature and addresses the matter-of-factness of our world without any concern for how such abstractions are applied to make change.

For Bardzell and Bardzell critical theories are also tied to the sphere of interpretive competence, “Critical theory models ways to read sceptically, to be suspicious of false harmonies and false pleasures; metacriticism models ways to perceive and read with unparalleled sensitivity and insight.” (Bardzell and Bardzell 2013: 3303) Again, Bardzell and Bardzell find support for critical design’s correlation to critical theory through its ability to not only imagine something different, but for its capacity to resist being packaged as commodity, transcending the specific dictates of the market. They state,

Critical design is a design research practice that foregrounds the ethical positioning of designers; this practice is suspicious of the potential for hidden ideologies that can harm the public; it optimistically seeks out, tries out, and disseminates new design values; it seeks to cultivate critical awareness in designers and consumers alike in, by means of, and through designs; it views this activity as democratically participatory. (Bardzell & Bardzell 2013: 3300)

That said, while critical design does indeed exist outside market driven imperatives, it does in fact hold ties with culture as commodity and is often institutionalised as event or exhibition – a point which will be explored in the second half of the thesis.

In addition to this, if we return to Guess’ insights we can begin to see a fundamental tension between critical theory and critical design: If critical design begins from the question What if?, which as Dunne explains, implies that it is “intended to open up spaces of debate and discussion” (Dunne and Raby 2015) then it would seem that critical design is not a practice set on stating that there is a better world that society can and should progress towards, but instead one whose interests lie in picking up on relevant problems and opening these up to a public. Thus unlike critical theory, critical design seeks engagement over enlightenment. It is less about informing a public of what they would want if they knew what they could want. Or to put it another way, its outcomes are not the realisation of utopian

ideals of a 'better world'. On the contrary, critical design operates in the unveiling of possibility. It problematises that which is seen as given. It does this through what is known as poiesis, which design historian Clive Dilnot defines in his recent book *Design and the Question of History* as a productive acting that operates through unveiling what is possible to bring into being. (Dilnot 2015: 143) Strongly influenced by Agamben's understanding of poieses as "the experience of production into presence, the fact that something passed from nonbeing to being, from concealment into the full light of the work" (ibid), Dilnot explains that the process of poiesis begins by acting in a state of reflection. Quoting Heidegger he situates poiesis "in a dimension in which the very structure of man's being-in-the-world and his relationship with truth and history are [put] at stake. (Dilnot 2015: 143) Critical Design, in other words, seeks metaphorically to reintroduce its public back into the world. By this I mean that its aim is to explore alternative views of the world. To point out that beneath current paradigms, there are a pluralism of alternative knowledge claims or forms, and through understanding this we can begin to develop emancipatory knowledge.

The term *explore* in this context is significant. Critical design tends to be undertaken as a mode of exploration, understood as opening a space of possibility. As aforementioned, it is not about stating directly that things could be better, or more explicitly that our world is fundamentally in crisis. In this sense critical design is perhaps better aligned with Foucault's notion of critique, which he claims is:

not a matter of saying that things are not right as they are. It is a matter of pointing out on what kinds of assumptions, what kinds of familiar, unchallenged, unconsidered modes of thought, the practices that we accept rest . . . Criticism is a matter of flushing out the thought and trying to change it: to show that things are not as self-evident as we believed, to see that what is accepted as self-evident will no longer be accepted as such. Practicing criticism is a matter of making facile gestures difficult. (Foucault 1988: 154-55)

Critique for Foucault enacts a mode of questioning, it is about the possibility of thinking otherwise. In his essay *What is Critique* he likens critique to virtue, positing it in opposition to an uncritical obedience. For Foucault, the core of critique resides in the relationship of power, truth and the subject. "I will say that critique is the movement by which the subject gives himself the



right to question truth on its effects of power and question power on its discourses of truth.” (Foucault 1997: 32)

What this implies is that critique is directly related to a self-reflexivity that maintains a critical relation to existing norms. It is to pose questions of the limits of our absolute ways of knowing. How Judith Butler understands Foucault in this context powerfully makes this point when she says “To be critical of an authority that poses as absolute requires a critical practice that has self-transformation at its core.” (Butler, 2001) In her view, Foucault locates critique in the question, “how not to be governed” or more specifically “how not to be governed like that, by that, in the name of those principles, with such and such an objective in mind and by means of such procedures, not like that, not for that, not by them.” (Ibid) The spirit of critique in this sense is not universal. It is about questioning the reality of a given order while engaging in a self-formation, which problematises the conditions of our existence. To link this back to critical theory we can say that the essential character of Foucault’s critique is not praxis thought as the transformation of society, but instead as Thomas Lemke states in his article *Critique and Experience in Foucault*: “the problematization of the way we think about and judge certain objects in order to distance ourselves from their naturalness or self-evidence and to work towards new experiences. (Lemke 2011: 32)

In Lemke’s understanding, Foucault’s critique is therefore more of an attitude than a theoretical concern. It is “a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits imposed on us and an experiment with the possibility of going beyond them” (Foucault 1997: 319) To put this slightly differently, the thrust of Foucault’s critique is not the subversion of one logic for a higher logic. But instead the analysis and questioning of rationalities, in particular how relations of power are rationalised. (Smart 2010) This possibility that Foucault affords sets a challenge to think of critique as existing not in the domain of the ‘good’ or the ‘ideal’, but in the domain of the real. His commitment is to the freedom to think differently from what we already know. (Olssen 2003: 73) It is more explicitly an attitude of permanent criticism that Foucault concerns himself with, which aims not for absolute emancipation, or absolute enlightenment, but is instead concerned with partial transformations of our world, and of the self. (Ibid: 74)

While the work of critical design reveals, to a certain degree, a comparable positioning towards possibility and agency in a similar vein to Foucault's critique and to a lesser extent the work of the critical theorists, it nevertheless differs from these schools of thought in many ways that are integral to its understanding. The objectives of critical design are not to point out 'what should be!', or to transform the structures of power embedded in society (although the unveiling of power structures for debate and discussion is most certainly a topic regularly explored through critical design practice.) Rather, critical design, in the sense meant here, is nothing more than active exploration – thinking – which is meant to imply networks of indiscipline, lines of flight and questionings. (Sheikh 2009) To link this back to Dilnot's question of poieses he states:

thinking here is not the abstract thinking of contemplation, nor can it stop at critical reflection. Thinking means here intervention; that is, it means thinking intervention or, more precisely, it means thinking through intervention. It means thinking how we conceive of what intervention – action – might be and it means thinking the knowledge embodied and exemplified in intervention, productive action. (Dilnot 2015: 142)

What is of particular significance here is that critical design uses the production of artefacts and scenarios to think, interact, intervene, communicate and question. It is a mode of action, not situated in the dimensions of certainty (praxis) but instead understood as unveiling (poiesis). (ibid: 143) That is to say, that it recognises design as an inherent part of understanding and challenging the relationship between culture and society.

Finally, instead of looking to outside sources as a way to understand how critical design operates, it might be more productive to consider critical design as part of an evolving field of operations whose salient features may be best understood broadly, through the notion of a para-model of practice. It is to this that I will now turn, starting with the concept of para and what it entails.

### **3.5 Critical Design as a Para-Model of Practice**

The concept of critical design as a para-model of practice stems in part from art critic Rosalind Krauss' Paraliterary works, developed in her essay 'Post-structuralism and the Paraliterary'. (1980) Krauss describes the paraliterary

as a seemingly parallel form of writing that deliberately blurs the distinction between literature and literary-criticism (Krauss 1980: 37) Through an examination of the works of Barthes and Derrida, she argues for the existence of a paraliterary genre brought on as a result of theory in operation, stating that:

If one of the tenets of modernist literature had been the creation of a work that would force reflection on the conditions of its own construction, that would insist on reading as a much more consciously critical act, then it is not surprising that the medium of a postmodernist literature should be the critical text wrought into a paraliterary form. (Krauss 1980: 40)

In effect what Krauss implies is that the paraliterary form is itself a reflection of its own strategies of construction, a parody of literary conventions. Similarly in a discussion of the expanded field of curatorial practice curator Paul O'Neil problematises the para-model for curatorial studies, arguing for "the paracuratorial as a terrain of praxis that both operates within the curatorial paradigm and retains a destabilizing relationship with it via (para-)texts, sites, works, and institutes." (O'Neill 2012: 55) In both Krauss and O'Neil's examples the prefix 'para', qualifies an act as greater than a supplementary or subsidiary function which most often assumes the existence of a primary and secondary relationship to roles.

Drawing from the OED, Catherine Lord, in her article *Rapturing the Text*, defines 'para' as having "... an antecedent in the Greek preposition *παρα*, which assists the prefix in carrying connotations of 'by the side of', 'beside', 'alongside of', 'within', along with the added associations of perversion, or that which veers radically from the established path. (Lord 2003: 139) By extension the prefix came to designate objects or activities parallel to or derivative of that denoted by the base word. In contrast, both Krauss and O'Neill position the 'para' as indicative of the margins of practice whereby its very existence implies an evolving field of operations determined to oppose the established order of things. For example, Krauss' para-text resists being 'about' something, such as death or money (Krauss 1980: 38), while O'Neill's paracuratorial resists the 'narrative-oriented authorial model of curation' (O'Neil 2012: 56). O'Neil proposes that paracuratorial practices "employ a host-and-uninvited guest tactic of coordination and invention, enabling parasitic curatorial labor to coexist alongside, or in confrontation with, preexisting cultural forms, originating

scenarios, or prescribed exhibition contexts.” (O’Neil 2012: 57) They are not part of an either/or scenario. In a similar vein Krauss asserts that the paraliterary text is responsive to its traditions. It is built upon the intertextual reality of the conventions of literature. One which might best be described as a bridge between literature and philosophy. (Krauss, 1980)

Here we are understanding ‘para’ as a form of defiance, whereby it seeks to articulate a mode of ‘adjacency’ in the terms described by cultural anthropologist Paul Rabinow in his theorising of the contemporary.

Neither the overdrive of the universal intellectual nor the authoritative precision of the specific. Rather: a space of problems. Of questions. Of behind or ahead. Belated or anticipatory. Out of synch. Too fast or too slow. Reluctant, Audacious. Annoying. (Rabinow 2007: 40)

Rabinow’s adjacency represents a space in between the external and internal, a space of transition and movement, of margins where experimentation can happen. It can be approached as a mode of provocation which invites movement, interaction and engagement. Likewise, as curator and writer Livia Páldi asserts of paracuratorial practices:

They can either slow down a process, reverse it by zooming in on some ignored detail, or alter the perception of artistic and curatorial work by making its procedures detectable in a more critical framework of theory. There are a wide array of practices building up on mixed (even chameleonic) formats with the potential to reveal more precisely the blind spots and paradoxes, and even sometimes counterproductivity, or curatorial work. (Paldi 2012: 72)

This very understanding of the paracuratorial plays to an illumination of curating’s inherent systems of reference, rendering them visible and subject to both discussion and analysis. As she describes it, the para is a way for a field of practice to work in response to itself.

Thus, Krauss’ paraliterary filtered through the writings of O’Neil and Páldi enables us to begin to refine the protocols and procedures of a para concept for design. Firstly, a para-model of design might be considered as integrating both an active and reflexive criticism within its practice – a mounting of a criticism through a mode of adjacency. Secondly, it can be seen as a tool to think through emerging design practice and its relationship to the corpus of the discipline. It shifts our thinking away from the centre of the practice to its periphery, encompassing all of its many actors, concepts and materials. The emphasis here is on an understanding of critical design as

a set of practices that have shifted away from conventional design formats but remain within the boundaries of a design field. This can be evidenced through the work of designers who have explored and partially transcended their medium (materials, techniques, practices) all the while remaining committed to that very medium. Their work places the entire field of design practice in a broader focus extending design's conventional remit into uncharted territories, while providing a space for discourse, inquiry and engagement.

As was previously discussed, critical design projects work against dominant design conventions by emphasising process over product, publics over users, and 'What if' over 'What Is'. Instead of supplying the market with commodities they reveal themselves as 'discursive objects' (Dunne & Raby 2013) that gesture towards reflection, discourse and questioning.

To return to Thwaites' toaster project (chapter 2) At first glance the work appears to be an exercise in making, however at the same time *The Toaster Project* is about "the grand-scale processes hidden behind the smooth plastic casings of mundane everyday objects." (Thwaites 2011: 5) As an open exploration set on discovery, the work invites a discussion on consumer society and the conditions of our networked existence. In his preface to the publication *The Toaster Project: or a heroic attempt to build a simple electric appliance from scratch*, Thwaites' observes that "I'm interested in the economies of scale in modern industry, the incremental progression of science and technology, and exploring the ever-widening gulf between general knowledge and the specialisms that make the modern world possible." (ibid) In this way of thinking *The Toaster Project* acts as a resource beyond representation, feeding into the project's understanding as embodied criticality rather than a product or thing. I will describe how this notion of embodied criticality can be used to understand critical design further in chapter 7, but for the purposes of this chapter criticality is here proposed as the inhabitation, rather than analysis, of a process (or problem) as a way of inquiry. The point is not to find an answer, but to access a different mode of inhabitation. (Rogoff 2006)

Here, then, embodied, situated and enacted forms of critique become more important to our understanding of *The Toaster Project* than form and function in the traditional sense. This has the effect of critiquing designs reliance on conventional modes of production and consumption under

capitalism. In fact on the level of production, the process films that Thwaites used to document his journey were essential to grasping the problem he intended to explore, but also to shifting the project away from designs desire to change existing situations into preferred ones. The films placed the performance of Thwaites' journey as integral to the work itself while summoning the experiential potency of the journey to correct a collective amnesia surrounding the origins of everyday objects. It is this very performativity of the work that allows it to be much more than just an exercise in making a toaster, since performance was a way to disrupt the hidden origins and veiled complexities of our everyday ecologies.

Understanding *The Toaster Project* as a para model of design thus enables us to see it as a mediating practice, or better yet, a space for critical reflection dedicated to opening up the play of interpretation. The notion of para captures the proposition of the project as a critical counter-discourse which challenges not only the dominant disciplinary discourses of design, but as well our current social and technological paradigms. While sitting far outside the conventions of design practice, Thwaites' toaster project foregoes the ideology that has dominated design and its market economies: it is no longer about products for consumption but instead acts as a crafted intervention to spur critical questioning. In other words Thwaites *Toaster Project* plays to an illumination of design's paradoxes while challenging it's audience to question and reflect on their perception of the world.

This orientation towards design as a reflexive (a term we will further explore in the following chapter), communicative, critical and generative medium can be examined further through a detailed consideration of *The Wrong Store* by Tobias Wong + Gregory Krum (2007)

Designed to act as a pop-up-shop installed on the ground floor of a Commercial Gallery in Chelsea, N.Y., *The Wrong Store* (Fig.3.4) presented a collection of limited edition and exclusive works by designers including Marcel Wanders, Hella Jongerius, Dieter Rams and Gaetano Pesce.

The space intentionally never opened. Perpetually closed for business, *The Wrong Store* was an imperfect simulacrum, a fictional retail space that worked to foreground questions and reflections over commerce and consumption. Down to the very last detail – its business license, branding and Visa and Mastercard stickers displayed on its window – the project was in every which way a retail shop but for one slight discrepancy. Revealing

Figure 3.4 – The Wrong Store by Tobias Wong, 2007.

image: psfk.com



itself through a sign on the window alerting visitors “Come In, We’re Closed”, *The Wrong Store* was a complete reversal to the typical conditions of commerce. The project opened up a moment for reflection and questioning, for thinking about objects of design and our relationship to them and the systems that bind us.

In a similar spirit to *The Toaster Project*, what is being pointed to here is the very idea of a design acting on itself. Each are performing self-reflexively through their methods, whereby the forces of socialisation (the norms, customs, values and ideologies) of, or around, design, be they economic, social, political and/or cultural, are foregrounded and questioned. To this end design is seen to engage in a meta-level of recognition and action on the forces of socialisation inherent to the field. In this respect *The Wrong Store* may usefully be understood as a para-model of design in the same vein as *The Toaster Project*, although experienced through a differing set of contexts of operation and exchange. From such a perspective, a curatorial format such as *The Wrong Store* can be appreciated as an expansion of the possibilities for the form, delivery, and experience of critical design as it enables the use of the time and space of the exhibition to process and realise works.

Importantly, both instances provisionally mark out a new terrain of design practice. The issue of self-reflexivity is inextricable from the defining characteristics of each example. Having traced the theoretical lineage of para and begun to apply this concept to examples in design, the following

sections provide a more detailed conceptual definition followed by the structural and motive force behind critical design's inception.

### 3.6 Tactics of Critical Design

In a grander scheme we could further conceptualise critical design practice as acting at the fringe of the design world facilitating our reading and understanding of design and its cultural agency. It functions to uncover the problematics of the internal frameworks, social construction and consumption of design, dealing specifically with the economic, political, and cultural conditions that make up a design world. In effect critical design uses design as a means to question and discover. In much the sense that Thwaites' toaster project appropriated the language of the toaster to critically address issues pertaining to the global, social, and economic systems of its industry.

What is in essence being suggested is that critical design can be understood as a post industrial practice that engages in a discourse with the design world while attempting to provoke deeper thought from designers and their publics. It goes well beyond the depths of the conventional systems and values of design – ultimately challenging the field's reliance on utility, efficiency, mass manufacture and the market as the only context. This is not to reject the singular approach and motive of each designer. Designers choose to practice critical design for many reasons: to challenge dominant design conventions; to articulate and give visibility to certain social, cultural, technological, and environmental questions and concerns; for personal realities, interests and convictions; and the enjoyment of process over final product. Moreover, in a wider context, Ramia Mazé and Johan Redström (2007) go on to suggest that critical practice has the potential to not only reveal the problematics of its internal systems of reference, but also to engage with other extrinsic theories and practices not central to its domain. (Mazé and Redström 2007: 7) This in turn positions critical design as a method of practice with the potential to operate along the fringes of various disciplines, employing devices of projection and tracing as a means to actively engage with the world it seeks to address.

A guiding image in this respect is the work of London based designer Tuur van Balen (of design duo Cohen Van Balen) which offers a fascinating glimpse into the power of critical design within the realm of synthetic biology. *Pigeon D'or* (2011) (Fig. 3.5), a combination of speculative objects,



film and biological structures presents an alternative reality that engages with and challenges industries technological and scientific agenda.

Figure 3. 5 – A Photograph forming part of the work *Pigeon D'or* by Tuur van Balen. The image depicts a contraption that allows pigeons to become part of the architecture of a car, facilitating bespoke urban disinfection.

image:  
cohenvanbalen.com



The project uses design as a way to analyse future contexts. It proposes to manipulate the metabolism of feral pigeons in order to turn their feces into soap. By considering both micro and macro scales in its execution, *Pigeon D'or* explores the physical realities and cultural effects of biotechnologies and their relationship to our complex interconnected world. (Cohen and Van Balen 2011) Focusing its efforts on narratives of production and use, *Pigeon D'or* incorporates the actual design of the bioblock with a series of scenarios relating to the conditions of its reality when put in practice. The result is a fusion of the fictional with the real. A space that opens up a moment to contemplate and question the legal, cultural, political and ethical conditions and consequences of new scientific structures. The project uses design as a way to draw attention to the functioning of biotechnology and science by speculating on its limits. Its aim is not to prescribe a given future, directing courses of actions towards a preferred outcome, but to instead make apparent possible consequences of what might be, as a way to stimulate discussion and debate amongst designers, industry, science and its publics.

What comes through in works like *Pigeon D'or* is that critical design is far more open-ended. It is not a practice intent on imposing itself as the new dominant form, but instead acts as a series of constantly renegotiated actions or events that currently operate in the gaps of design convention. What

seems increasingly certain is that critical design is a tool which privileges a moment of reflexivity. Its role becomes that of increasing societal awareness of the complex situations of our contemporary world so that people might take action on those situations. (DiSalvo 2009: 49) What has yet to be determined, however, is what makes a work ‘critical’? Carl DiSalvo advocates the tactics of projection and tracing. (2009) However, I will argue that DiSalvo’s tactics are very much in line with Foucault’s ideas of the apparatus or *dispositif*, and should therefore be considered ‘devices’ in a similar vein employed by Celia Lury and Nina Wakeford (2012)

Forming part of his attempt to unveil the means by which contemporary design contributes to the construction of publics, DiSalvo (2009) suggests that both tactics of projection and tracing are the actual actions used to gain an objective. They are the designerly means used to expose and articulate the issues relating to our social world in a manner which might prompt a public to come into being. (2009: 60) What is being pointed to here is the way in which tactics draw on common design strategies and form while adapting them for their own purpose, and these designerly means should not be seen as repetition of existing techniques, but as translation. (DiSalvo 2009: 52) Referencing the work of de Certeau, DiSalvo employs the idea of design tactics as “adjustments to, appropriations, or manipulations of design products and processes to accommodate purposes beyond the common, often historically and professionally constrained, purposes of design.” (ibid.) For DiSalvo the ‘tactic of projection’ is inherently tied to the notion of a predictive scenario. It is “the representation of a possible set of future consequences associated with an issue.” (ibid.) He believes projections to be grounded in fact not fiction and suggests that they are put in practice as a means to explore and discover the possible circumstances and outcomes of the ‘yet to come’. The Extrapolation Factory’s *99 cents*, for example, invited factory workers in a workshop environment to collectively consider the potential outcomes of a series of forecasts from a futures-database. These became a vehicle for participants to produce unique visions of the future expressed through product concepts that might find themselves in a dollar store of the near-future.

The participants prototyped each of the imagined products at the factory’s rapid-prototyping centre. The speculative products, including objects such as Space Suit Lining-Replacements, Benzene Vapor Refills, and

DIY Organ Transplant Kits, each packaged with the story that inspired them, were later stocked and sold at a nearby dollar store alongside present day inventory (iPhone 5 covers) and outdated merchandise (VHS labelling kit).

Bringing this back to DiSalvo's tactics of projection: by grounding the workshop in reality, through both the information used to inspire the future visions, and the practicality of selling them in an existing shop, *99 cents* facilitated a space whereby shoppers could discuss and debate the possibilities of a future evoked by the products on display. *99 cents*, then, does not aim to suggest or direct its audience into accepting or rejecting a future already selected by others, quite the contrary, its purpose is to make apparent a pluralism of possibilities, engaging its audience in an ontological, political and ethical reflection of who we are and what we might become. But this raises a number of concerns for critical designers and researchers, including the question of whether the logic of consumption and the dollar store as context can function as vehicles for speculation. Did consumers of *99 cents* value these objects as points of exploration on possible futures, debating and discussing their meaning, or were they simply approached and consumed as eccentric commodities or worse collector's items? Such concerns are an explicit focus of the second half of this thesis which looks specifically at various ways in which works of critical design are being disseminated to a public within the context of the museum exhibition.

To continue with DiSalvo's tactics, he conversely defines the 'tactic of tracing' as "the use of designerly forms to detail and communicate, and to make known, the network(s) of materials, actions, concepts, and values that shape and frame an issue over time." (2009: 55) *Rare Earthenware* (2015) (Fig. 3.6) by Liam Young and Kate Davies, of the Unknown Fields Division, is exemplary of this. The project, developed for the Victoria and Albert Museum in London for their exhibition *What is Luxury?* began as a journey tracing the global supply chain of rare earth elements used in high-end electronics and green technologies, and culminated in the design of three ceramic 'Ming Vases' made from radioactive mud retrieved from a tailings lake in Inner Mongolia. Produced with the exact amount of toxic clay generated in the production of a smartphone, a laptop and the cell of a smart car battery respectively, the vases play on the value and wealth attributed to Ming dynasty porcelain through both their proportions and silhouette. In an interview for *Fastcoco* Kate Davis explains: "Ming Vases are particularly

Figure 3.6 – Three finished vases from Rare Earthenware, designed by Unknown Field Division and produced with ceramicist Kevin Callaghan.

image: Toby Smith/  
unknownfieldsdivision.c  
om



iconic objects of high value as well as being artefacts of international trade. She continues, “The three vases are presented as objects of desire, but their elevated radiation levels and toxicity make them objects we would not want to possess” (Carter 2015) They act as a testament to the global supply network but also the environmental impact embodied in our technology obsessed societies.

An important part of the project was the accompanying film (Fig. 3.7) which documents the journey of the supply chain of tech gadgets. Produced as a single panning shot, the film documents the journey in reverse from wholesalers, to container ships and factories, back to the radioactive lake in Inner Mongolia poisoned with the tailings from the refining process. (Tomorrows Thoughts Today 2016)

Figure 3.7 – A still from the video which shows Liam Young collecting radioactive clay from a tailing lake beside the worlds largest Rare Earth minerals refinery in Inner Mongolia. The clay was used to craft the three vases shown above.

image:Toby Smith  
unknownfieldsdivision.c  
om



Ultimately it works to draw into focus a network of implicated persons and places associated with what in many ways is an underrepresented issue. From an everyday perspective, *Rare Earthenware* expresses a different type of awareness of the world. It juxtaposes the nature/culture divide, highlighting the undesirable consequences of our material desires. In more figurative terms, the project employs DiSalvo's tactic of tracing to archive and re-imagine the complex and often contradictory realities of the present.

As we can see, tactics of projection and tracing are intrinsically connected here. Tracings draw from past events, they work to question and critique engrained systems and established modes of behaviour through making visible what has already occurred. Projections, in the context in which DiSalvo intends, look to the future as a way to conceptualise issues in the present. Accordingly, both tactics of projection and tracing are reflexive acts situated in the now as a means to map our contemporary conditions. At the same time, key to his concept of tactics is the reliance on the forming of a public. As DiSalvo argues, both tactics of projection and tracing seek participatory, democratic engagement. In reference to John Dewey's *The Public and Its Problems (1927)*, DiSalvo asserts that publics are constructed through and around issues and that it is the communication of these issues and their possibilities that prompt a public to come into being. (DiSalvo 2009: 51) On the one level, in the above cases, there was an attempt to communicate issues (the hidden processes behind everyday objects, our culture of consumption, the legal, cultural, political and ethical conditions and consequences of new scientific structures, the future, and the undesirable consequences of our material desires). And yet it is uncertain as to whether any of the above examples did in fact attain participatory, democratic engagement. To be sure, DiSalvo's argument is significant for drawing attention to the work of Critical Design as a discursive object, a crafted action which exhibits the agency to assemble people around the articulation of issues for reflection, inquiry and debate. Yet it also points towards the importance of the very parameters of how the public understands and engages with works of critical design. One implication of this is that the categories of dissemination for critical design can come to be questioned, which I will address further in the second half of this thesis.

### 3.7 Critical Design as a Device for Thinking and Action

We are now in a position to consider DiSalvo's concept of tactics in line with what Celia Lury and Nina Wakeford were getting at with their notion of 'device' employed in the introduction to their recent work *Inventive Methods: The happening of the social*. (2012). For Lury and Wakeford, "devices act as a hinge between concepts and practice, epistemology and ontology, the virtual and the actual, opening a door ... on to the practical investigation of the social world." (Lury and Wakeford 2012: 9) Drawing on Foucault's notion of the apparatus, they propose the 'device' as a term which can be understood as a complex ensemble of practices that are organised in response to urgent needs. (ibid: 8) It is by no means a static tool that can be used time and time again in a predictive manner, nor can it operate in isolation, as it must always be understood in relation to the ensemble. (Lury and Wakeford 2012) They go on to suggest that devices are not guaranteed end results. There is a certain level of uncertainty and vagueness inherent in a 'device'. 'Devices' embrace variability, they are not intended to capture or predict, but more so to inspire what is 'yet to come'. Importantly, they assert, devices act or make others act. (ibid: 9) Taking this into consideration then, reframing DiSalvo's notion of tactics as 'devices' of projection and tracing in network terms helps to conceptualise the importance of the system. In other words, how the performance of practices, objects and concepts articulate actions. Devices understood in Lury and Wakeford's sense, are not static forms of representation of issues, but instead active measures which interfere in the worlds in which they are positioned. Thus, as devices, works of critical design are best understood as forms of world-building, assemblages whose boundaries extend beyond the material object, resisting the transformation of ideas into goods. They act as interpretive frames or lenses through which one can peer into the past or future as a means to understand 'what-is' through discoveries of *how* 'what-is' or what 'may-be'. (Dilnot 2015)

Situating the principles of 'device' in relation to that of critical design helps us to conceptualise critical works as assemblages (practices, objects and concepts) of experimental activity that are always in relation to particular situations, problems and and/or needs. This analogy further positions critical design as both inventive and adaptable, reliant on movement, whereby reflexivity becomes its primary tool. Any critical design

could therefore not be considered a static fact but more so a performative act in the here and now. It is precisely here where one sees the transition from design characterised as praxis (a will that produces a concrete effect) (ibid.) towards a design that inhabits the space of possible becoming. The design theorist Clive Dilnot has referred to this strategy as the ‘science of possibility’, or what he has elsewhere called the ‘science of uncertainty’. It is that which translates the given into uncertainty and therefore opens as question its possibility. (Dilnot 2014) Dilnot’s point is important for drawing attention to the work of critical design as a device which allows us to see how we negotiate the limits of what we understand, at any moment, as the ‘actual’. To understand *The Toaster Project* as a device, considers both object and procedure, method and mediation as constitutive, while acknowledging that it is their relation that allows us to confront the new. (Lury and Wakeford 2012)

### 3.8 Conclusion

As a device, a work of critical design, then, is a reflexive system between elements, constructed through and around issues with a task of fuelling new forms of relations, power and action within society. These elements, both the contents of the work – the toaster, the design store, the pigeon that poops soap, the dollar store merchandise, and the ming vases – as well as the structures they are linked to – globalisation and consumerist society, and the social and cultural realities of technology are interlinked and formed around an ‘urgent need’ – sustainability, overconsumption, political, ideological and ethical implications of emerging technologies.

In this respect I would argue that critical design might best be understood as a multifarious space of research, thinking and interaction for the designer and/or its publics. Or as Dilnot has referred, “a space of being able to think about thinking-differently-about-the-present; a space of thinking about the possible.” (Dilnot 2014) This very idea positions critical design as a heuristic platform capable of thinking past our taken for granted ideas of ‘what is’ towards ‘*how* what is’ and ‘what might be’, and therefore capable of opening ourselves and our world to reflection. The emphasis here is on the creation of conditions for both thinking and action, whereby the work privileges an embodied criticality within which the designer and the

work's audience are invited to question his/her knowledge and modes of inhabiting the world.

What becomes thinkable, therefore, is that critical design presents a notable device of social and cultural research. However if we are to further understand the true character of the critical turn in design we need to explore the origins and trajectory of critical design as well as its contexts, sites and situations. How does critical design emerge and develop? Which contexts and what conditions make this possible? The following chapter, which links the origins of critical design practice to theories of reflexive modernisation and the Risk Society will begin to construct the basis to formulate an understanding of the complex interrelated network of systems, forces, centres and peripheries that have contributed to the critical habit that we see cultivating in design.



. . . . Chapter four

# A Context of Practice

## Understanding Critical Design in the context of Reflexive Modernity

### 4.1 Introduction to the Chapter

In chapter 3 we explored the behaviours of critical design presenting the field as a platform for opening ourselves and our world to reflection. Critical design, I have suggested here, is part of a toolkit for thinking things differently. It is a heuristic platform that serves to allow a public to think past taken for granted ideas of ‘what is’ towards, ‘how what is’ and ‘what might be’. This shift in practice from design as a problem solving, market driven activity targeted at consumers, toward a practice centred on questioning, agency, possibility and reflection, necessitates an examination of the broader theoretical context of societal change. The premise of this chapter is that particular theories of reflexive modernisation are pertinent to the concerns of contemporary design practice and can help clarify the basis for identifying the practices and themes of critical design. Specifically, it conceives of critical design as linking to the theory of ‘reflexive modernization’ and its subsidiary concept of the risk society as theorized by sociologist Ulrich Beck. In particular I aim to show that the notion of what Beck terms ‘second modernity’ can provide a compelling theoretical frame for situating and conceiving the recent development of a critical design practice within Western design convention. This I argue is necessary to understand why critical design is not simply a form of passive critique on our current situation, but instead a live medium, that strives to generate active engagement and social emancipation. What is meant here by emancipation is as Jacques Ranciere defines in his 2011 book *The Emancipated Spectator*,

“The blurring of the boundary between those who act and those who look; between individuals and members of a collective body.” (Ranciere 2011: 19)

In what follows, I begin with Beck’s highly influential notion of the Risk Society and link it to his theory of Reflexive Modernization to imagine the beginnings of some of the more instrumental conditions underpinning the principles of critical design. Following this I use these ideas to propose the possibility of understanding the growing body of critical work coming out of the field of design as constituting a design of reflexive modernization. My argument is that our current understanding of critical design, as discussed in chapters 2 and 3, needs to be confronted with a model of reflexive modernization in order to bring into view critical design as a method of reflexivity that opens ourselves and our world to reflection.

In this sense I want to consider critical design practice as a practice respondent to the tailings of modernity. I suggest that we need to dissociate somewhat from our fixation on the designer genius often associated with autonomous works of design. We need to instead focus on the immediacy of critical design practice rather than on the idea that meaning is generated from its maker. Understanding critical design as a design of reflexive modernity means recognising the contingency of the works as central to their making. The point is not to find an answer, or solve a problem, but to assess a different mode of inhabitation for the designer, the work, and the user. This way of thinking, I argue, contributes to an understanding of critical design as a form of criticality in Irit Rogoff’s terms. Criticality, Rogoff observes, offers an opportunity ‘to explore that which we do not yet know or that which is not yet a subject in the world.’ (2006) It exists in the operations of revealing possibility and potentiality with an emphasis on the present – of living out a situation. (ibid) The concept of criticality is central as well to sociologist Karin Knorr Cetina’s analysis of the shift to a second modernity which she sees as accompanied by the expansion of object-centred environments which increasingly mediate human relationships. (Knorr Cetina 1997) The object in this situation assumes a position of ‘knowledge object’ defined as open, question-generating and incomplete. (Knorr Cetina 2001) Acknowledging the simultaneously reflexive and generative character of critical design, I conclude with a first attempt to portray works of critical design as epistemic objects – entities for materialising questions in which and through which individualisation can occur. (Knorr Cetina 2001)

## 4.2 Reflexive Modernity Presented as the Context for Critical Design

Social and cultural theories have always provided important insights into the conditions of designs development. For example historians have argued the Bauhaus movement as a design philosophy of Modernism, and Memphis Group as a design philosophy of Postmodernism. In the discussion to follow critical design is interpreted as performing under the theory of the Risk Society and Reflexive Modernity. It will examine Beck's sociology of risk with reference to the broader social theory of reflexivity. With the shift to a risk society we are confronted with not only changing patterns of personal and community relations but with new meanings of individualisation which have been discussed and debated by Beck, Anthony Giddens and Scott Lash in their 1994 publication *Reflexive Modernization*. The section which follows will present a brief sketch of the Risk Society and Reflexive Modernization developing individualisation as the motor for a social re-modernisation which involves a transition from control and rationalisation to empowerment and questioning. (Beck, Lash and Giddens, 1994)

### 4.2.1 Risk Society

In his 1986 volume 'Risk Society: Towards a New Modernity' Beck points to a new historical character of a society respondent to the tailings of modernity – the “incalculable risks and manufactured [human-made] uncertainties resulting from the triumphs of modernity.” (Beck 2009: 6) In it he argues that manufactured risks, such as pollution, global health pandemics, and international terrorism have become the predominant product, not just a side-effect of industrial society. (ibid)

On a historical level, Risk Society was published in the mid 1980s when the clouds from Chernobyl were spreading over Europe. (Latour 2001: 7) It was a period marked by the end of the 'first wave' of the environmentalist movements in most of the industrialised economies of the West, whereby regulations were being put in place to restrict the impact of industry on our natural resources. (Matten 2004: 377) In his writings Beck situates the transition from an 'industrial' to a 'post industrial' or 'risk society', which he cites as occurring around the early 1970s. This is the moment when

Figure 4.1 – An image of Arabella (one of the adopters of the prototype) testing out the compass table to see it's reaction to various objects in the home (both mechanical and electrical).

image: Jason Evans  
dunneandraby.co.uk

humanity is confronted with a set of global risks that it has itself engendered. In this context, modernity's focus on the forces of production and progress brought on by the rapid development of science and technology becomes the impetus behind the unintended large scale hazards developed from industrial, technological and economic change – nuclear disasters, the greater mobility of diseases, climate change, scarcity of water, the hole in the ozone layer. Thus the institutions of industrial society are attributed the status of producer and legitimator of what Beck terms 'manufactured risks' – ecological, financial, biomedical, terrorist, informational – that they cannot control. He writes: 'manufactured uncertainties',

are distinguished by the fact that they are dependent on human decisions, created by society itself, immanent to society and thus externalisable, collectively imposed and thus individually unavoidable... they are incalculable, uncontrollable and in the final analysis no longer (privately) insurable (climate change, for example)." (Beck 2009: 293)

Beck sees these as 'high consequence risks' – responsible for modernity becoming reflexive (directed at itself) as a reaction to being progressively confronted with its own effects. (Rasborg 2012) Risk Society thus implies the way in which society must orientate itself to the reality of the 'manufactured uncertainties', hazards and insecurities of our current global society. For this reason Beck argues that in the risk society emphasis shifts from an interest in the mass production of goods (the focus of industrial society) to a regard for the mass production of 'bads' – the problems induced and introduced by modernisation itself. (Beck 1992: 21)

In a similar manner, critical design is understood as resisting the mass production of goods, while instead using the language of design to open up new perspectives on the hidden realities and 'wicked problems'<sup>11</sup> of our world. This is evidenced for example in Dunne & Raby's *Placebo Project* (2001) which comprised eight prototype objects designed to investigate people's attitudes and experiences of electromagnetic fields in the home. Similar to a medical placebo, the objects did not remove or counteract the cause of concern, but were instead intended to provide psychological comfort. (Dunne, 2001: 75) For example the 'Compass Table' (Fig. 4.1) was a seemingly ordinary table with 25 compasses embedded in its surface. Each compass was designed to react to the electromagnetic fields emitted when an

<sup>11</sup> First theorised by Horst Rittel and Melvin Webber (1973), Wicked Problems apply to social and cultural problems that are difficult or impossible to solve due to their complexity, non knowledge, and interconnectivity with other problems. Examples include, poverty, sustainability, equality, and health.



electronic device, such as a mobile phone or laptop, was placed on or near its surface. As with any placebo, the project points to the importance of perception. The objects themselves were not intended to change reality or provide solutions, but were instead designed to stimulate critical reflection in a manner which challenges our perceptions and interrelations with electronic objects. (ibid)

Here two contradictory notions of risk are at play simultaneously. On the one hand Dunne & Raby's *Placebo Project* raises questions on the 'real' risk of electromagnetic waves (radiation) stemming from digital technology. While on the other hand, it points to the social construction of risk (our personal subjective understanding and knowledge of the risks associated with electromagnetic waves) What is implied here, and also what is at stake in a more general sense, is that risk is not only something that exists as real (as Beck's early work would argue), but something that is socially constructed.

Sociologist Michell Dean argues the importance of the social construction of risk as a critique on Beck's realist notion as well as his limited focus on science and technology. Unlike Beck, Dean does not imagine risk as real, but rather describes risk as being intimately connected with modern forms of governmentality concerned with both the regulation and control of social behaviour. (Dean 1999: 178) Following Foucault, Dean situates risk as both socially produced and culturally constructed. He argues

that risk is embodied in the foundations of social government alongside its related notions of social justice and the emergence of a social form of citizenship. Contrary to Beck's ontological treatment of risk, Dean posits risk as an abstraction brought into being through varying modes of representation. It is not a thing in and of itself, but instead a 'calculative rationality' for governing the conduct of individuals, collectivities and populations. (Dean 1999) This constructivist approach to risk, formulated under the assumption that risk is a social construction dependant on both historical and cultural context, considers that access to knowledge plays a big part in peoples relationship to risk. In this sense the social constructivist formulation of risk is epistemological by nature.

In Beck's later work he too identifies the dependence of risk on knowledge. In contrast to Dean, however, Beck continues to maintain that risks exists in a real material fashion, but that they can be interpreted differently at different times and places. He states

risks are at the same time 'real' and constituted by social perception and construction; their reality springs from the impact of ongoing industrial and scientific production and research routines. On the other hand their knowledge, quite differently springs out of the history of symbols and one's culture (the understanding of Nature for example) and the social fabric of knowledge. (Beck 2000:219)

That risks, while real (objectively true), can at the same time be understood differently in different parts of the world, Beck claims, is one of the main reasons the same risk the world over can be dealt with so differently. It means that there is no objective risk accessible beyond social interpretation. Hence we should recognise now that politics, ethics, mass media, technologies, cultural definitions and perceptions all combine to determine risk in our world, and that ultimately there is a social invisibility inherent in risk, which demands that risks must be clearly brought to consciousness in order for them to be recognised as threat. (ibid.) In this sense risk, according to Beck, can be defined as the human capacity to understand the real life consequences of the fabricated uncertainties of modernisation. On the basis of this analysis, these general tangential assertions Beck advances signal that 'fabricated uncertainties' and 'risk knowledges' together, (Giddens 1994, 4; Beck 1994) force people into a state of self-regulation, self-monitoring and self-building. Taken from a broader view, the risk society thus implies a decrease in the unquestioned validity of expert knowledge and central

Figure 4.2 – A noPark garden in New York City. The design involves the retrofitting of ‘no-parking’ areas around fire hydrants into biofilter gardens.

image:  
 inspirationgreen.com

control. What is significant is that all interpretation becomes a matter of perspective. Against the theoretical backdrop of the failing of the ‘modern project’ and discredited expert knowledge the certainty and singularity of knowledge appears to breakdown, while all truths become treated as contestable propositions open to ‘discursive articulation’, and critique. (Lash 1994: 202)

From a critical design standpoint Beck’s theory of the Risk Society is pertinent, encapsulating as it does the necessity to attend to a more discursive practice centred on possibilising, probabilising, questioning and active agency. An example can be drawn from Natalie Jeremijenko’s Environmental Health Clinic (EHC), which serves to help the public analyse, critique and reflect upon our relationship to how we understand human health. According to Jeremijenko the EHC

is an experimental design project to transform our relationship to nature; to break down the division between humans and other species and demonstrate that the world is one giant feedback loop, and that any division between self and other, society and nature, is a problematic dichotomy. (EHC website)

As part of the project she sets up a series of field labs to meet with ‘imPatients’: those too impatient to wait for legislative change to address local environmental health issues. These offices provide an immersion into some of the environmental challenges that we face, while putting agency at the forefront of the discussion. For example, one field office in Belgium dealing with air pollution was stationed in a traffic circle precisely because the roundabout stands in opposition to the top down control of the traffic light system, inviting micro decisions to be made in situ by people not being told what to do, but invited to think. (Jeremijenko 2012) Employing behaviours embodied in the Risk Society, Jeremijenko’s work focuses on translating major environmental issues into something concrete that people can engage with, while empowering a public to take action.

One call to action in the EHC, called *noPark* (Fig. 4.2), is targeted toward improving water quality by inviting ‘imPatients’ to remove asphalt from no-parking zones associated with fire hydrants around the city. The vacated spaces are then filled with mosses and grasses specifically designed to filter out road pollutants before they enter into the city’s estuary system.



Considered over time, Jeremijenko argues, *noPark* works toward redefining the ‘emergency’, while addressing what she deems ‘a crisis of agency’:

99% of the time when a fire truck is not parking there, it is infiltrating pollutants, it is also fixing CO<sub>2</sub>'s, sequestering some of the air born pollutants. And aggregated, these small interceptions could actually infiltrate all the road born pollution that now runs into the estuary system. (ibid)

Fundamentally Jeremijenko’s work centres on structures of participation in the production of knowledge while being reflexively critical and disruptive of modernisms expert-driven systems of power. As Beck reminds us, Risks can only become ‘visible’ when socially defined. Here I posit that works of critical design, like Jeremijenko’s EHC, act as prime sites for the social definition of risk, while simultaneously engaging in strategies of reflexivity and active agency.

In what follows, I will tie critical design to Beck’s theoretical ideas of the ‘risk society’ and his wider social theory of ‘reflexive modernization’ in order to both clarify our understanding of the behaviours of critical design and to place the field of practice in a broader theoretical context of societal change. In order to do this I will first describe the key behaviours of Reflexive Modernization as espoused by Beck before sketching the ways in



which it can be employed as a useful explanatory framework for critical design.

#### 4.2.2 Reflexive Modernization

With this indeterminability of risk Beck introduces the concept of reflexive modernization, or what he otherwise terms, second modernity, which presupposes the possibilities of a new form of society which takes shape from the bottom up. The concept of reflexive modernization refers here to a three state periodization of social change, with the first being pre-modernity (traditional society), followed by first-modernity or simple modernity (synonymous with the development of industrial society) and lastly our current situation of second modernity or reflexive modernity (risk society). In generalised terms reflexive modernity refers to a process of modernisation whereby modernity challenges and overturns its own foundations and taken-for-granted assumptions. It has become directed at the process of modernisation itself. Essential to Beck's theory therefore is the release of agency from structure, whereby individuals are forced to free themselves from the normative expectations of the institutions of first modernity. (Lash 1994: 200) As professor John Barry states: "Additionally and radically what reflexive modernization implies is that society democratically makes decisions on its development path; that is, democratically 'regulate' social progress." (Barry 2007: 252) What Barry contends is that reflexive modernization must be understood as a form of 'social learning' through which society attends to the consequential risks arising from industrial modernisation. (ibid: 251- 252)

It is significant to note, however, that Beck's theory of reflexivity does not necessarily lead to an increasing reflection on the 'self-destructive potentials' of the risk society. Despite Beck's assertion that knowledge plays a key role in both the risk society and reflexive modernity, he repeatedly asserts that risk in second modernity is uncertain and unpredictable and must be understood as the unintended consequences of industrial modernisation. (Rasbourgh 2012: 14) Beck argues that reflexivity is not entirely a conscious process mediated by knowledge (reflection) but rather more so "a 'reflex' in the sense of the (preventive) effect of not knowing." (Beck 2009: 119) From this point of view Beck's notion of reflexivity comprises not just knowledge but unawareness. As Beck states "Non-knowledge rules in the world risk

society. Hence, living in the milieu of manufactured non-knowing means seeking unknown answers to questions that nobody can clearly formulate” (Beck 2009: 115) This new uncertainty invites doubt into the equation, allowing us to question expert knowledges and the pre-regulated progress of modernity. (Beck 1997) Beck (1994: 176-7) gives a sense for this in the following passage :

... the ‘reflexivity’ of modernity and modernization in my sense does not mean reflection on modernity, self-relatedness, the self-referentiality of modernity, nor does it mean the self-justification or self-criticism of modernity in the sense of classical sociology; rather (first of all), modernization undercuts modernization, unintended and unseen, and therefore also reflection-free, with the force of autonomized modernization. ... [R]eflexivity of modernity can lead to reflection on the self-dissolution and self-endangerment of industrial society, but it need not do so.

Thus, Beck’s reflexivity first involves the action of ‘reflex’—‘a process that culminates in [an automatic response to a stimulus]’ (Merriam Webster 2013) Here reflex is neither individualistic, nor conscious nor intentional (Lash, 1994) Second, this state of reflex leads to the potential for reflection – a relation that exists between an entity and itself’ (Merriam Webster 2013; Aiken 2005: 5) In this sense what Beck is suggesting is that while we are subjected to change derived from previous actions, this leaves us with a clearer understanding of our predicament.

How might all this relate to critical design? At the most basic level, critical design is a practice that challenges the taken for granted's of design practice. Old certainties of Industrial modernity, like utilitarian functionality, beauty, and problem solving are brought into question by a practice centred on problem finding, questioning, and social emancipation. On a deeper level works like Thwaites’ toaster project (see chapter 2), and Young and Davis’ *Rare Earthenware* (see chapter 3) open up the possibility for the public to become reflexive (in a reflective sense), leading to a clearer understanding of our non-knowledge of the objects in our lives. On this score the individual plays a crucial part in the process of critical design.

This ties in with fellow sociologists, Anthony Giddens' and Scott Lash’s theories on the politics of reflexive modernization which presume a plural democracy rooted in the empowerment of subjects. As Lash writes: “If simple modernization gives us Foucault’s scenario of atomization, normalization and individuation, then the reflexive counterpart opens up a

genuine individualization, opens up positive possibilities of autonomous subjectivity in regard to our natural, social and psychic environments.” (1994: 113)

### 4.2.3 Individualisation

In generalised terms, reflexive modernity pertains to the emergence of the autonomous individual, together with society’s retort to the risks produced as a by-product of modernity. It assumes a move from an expert-governed society to an individualistic society, whereby individualisation is understood as a stimulus for agency rather than alienation. For Beck, Lash and Giddens, the concept of individualisation not only involves the transformation of the way in which individuals are able to experience life free from collective and abstract structures such as class, nation, the nuclear family and the unconditional belief in the validity of science, (Beck, Lash and Giddens 1994) but more importantly they posit the very process of individualisation as the fundamental ‘motor of social change’. (Lash 1994: 114) In this respect individualisation as a social condition is not a self-determined choice, but is rather imposed on individual citizens by modern institutions. With modernisation, the individual is progressively stripped of traditional identity structures – for instance, forming part of a nuclear family or belonging to a specific class. As Beck writes: “Everyday life is becoming cosmopolitan: human beings must find the meaning of life in the exchange with others and no longer in the encounter with like.” (2006: 331) The individual is therefore left to negotiate their own biography and to navigate the shifting institutional demands of work, family, politics etc. (Arnoldi 2009) This notion of individualisation is central as well to Zygmunt Bauman’s theories of Liquid Modernity, which posit change as the only permanence within modernity, and uncertainty the only certainty. This fluidity, according to Bauman, is largely responsible for a change in contemporary approaches to self-identity toward a period whereby individuals are free to experience life as ‘tourists’ in search of multiple heterogenous social experiences. (Bauman 2000)

Understood in this way, individualisation under reflexive modernization gives rise to widespread reflexivity in which agency reflects on both social structure (rules and resources) and the self. It is not only the discrediting of expert knowledge but as well the disintegration of the certainties of life situations and conduct of the industrial society, class, nuclear family, sex

roles, division of labour, traditions of marriage. In the individualised society, identity is actively organised by the individual who is conceived of as a calculating person in charge of their own decisions. Thus reflexive modernity can be approached in terms of flexibility, pluralistic democracy and the exercise of choice. This new context marked by uncertainty and difference is a direct consequence of what Beck describes as the ‘world risk society’ whereby risk is experienced as omnipresent. (Beck 1992; 2006)

For Beck, Lash and Giddens, this new valourisation of the individual marks the end of a linear and beginning of a non-linear modernisation (the reflexive). For example, Giddens’ notion of ‘active trust’ which involves the reflexivity of individuals mediated through expert systems attempts to understand the considerable undermining of the certainties attached to knowledge that we are seeing more and more within everyday life. (Beck et al. 1994) Giddens uses this concept to discuss the nature of truth in reflexive modernity which he characterises as a ‘propositional truth’ open to discursive articulation and critique. (Beck et al. 1994: 202) According to Giddens, this process of reflexivity creates the conditions for what he calls ‘clever people’, which Knorr Cetina aptly defines as “individuals [who] engage with the wider environment and with themselves through information provided by specialists which they routinely interpret and act on in everyday life” (1997: 7) Finally in Beck’s terms, reflexive modernity is a state of modernism whereby individuals are oriented, above all, towards active participation and subjective knowledge. Summarising the shift from a linear to non-linear modernity he states,

Linearity means consensual expert knowledge: limited numbers of recognized and authorized practitioners in research institutes and organizations and corresponding explicit sites for producing, accrediting and implementing knowledge linked in cooperative networks. Non-linearity means dissent and conflicts over rationality and hence over principles, that is, confused, uncooperative, antagonistic networks of epistemic actors and coalitions (Hajer 1995) engaging in conflicts over (at the limit) contradictory certainties... (Beck 2009: 125)

Taken together, the received assumption is that non-linear modernity is more subject to the effects of human agency. It is a concept that primarily communicates individualisation as involving a shift from the meta-narrative of society to the possibility of individual narratives, whereby individuals are left to construct a reasoned lifestyle, identity and structures of collectivity for

themselves. (Knorr Cetina 1997: 4 from (Beck and Beck-Gernsheim, 1994, 1996; Giddens, 1994a; Heelas, 1996:2)

This theme of reflexive modernization, I suggest, is consistent with an understanding of critical design as a source of reflexivity with which to disrupt and transform the assumptions of modernism. In this setting critical design is characterised as propositional, reliant on an active criticality which privileges individual agency in the game of knowledge production and understanding. Critical design, in this sense, orients its audience to the uncertainties of expert knowledges while empowering the individual to play a role in the ongoing reconfigurations of our world. On this understanding, identity in *Reflexive Modernization* is not only built through associations with the other, but also through the object.

#### 4.2.4 Objectualisation

The Austrian sociologist Karin Knorr Cetina has argued that Beck's notion of individualisation focuses exclusively on human relationships ignoring the role of object worlds in the formation of an individual's sense of self. (1997: 1) For Knorr Cetina what is most pressing is that in contemporary society we are not only confronted with developments in individualisation but also more generally post-social developments whereby knowledge takes centre stage. This can be seen in the recent proliferation of concepts such as the knowledge society, information society, technological society and the aforementioned risk society. She maintains that the shift from industrial society to a post-social knowledge society has provided for a form of object-relations that exist in stark contrast to those previously available to social theory by which she means relations with commodities and instruments. Objects of Knowledge as Knorr Cetina terms them, are characterised 'as continually unready-to-hand, unavailable and problematic' (ibid: 10)

Knorr Cetina puts this in her theory of 'objectualisation'<sup>12</sup> which implies an object-centred sociality whereby objects of knowledge take on the role of embedding environments or mediation devices for human relationships. In this sense, our understanding of individualisation opens itself up towards objects as potential sources of the self, of relational reflexivity, of shared subjectivity and of community. (ibid: 9) The advantage of Knorr Cetina's concept of objectualisation is that while recognising the importance of knowledge it asserts that identity in second modernity is

<sup>12</sup> Knorr Cetina's concept of objectualisation draws heavily from the new sociology of science which argues that knowledge cultures structure themselves around object worlds to which experts and scientists are oriented. (see Callon 1986; Latour 1993)

actively organised not just by individuals, but also through objects. This would suggest that works of critical design can function as embedding environments in support of individual and socially reflexive systems. That is as knowledge objects centred on multiple viewpoints and experiences. What is being pointed to here is that objects also have agency in their relationships with humans and the world, and that this agency draws attention to the processes of questioning, and self-identity that are central to Beck's theories of reflexive modernization.

This emphasis on the capacity of knowledge objects to insight reflexivity and questioning, also feeds into Beck's understanding of doubt as central to the enactment of individualisation in second modernity. Fundamental to Beck's vision is the recovery of doubt as the great emancipatory legacy of the Enlightenment. This is perhaps most powerfully instantiated when he states: "Doubt arising not from ignorance but from greater knowledge and further questioning is the most certain victor of modernity" (1997: 166) This perception blocks out the horizon of certainty associated with simple modernity, foregrounding doubt as a resource for the cultivation of individualisation as understood by Beck, Lash and Giddens. Doubt thus provides an anchor for the 'radicalisation of rationality'. In other words, as Beck suggests:

Contrary to a widespread mistake, doubt makes everything – science, knowledge, criticism or morality – possible once again, only different, a couple of sizes smaller, more tentative, personal, colourful and open to social learning. Hence it is also more curious, more open to things that are contrary, unsuspected and incompatible, and all this with the tolerance that is based in the ultimate final certainty of error.  
(1994:33)

Thus when Beck understands second modernity as inherently tied to individualisation, he is speaking of the need for a reflexive self-awareness and redefinition, a re-modernisation which involves a transition from control and rationalisation to empowerment and questioning.

In this perspective the shift to a reflexive modernity demands a more active voice in society which enables new forms of collectivity to flourish. This is particularly thematised in Beck's example of a sign on a motorway in Munich that reads: 'You are not in a traffic jam, you are the traffic jam'. (Lootsma 2015) The signage functions not as instruction or one way communication but rather entails interpersonal reflexivity which comes

through an individual experiencing the sign while ‘stuck’ in traffic. This is best exemplified in the following passage:

For me, the realization that the car as a means of transport in large urban centers is an utter failure came many years ago, when I was stuck in traffic in the city of Hamburg. The Greens had organized a very small, but clever campaign. They stood along the side of the traffic holding placards that read: ‘You are not in a traffic jam – You are the traffic jam.’ It clearly brought home the message that the guy in front of you is not any more or less a problem than you are to the guy behind you. (Habito 2015)

The quote comes from an experienced commuter addressing the self-inflicted character of our collective immobility. The important point here is that the placard functions through immediacy and is confronted not as critique from the outside, but rather a reflexive object (both engaged and critical) for those embedded in the experience. Meaning in this instance is not held within the object, or something to be imparted on a user, but instead materialises through experience. The guiding principle here, is not necessarily as Beck implies, that this reflexivity would bring people to reorganise their transportation themselves (Lootsma 2015) but more that it challenges the individuals conception of the traffic jam as a life form out of their control, even though they are part of it. In this moment the self is empowered so that this reflexivity results in a transition from a situation framed by control and rationalisation (through transportation structures, industrial mechanisms, government policies) to one defined by individualisation.

Generally speaking I have conceptualised reflexive modernization as being about individualisation, incomplete knowledge constructs, as well as active forms of becoming and engagement. In the following, I will consider critical design practice in terms of Beck’s, Giddens’ and Lash’s theories of reflexive modernization. I want to maintain that the reflex-like, open, uncertain, and individualising character of reflexive modernity uniquely matches the structure of device by which we characterised critical design practice in chapter 3.

### 4.3 Towards a Design OF Reflexive Modernization or a Design FOR Reflexive Modernization

<sup>13</sup> What is meant by function in this context is utilitarian functionality. To see a wider understanding of function see Matt Malpass (2015)

The relevance of the above example for the study of critical design may not be immediately apparent, but my point is that corresponding to the shift from simple modernity to second modernity is a shift in how we can experience objects: not only as determinate entities that serve functional<sup>13</sup> requirements in production and use but as indeterminate, reflexive, and question-generating. As Lash points out, we engage the former primarily in terms of ‘operationality’, while the latter is more a manner of meaning. In this sense, objects in second modernity are less determined through representation and interpretation than through perception and embodiment. (Lash 1994)

A starting point for conceptualising critical design as a genuine design of reflexive modernization can perhaps be tied to the assertion that in the same way that Beck, Lash and Giddens contend that modernity becomes reflexive, ‘a theme and problem for itself’ (Beck et al 1994: 8) so too has our current state of critical design practice, which uses both reflex and reflection as tools to begin to engage with the world of design and by extension our social, technical and cultural worlds. In this scenario reflexive modernization not only resonates with an understanding of critical design as located in a reflexive act, but it also speaks to the shift from problem-solving to problem-finding (Mazé and Redström 2007), where critical design projects take on the role as transmitters and communicators – reflexive devices of constantly shifting movement and interconnections. A further point that warrants discussion follows from recognising variability and uncertainty as integral features of a critical design practice.

In this sense the relevance of reflexive modernity to critical design presumes more than this. The notion that reflexivity and individualisation are conditions of second modernity and that the processes of doubt, uncertainty, non-knowing, and engagement contribute to societal change in the everyday, provides a valuable theory to conceptualise, describe and critique critical design practice. The following will therefore explore the possibilities for understanding the growing body of critical design as constituting a design of reflexive modernization. This notion of critical design as a design of reflexive modernity, I argue, is tied to the shift from critique to criticism to criticality as defined by theorist and curator Irit Rogoff. (2006) I want to



propose that this theory of second modernity has reinforced a design practice centred on the creation of conditions for both thinking and doing, whereby works of critical design privilege a criticality within which the individual is asked to question his/her knowledge and modes of inhabiting the world. In this instance what comes to the fore is that the social theory of reflexive modernization is not only a productive approach to understanding the social condition that lay the grounds for the emergence of critical design practice, but as well leads to a better understanding of works of critical design as objects of knowledge characterised as dynamic, question-generating and complex.

#### 4.3.1 The Aesthetics of Reflexive Modernity

In his philosophical discussion of an Architecture of Reflexive Modernisation, historian Robert Cowherd (2009) summarises the shifts in emphasis between modernity, postmodernism and reflexive modernisation. He positions postmodernism as concerned with the destruction of the ideals of modernism, which itself was bent on progress with little regard to its effects. Whereas he sees reflexive modernity as equally concerned with both destruction and reconstruction. As he states:

But where the modern mega-project would proceed without consideration for side effects, and the postmodern critique would dash the hopes of any chance of success, the second modern project seeks out positive feedback loops capable of responding to changing conditions in real time - reflexively...as an automatic response to a stimulus - including the emergence of unintended consequences.  
(Cowherd 2009: 70)

The architecture of reflexive modernity that Cowherd spells out rests on an understanding of a shift from modernism's pursuit of utopian ideas to an emerging architectural creativity defined by complexity, uncertainty and unpredictability – a notion which emphasises the importance of both variability and adaptability in the process of modernisation itself. Cowherd sees an architecture of reflexive modernisation as one which functions as both engaged and critical. More importantly the conditions of second modernity, he states:

. . . call for reflexive design processes that produce architectures in support of socially reflexive systems capable of displacing the non-

reflexive mechanisms of high modernism, and the negative feedback loops of late capitalism. (ibid. 74)

His critique of instrumentality sees architecture as needing a complexity driven by attributes of contingency, possibility, and fluctuation.

Cowherd's account mirrors much of what Lash (2003) highlights in his discussion on the position that subject and knowledge hold in reflexive modernity. Lash situates both subject (the individual) and knowledge as having a place in our current social world, only this time a place of uncertainty. He states:

What happens now is not non-knowledge or anti-reason... It is itself precarious as distinct from certain, and what that knowledge is about is also uncertain – probabilistic, at best; more likely 'possibilistic'. (2001: ix-x)

Critical of both Beck and Giddens' presupposition that reflexivity is both normative and cognitive, Lash sees the shift to a reflexive modernity as driven as well by an aesthetic (hermeneutic) and expressive dimension. At issue in his theory is the existence of both reflexive subjects and reflexive objects. Lash believes that it is not only conceptual symbols that function as conditions of reflexivity, but that reflexivity can be found equally in aesthetic moments. Accordingly he maintains that aesthetic reflexivity, in contrast to cognitive reflexivity, takes place via a mode of not conceptual but mimetic mediation. (136) In a similar vein to Beck, Lash argues that the theory of reflexive modernity is not solely a logic of choice. It is not always based on a deliberate, conscious action, a rationalist self-monitoring, but instead should be understood as a system of self-interpretation whose core is not consensus and contestation, but the social construction of reality. (Lash 1993: 8) With this Lash considers the aesthetic dimension of reflexivity as the grounding principle of 'expressive individualism', it involves intuition and imagination above and beyond cognitive and normative judgement. (135)

One of the more interesting things that Lash's concept of aesthetic reflexivity allows is the notion that within second modernity we inhabit a problem rather than analyse it. This recognition of a living out a situation both cognitively and aesthetically offers notions of an ontological openness

whereby one is free to question his/her knowledge and modes of inhabiting the world.

When carried into the area of critical design these features lead to an understanding of works of critical design as complex and indeterminate, operating through both movement and becoming. In this sense, works of critical design are not to be understood as definitive answers to proven problems, but rather as possibilities open for engagement by their users. That is, they challenge certainties of knowledge while problematising the conditions of our existence. Alternatively, from the perspective of the designer, a design of reflexive modernization is not necessarily tied to the quest for a theoretically rigorous practice. If we agree with Beck and Lash that the shift to a reflexive modernity is not solely a logic of choice, then we might acknowledge that a change in the conditions of design in second modernity would instinctively trigger a change in response by the affected generation. In this sense, critical design practice must be equally regarded as reflex, as it is a conscious reflection by a practitioner. It becomes plausible to assume, therefore, that the same conditions of reflexive modernization, rather than say historical predecessors, can be pinpointed as driving circumstances for the emergence of Critical Design (as a reflex to changing societal, environmental, political and cultural conditions). While it is obviously one-sided to look at the rise of critical design practice solely from the perspective of second modernity, and there are most definitely arguments to be had about the relationship of critical design to radical design, anti-design, critical architecture and conceptual art, what I want to imply through this direct correlation is the importance of approaching critical design as a practice grounded in immediacy in all of the senses just described.

In this scenario critical design as a design of reflexive modernization comprises reflex, non-knowledge, uncertainty, movement and becoming, with the importance of direct experience figuring strongly. Lash and Lury in their book *Global Culture Industry* (2007) call this a process of the construction of difference. (5) whereby difference is generated through direct experience. (ibid: 7) Their argument rests on the growing significance of reflexive modernization in which,

products no longer circulate as identical objects, already fixed, static and discrete, determined by the intentions of their producers. Instead, cultural entities spin out of control of their makers; in their circulation

Figure 4.3 – An image of a bird triggering one of the six electronic perches at the Whitney Museum.

image:  
environmentalhealthclini  
c.net



they move and change through transposition and translation, transformation and transmutation. (5)

As a result Lash and Lury maintain that by virtue of their unintended consequences cultural entities are indeterminate not just through their being but in their effects. (ibid) This notion of a practice which functions as a vaguely scripted, complex, open system describes a multimodal experience that requires constant effort and creativity from its users. It is a form of practice that escapes the symbolic and representational and enters a real in which meaning is operational. That is, meaning is no longer reliant on interpretation or reflection but rather on doing. As Lash and Lury insist, we do not ‘read’ objects in second modernity, so much as do them. (8) For example, they state “in Rem Koolhaas’ *Harvard Guide to Shopping* (2001) architecture becomes increasingly surfaces of communication, intensities, events.”

While Lash and Lury specifically focus on the relationship between brands and second modernity, many of their arguments can be applied to critical design practice. In the context of the above, critical design viewed not as object but as experience constitutes a shift from the symbolic to the real, to which Lash and Lury state: “In the symbolic, signification works through structures to produce meaning. In the desert of the real, signification works through brute force and immediacy.” (2007: 12) This implies that

critical design, and other practices born from second modernity, resist the pressures to surrender to capitalist economy. They work instead in the space of the real, while actualising themselves not as objects but more so spaces for communication, action and thinking. (ibid:13) To give an example let us return to Jeremijenko's work. *For the Birds* (2006) (Fig. 4.3), was a site specific installation in the courtyard of the Whitney Museum, NY. The project, designed in collaboration with Phil Taylor, comprised a series of six electronic bird perches, each equipped with an independent sound file. When triggered by a real bird landing on the perch, the pre-recorded 'bird' voices would warn museum goers about the deadly avian flu virus. For example, one perch sounded a male voice saying:

Tick... Tick... Tick... That's the sound of genetic mutations, of the avian flu becoming a deadly human flu. Do you know what slows it down, healthy sub populations of birds, increasing biodiversity generally. It is in your interests that I am healthy, happy, well fed. Hence you could share some of your nutritional resources instead of monopolizing them. That is . . . share your lunch.

The work invited those experiencing it to not only feed the birds, but to simultaneously reflect on the ways that we impact nature and the ways nature affects us – exploring all the while what it means to have social agency in the complex ecologies we are all a part of. (Yang and Donner, 2008) In an interview about the project, Jeremijenko explains “the birds are arguing that the reason we have diversity in nature is to protect us against disease” she continues, “The birds are arguing that if we were to address the problem effectively, with a systems-level view, we would increase the health of domestic and wild birds, and that would be our best protection.” (Berger, 2006)

By scripting a work that creates interfaces between the public and their environment, Jeremijenko offers her audience a moment to reflect on the fact that we do not live in a plastic bubble. Everything we do impacts those around us, human, animal and environment. Perhaps most importantly the work comprises both information and a resource to act on that information. It articulates an immediacy – it acts and makes others act.

#### 4.4 Criticality

What I am attempting to uncover is the move away from an understanding of critical design as a form of passive critique on our current situation, considering it instead as a live medium that generates active engagement through the same mechanisms that Beck, Giddens, and Lash identify as key determinants for reflexive modernity: uncertainty, variability, and reflexivity. (Beck et al 1994; Cowherd 2009) The emphasis here is on the creation of conditions for both thinking and doing, whereby works of critical design, as previously mentioned in chapter 2, privilege a criticality within which the audience is asked to question his/her knowledge and modes of inhabiting the world. This way of thinking, I argue, contributes to an understanding of critical design as a form of criticality in Irit Rogoff's terms. (2006)

In her article entitled 'Smuggling' – An Embodied Criticality' Rogoff embarks on a discussion of experiencing contemporary cultural practices as forms of embodiment. She conceptualises this experience as a living out a situation, whereby meaning is not a pre-determined element of a cultural work but instead generated through a performative function that takes place in the present. Rogoff sees this as intimately tied to societies shift away from critique towards criticality. (Rogoff: 2006)

That is that we have moved from criticism which is a form of finding fault and of exercising judgement according to a consensus of values, to critique which is examining the underlying assumptions that might allow something to appear as a convincing logic, to criticality which is operating from an uncertain ground of actual embeddedness. By this I mean that criticality while building on critique wants nevertheless to inhabit culture in a relation other than one of critical analysis; other than one of illuminating flaws, locating elisions, allocating blames. (Rogoff, 2006: 2)

We can see many linkages between Rogoff's notion of criticality and the rise of reflexive modernization. The style Rogoff spells out rests on an understanding of criticality in terms of a mode of embodiment, a 'living through' the very problem we are trying to analyse and apprehend. It represents an abiding unity between audience and work as it enters a discourse of performativity that actively inhabits a subject rather than merely offering it for analysis and consumption. This emphasis on possibility and potentiality in which works can be approached as relative not absolute truths offers a space for multiple viewpoints and experiences which together create

a collective endeavour that remains forever open to contestation and adjustment.

Importantly, this notion of criticality as a transformative activity reliant on a lack of completeness of being, heralds an understanding that meaning is not immanent but functions instead as a field of possibility for different individuals to produce their own significances. (ibid) Broadly speaking, what Rogoff's theory of embodied criticality brings into perspective is the understanding of the user as a central component to critical practice. It positions the subject in a leading role, in the sense indicated by the Italian art critic Filiberto Menna, whereby the individual is moved toward a state of self-realisation and the full exercise of freedom. (Menna, 1972) Or as Rogoff argues, 'Criticality as I perceive it is precisely in the operations of recognising the limitations of one's thought for one does not learn something new until one unlearns something old, otherwise one is simply adding information rather than rethinking a structure.' (Rogoff, 2003: 1)

Rogoff's ideas are important here because they epitomise the notion of individualisation and objectualisation which prevail in our understanding of reflexive modernity. In effect, criticality produces subjects and objects that exist in the realm of the uncertain – a space rife with knowledge and unawareness. This understanding of uncertain knowledge serves as a state of non-knowledge which I have described above as seeking unknown answers to questions that nobody can clearly formulate. The concept of critical design as a form of criticality therefore emphasises object worlds as embedding environments open for thinking and individualisation.

#### **4.5 Critical Design as Epistemic Object**

To examine the relationship between individualisation, objectualisation and criticality further, I want to make a first attempt to contextualise works of critical design as epistemic objects – in the sense originally described by Hans Jorg Rheinberger (epistemic thing) and later elaborated by Knorr Cetina (epistemic object).

For Rheinberger epistemic things are objects which are "open, question-generating and complex." (2007) They engage us in an 'endless game of realization of the possibles' inviting us to think through a conversation with materials. (1997: 283) He distinguishes these from instruments which he defines as fixed and ready-to-hand. Similarly Knorr Cetina's epistemic

objects are knowledge objects characterised by “an incompleteness of being and the capacity to unfold indefinitely” (2001: 180-181) These fluid objects, she contends, have an ‘ontological openness’ which generate questions while providing pointers to possible future explorations. (182) Knorr Cetina writes: “In this sense they lie at the opposite end from pure tools and commercial commodities. These tools and commodities have the character of closed boxes, while objects of knowledge are more like open drawers filled with folders extending indefinitely into the depths of a dark closet.” (2000)

The concept of the epistemic object is useful here because of its emphasis on the power of material objects as driving forces for both thinking and action. In essence identifying works of critical design as epistemic objects builds on the notion of critical design as a dynamic, complex, signifying and meaning generating medium where thinking and things intertwine.

In chapter 2 I argued that the goal of critical design is to serve as an open platform able to act as a speculative context, shifting the emphasis from design as a discipline of knowledge production to a space to think about thinking differently. Such openness as Rheinberger contends enables continuous conceptualisation and experimental manipulation around an object (in our case a work of critical design), increasing rather than reducing its complexity as it is being revealed and discovered. (1997) In this sense works of critical design can be seen not only as embedding environments for the self, but also as epistemic objects. One interesting facet of this analogy is that it hinges on the notion of critical design as never completely understood. Rather works of critical design are approached as vehicles for materialising questions; sites of possibility and potentiality – tied to ideas of flexibility, collaboration, experimentation, research and thinking; and experiences where individualisation can occur.

This development of the concept of critical design as an epistemic object will be articulated further through a series of examples in chapter 7. I want to maintain that such conceptualisations might broaden our understanding of what constitutes a work of critical design in ways needed to better approach its mediation to a public.



## 4.6 Conclusion

In summary, I have suggested that there are four broad but interlinked behaviours associated with Reflexive Modernity, which play a key role in illuminating an understanding of critical design as both a practice *of* and *for* Reflexive Modernization. Firstly, section 4.2.1 presented reflex as a fundamental condition of reflexive modernity which can lead to reflection, but need not do so. Secondly section 4.2.3 and 4.2.4 wove together concepts of individualisation with theories of the sociality of objects. The combination of insights from both sets of theories generates a conceptualisation of critical design as reflexive object (both engaged and critical). Third, section 4.4 presented reflexive modernity as privileging a criticality within which the audience is asked to question his/her knowledge and modes of inhabiting the world. It positioned critical design as a mode of embodiment, a 'living through' the very problem we are trying to analyse and apprehend. Fourth section 4.5 presented the epistemic object as emphasising material objects as driving forces for both thinking and action. It focused on works of critical design as sites of possibility and potentiality tied to experiences where individualisation and can occur.



. . . . Chapter five

# [Interduction]

## Transitions – From Critical Design to its Dissemination

### 5.1 Introduction to the Chapter

The idea for an interduction stems from my essential desire to create this PhD as a study in two parts. While the first part acts as a blueprint for the various behaviours, roles and responsibilities of critical design practice, the second functions as a series of case studies that identify, present and discuss the relationships that are being built between the museum and critical design. Specifically questioning the roles and limits of the exhibition, the section that follows raises a discussion on the conditions needed to help support works that are both open ended and critically engaged. The interduction is therefore positioned as a bridge that takes you from one part to the other. Note that it is not genuinely intended as a perfect stepping stone, but to act instead as a moment to clarify the importance of context to critical practice. The issue here is that the limited impact of focusing solely on the behaviours, roles and responsibilities of critical design must be expanded on by addressing a more holistic understanding of practice, and perhaps most importantly its context setting and mediation. In other words its dissemination.

### 5.2 The Forces of Dissemination

Dissemination is an essential component within design. This is particularly relevant to critical design practice as it is not produced for the traditional industrial economy. Far removed from market strategies and business interests critical design is guided more by debate and discussion than the

traditional patterns of consumption widely accepted as the desired form of engagement with design. As discussed earlier, works of critical design do not hinge upon solutions or practical functionality based on efficiency and optimisation (Moline 2006), but instead attempt to expose problems and pose thought provoking questions for both thinking and debate. Such works turn comment into conversation, and give preference to subjects over objects. So much so that, to the outside observer, critical design is often interpreted as outside of the field of design. Many place it within art practice, focusing on the autonomous nature of the work while presenting it within an art historical context and setting. (Betsky 2003; Poyner 1999) Others criticize it for simply being an elitist preoccupation for a closed circle of colleagues. (Mazé 2009, Moline 2006) Here the problem is situated in its roots as a wealthy, urban, western practice focused on noncommittal aesthetic play. (Antonelli and Hunt 2015) However as Fiona Raby states:

While critical design might heavily borrow some of [arts] methods and approaches, it definitely is not art. We expect art to explore extremes, but critical design needs to be close to the everyday and the ordinary as that is where it derives its power to disturb and question assumptions... It is only when read as design that critical designs can suggest that the everyday as we know it could be different. (Raby 2008: 95-96)

Certainly, critical design can be read as resisting the problem solving model of design, which can be defined as working for a client to produce an object or service within an industrial frame defined by a capitalist economy. However, this separation away from the core commercial context of design practice represents certain challenges for those who seek to produce critical design, not least of which is this almost total lack of dissemination beyond relatively closed circles. Furthermore, if we take Raby seriously, what is needed is not simply challenging this seemingly limited interest in communication beyond the already-converted, but also finding new ways of contextualising critical design as a form of product design – but not necessarily one defined by the practical functionality that we have all too often been led to believe is integral to design. Critical design thus functions within the space of product design, but as a disruption to its normative relations to industry. It is therefore a practice that must be understood as not only contributing to but also broadening the horizons of product design as a discipline. As Malpass explains, “The difficulty in... discussing critical design practice lies in the fact that unlike traditional design, critical

designers primarily focus on the communication of an idea rather than the development of a product or service...” (Malpass, 2012: 70) A work of critical design encountered as a work of design, and not art, is a space for contemplation, not a statement or an answer to a problem. It is about encouraging unconventional ways of looking at and reading the world.

If we are to follow Malpass’ assertions that the values championed by critical designers prioritise relational and ambiguous characteristics over facts and solutions, than there is already an acknowledgement of the importance of both the subjective and possibility. In particular, Malpass attributes these dominant tropes as integral features for creating works that open discussion, raise debate and communicate ideas.(2012: 60) And it is in relation to this last statement – that thinking and debate operate as core mechanisms of critical design – that the discourse around design, critical or not, begins to unravel most of its utilitarian formulations and justifications. This realisation underscores the fact that we have a responsibility to attend to works of design in a way that is adequate to the characteristics that they imbue, not simply to assume as a premise that design is inherently about problem solving, functionality, and consumption. To add to this critical design is by no means a neutral thing. The values and principles on which critical design is predicated aren’t universal. They have geographic and social specificity among others. Thus, while critical design arguably needs strategies to make it visible and understandable, it is not so much its meaning as a category, genre, or object that is important to consider, but more so how each work participates in the construction of conversations and debate about what we want the world to be like.

As such, the following chapters are framed within the tradition of reception theory, or reception aesthetics, which focuses on how meaning is created by recipients through the process of ‘reading’ a work – a concept which demands the notion of interpretation and ideas of horizon of expectation, gap-filling, and wandering viewpoints (Livingstone and Das 2009:10) to be included in the process of experience. Moreover, this focus on the ‘reading’ of a work implies the concept of literacy and by extension raises questions of legibility – accessibility, affordances, purposefulness. This enquiry moves beyond establishing the reading of a work as an appropriate metaphor for uncovering a legibility for critical design, to speculate into the ways in which works of critical design can be made

effective as experience in a culture that habitually equates design with utility. It examines strategies that actively engage with the behaviours of critical works as defined in chapters 1 and 2– to uncover what writer, critic and curator John Roberts defines as the facticity and ideological density that allows a particular form of praxis to bring recipients into its purview. (Roberts 2012) In a lecture on the relationship between art and politics under the new cultural conditions Roberts situates legibility as concerned with how the connection between art world and world is made evocable and effective as experience. (ibid) Thus legibility in these terms implies that critical design needs to find points of connection (by which I mean access and participation) if it is to find a place in the world. The purpose being to create encounters or moments of contemplation and discovery for non-scripted discussion and debate. It is this concept of relationality that gives audiences access to power and the means to change the world.

To add to this, the interest in legibility fundamentally raises questions of the situatedness (ibid) of critical design practice – Which contexts and conditions make it viable? Where is it best performed and served? What are its functions in society? And ultimately: How might it be communicated beyond the confirmed believers. Implicit in the notion of reception theory and the literary/reader metaphor is thus the understanding of the audience as a central component to this form of practice. It positions the subject in a leading role in critical design, in the sense indicated by Italian art historian Filiberto Menna, whereby the individual is moved toward a state of self-realisation and the full exercise of freedom. (Menna 1972) In this respect, critical design demands a more discursive relationship to its audience than the market can provide, and by extension its primary mode of reception is not as a functional object for users to consume, but instead as a tool to engage citizens in contemplation, debate and discovery. In this way of thinking how a work of critical design is disseminated – its mode of engagement – becomes as important to its success as the actual work itself. Celebrated here is the experience of critical design, the conditioning of perception and the construction of the relationship and dramaturgy allowed to be developed through engagement with the audience. That said, as a noncommercial practice, critical design has yet to establish its own space to engage with its publics. This does not mean that critical designers have no place to go. In fact much of the work of critical design comes from the

academy and is sustained and disseminated through journals, research, teaching, exhibitions and design blogs. The danger, however, lies in the fact that these modes of dissemination largely speak to the already converted. That we do not know how to reach a wider public is a problem.

If we believe, as Dunne & Raby assert, that one of the main intentions of critical design is “to help us become more discerning consumers, to encourage people to demand more from industry and society as critical consumers”, (Dunne & Raby 2015: 37) or as James Auger states: “Its intentions are to speak not to a ‘small community of people’ but as large and diverse a community as possible”, (Auger 2014) then it would follow that the very parameters of how works of critical design can reach a public, beyond the already converted, become integral to the overall success of the practice.

### **5.3 The Museum as Mediator of Critical Design**

As previously mentioned, the experimentation and theory that characterises much of critical design practice has yet to find its equal with regards to the methodologies of its circulation and mediation. If critical design is to be subject to contemplation and inquiry through dissemination, interpretation and dialogue, a new language and a new space for its expression is required. It is time to take seriously the lack of consideration that goes into how critical design reaches its audience. While critical design practitioners have been particularly attuned to challenging the boundaries of design, to formulating new questions and creating new paradigms, they have been much less attentive to conditions of mediation employed in the field. Most of the methods of dissemination and mediation used for works of critical design are directly modelled on fine art and product design practice, which do little to crystallize critical designs new dialogic, questioning and reflexive methodologies. Fundamental to the ongoing practice of critical design is thus a need to establish what context is capable of not only nurturing but, ultimately, fuelling this form of design – providing a space for critical design’s new and sometimes difficult discourses to flourish. The following chapters are symptomatic of these aims. They will examine what roles associated institutions play in the development, dissemination and experience of critical design with a specific focus on the function of the

museum exhibition and curator in developing critical design's relevance to society. As Ramia Mazé suggests:

Institutions play an important role in defining experiences and conceptions of design, including those held by designers. Design educations, exhibitions, associations and cultural forums (as examples of some kinds of institutions) develop and disseminate particular ideas about what design is about, its objects and objectives, conditioning the expectations of potential clients and audiences of design as well as the self-perception and professional definition held by designers. (2011: 278)

As described in this thesis, an under-discussed and under-theorised element of contemporary design is the relationship that curators and museums can develop with this emerging practice. This is no more evident than in the fact that one of the only places to encounter critical design apart from the academy is in the art gallery or science museum, framed in a way that offers little possibility for conversation and debate. We are all familiar with the scene: a work of design displayed in a white cube on a plinth accompanied by nothing but title of work, date and designer's name, a convention that goes a long way to confusing the specificities of art and design practices. Or alternatively an exhibition whose heavy-handed didacticism instrumentalises the work, leaving little room for ambiguity and relationality. Either way, while much of what we have come to know of as critical design has been experienced through exhibitions, there continues to be an uneasiness about the relationship being developed with this medium. I bring this point to suggest that it is nonsensical to mediate critical design within the same modes of dissemination and display frameworks as either product design or art, given the differences between the histories and purposes of these fields of practice.

Fundamental to the ongoing practice of critical design is thus a need to reassess the frameworks we have inherited to explore, analyse and understand design today. As mentioned in chapter 2, Dunne and Raby have argued for a related version of the exhibition, where didacticism would become less relevant than sparking discussion and debate about possible futures and alternative presents. (2013:153-154) This would suggest that museums and galleries would need to do away with their notion of the exhibition as an object that speaks conclusively, authoritatively, and absolutely about design. Implicit in this statement is thus the understanding that the exhibition may be more than the representation of the undeniable



truth, and instead function as a site of possibility, or as Elena Filipovic suggests in her article *What is an Exhibition?*, as a site where:

... deeply entrenched ideas and forms can come undone, where the ground on which we stand is rendered unstable? Instead of the “production of knowledge” so frequently cited in institutional statements of purpose, an exhibition might provoke feelings of irreverence or doubt, or an experience that is at once emotional, sensual, political, and intellectual while being decidedly not predetermined, scripted, or directed by the curator or the institution. (Filipovic 2012)

Filipovic’s claim is that exhibitions should make great efforts to be spaces for engagement, impassioned thinking and visceral experience. They are not here to educate or prove an answer, but instead to allow works to provoke their own terms of engagement. She writes: “An exhibition should strive... to operate according to a counter authoritative logic and, in so doing, become a crucible for transformative experience and thinking.” (ibid)

All of this emphasis on instability and active engagement highlights the potential for exhibitions to make room for other types of exchanges, while opening up the possibility of creating a space that echoes and resonates with the particular needs of critical design. At the same time, as Filipovic alludes to in her writings, exhibitions can offer themselves as much more than didactic forms of display and sites of knowledge production. As she states:

You might then say that an exhibition is the form of its arguments and the way that its method, in the process of constituting the exhibition, lays bare the premises that underwrite the forming of judgement, the conditioning of perception, and the construction of history. It is the thinking and the debate it incites. (Filipovic 2012)

What such statements show is that the exhibition as a format has the potential to provide room for less didacticism, to shift its focus from being simply a platform for dissemination to operate in the ‘in-between’, that is, between the works and the audience. This related version of the exhibition positions contemplation, discussion and debate as the nucleus of practice – the heart of what an exhibition does. If we agree with Filipovic, we might therefore approach the exhibition not simply as a space to disseminate or comment on critical design, but more importantly we might also consider the exhibition as the formation of open discussion, debate, communication and contemplation. The exhibition as a platform for mediation of critical design can therefore act simultaneously as a work about critical design while being

a work of critical design: an open platform to expose problems, a space that raises questions and prompts embodied thinking and action from its audiences.

The following chapters are devoted to identifying issues concerned with defining, producing and disseminating critical design within the museum. At the same time they endeavour to ask what role the museum exhibition might play in fostering a productive relationship between critical design and its audiences. As Mazé contends “As contemporary design is changing so must the relevant platforms for debating and participating in such change.” (2011: 278) It is worthwhile to point out however, that each of the following chapters is written and intended as a stand alone piece. The goal is to embrace a more experimental format that tests new methods of presenting and discussing examples of critical design practice. Three of the chapters set off from a personal anecdote and are written as exhibition reviews. These serve as starting points for further theoretical exploration into the intersection between curating and critical design while working to conceptualise the conditions needed to generate highly effective and affective experiences within the museum.

#### 5.4 The Texts

Divided into five chapters the second half of this thesis addresses three ways in which critical design is being mediated within the museum. First it looks at the museums role in exhibiting critical design for a public to consume. Second it considers the exhibition as a space to produce critical design in situ, and third it suggests critical design as a valuable interpretation device for the museum curator. The following chapters address the challenges currently facing curators thinking about the distinctiveness of mediating critical design in opposition to commercial and everyday design practices. They examine how concepts like embodied criticality, epistemic environments, and criticality intersect with critical design’s behaviours of questioning, problematising, possibilising and activating.

Chapter 6 begins with an analysis of *United Micro Kingdoms* (UMK), an exhibition and project by Dunne & Raby exhibited at the Design Museum, London in 2013. Focusing on the tension between the role of the museum exhibition as a space for representation versus a space for presentation, I argue that the exhibition forms we have inherited neither

satisfy the complex behaviours of critical design, nor work towards building productive relationships with this category of practice.

Chapter 7 builds on the concept of the exhibition as a space of presentation proposing a ‘living things out’ whereby the exhibition is positioned as a site of real time experience and the viewer as participant rather than spectator. This move towards the exhibition as embodied criticality, I suggest, represents a flexible operation that disregards the constraints of traditional exhibition-making in favour of an abiding unity between audience and work.

Taking as its starting point, *Risk Centre*, a work by Onkar Kular and Inigo Minns (Stockholm, 2013), Chapter 8 examines the exhibition as a productive medium for critical design, not just a display of extant ideas. Its particular focus is on how *Risk Centre* employed the museum exhibition as a mechanism to enact risk. In the context of the museum, risk was productively presented as a means to offer the visitor an opportunity to critically engage and question their understanding of risk through spaces driven by negotiation, relationality and collaboration.

Chapter 9 explores the critical design exhibition as ‘experimental system’ – a space for thinking *through*. Through a study of past exhibitions, I propose the exhibition as epistemic environment for critical design, an environment that secures and creates conditions to support the thinking dimension of critical design practice while unlocking an active agency in the audience. At the same time, I argue that, the epistemic model of exhibition should be understood as a space where research and knowledge production is evoked *in situ* and *in action*. Similarly, I will demonstrate how the exhibition as an epistemic space triggers an audience into a reflexive state aimed at changing the way they think.

Chapter 10 alternatively considers the possibilities offered by employing critical design as a curatorial strategy in the museum. Focusing on *Timescape*, designed by LocalProjects, this chapter positions the indeterminacy and unpredictability of critical design as offering the potential to extend the museum beyond grand narratives, while emphasising the institution and its practices as vital (responsive) structures for thinking.

Each case traces the beginnings of a discourse between the museum and critical design practice and most importantly will shed new light on the differing characteristics, advantages, conflicts and scenarios of engaging

with works of critical design within and through the exhibition. At the same time, each chapter aspires to offer new methodological bridges to support some of the underlying tactics and conditions of critical design.

Presented next to one another, each review and theoretical reflection work to raise a dynamic discussion that interrogates the potentiality of disseminating critical design. Collectively they are not to be read as a set of protocols or rule book for practice. But instead they are to reflect the multiplicity of ways in which critical design is being developed and explicated by those active in its dissemination. The possibilities are endless, but given the increasingly prominent role of the museum in critical design practice, I believe that the moment has come to re-examine the existing forms of dissemination employed in the museum in order to make room for other types of exchanges that work to support the true potential of this emerging practice.

. . . . Chapter six

# [EXHIBITION REVIEW]

## United Micro Kingdoms: A Design Fiction

Design Museum, London, UK  
1 May - 26 August 2013

*“All that we cannot imagine will never come into being.” Bell Hooks*

In March 2009 the American designer Julian Bleecker wrote an essay for Near Future Laboratory which ultimately characterised the objectives and behaviours of design fiction, a term he coined the previous year. According to Bleecker,

design fiction is a hybrid, hands-on practice that operates in the murky middle ground between ideas and their materialization. . . . Through this practice one bridges imagination and materialization by modelling, crafting things, telling stories through objects, which are now effectively conversation pieces in a very real sense. (Bleecker, 2009: 08)

In a similar spirit to critical design, the work of design fictions is to trigger the imagination as a tool to confront today’s social, technological and cultural paradigms; to introduce questions and uncertainties in the underlying assumptions, thought structures and inherited truth claims of our world. This implies that design fiction is a medium to challenge the status quo while suggesting ways in which life might become different. It tells worlds, not stories, inviting the viewer to momentarily engage in a different

conceptual space before returning to the world as is. (Sterling 2013) Writing about Design Fictions Dunne and Raby share this understanding, suggesting that: “This space lies somewhere between reality and the impossible and to operate in it effectively, as a designer, requires new design roles, contexts, and methods.” (Dunne and Raby, 2013: 03) They suggest that the exhibition holds great potential for works of design fiction, not as a medium for display but as a laboratory for rethinking society, a space inciting debate and discussion about possible futures. (ibid: 153-154)

Figure 6.1 – Entry to the exhibition United Micro Kingdoms: A Design Fiction by Dunne & Raby. The wall depicts a map of future England divided into four super-shires.

image:  
dunneandraby.co.uk



In the exhibition, *United Micro Kingdoms (UmK): A Design Fiction* (Fig. 6.1), Dunne & Raby take this thesis further presenting a recent project that proposes potential futures for our society in an attempt to stimulate debate on a collection of imagined scenarios that technological advance might engender. Shown in the summer of 2013 at the Design Museum, London, *UmK* was heralded as the institution’s first foray into the world of Design Fictions. The exhibit offered a promisingly fresh alternative to a museum where more often than not no space, or at least very little of it, is left to ambiguity. Located in a small gallery on the second floor, the project unveiled a tentative future England divided into four super-shires inhabited by Digitarians, Anarcho-evolutionists, Bioliberals and Communo-nuclearists. The plot, such as it was, invited visitors to explore each micro-

kingdom through its primary mode of transportation. This focus on transportation provided a way to build stories around new social practices extending notions of a singular future into new considerations beyond the status quo. According to the introductory text to the exhibition:

Each county is an experimental zone, free to develop its own form of governance, economy and lifestyle. These include neoliberalism and digital technology, social democracy and biotechnology, anarchy and self-experimentation and communism and nuclear energy. The UmK is a deregulated laboratory for competing social, ideological, technological and economic models.

In the context of the museum new dreams for a future England were discussed over imagined transportation systems. The process, as the designers described, was designed to explore possible combinations of political systems and energy sources in a post-fossil-fuel England.

As we rapidly move toward a monoculture that makes imagining genuine alternatives almost impossible, we need to experiment with ways of developing new and distinctive worldviews that include different beliefs, values, ideas, hopes, and fears from today's. (Dunne & Raby, 2013: 189)

In this way, each depicted scenario was filled with beautifully crafted yet intentionally vague narratives that set out to stimulate critical reflection while challenging the audience's perceptions and relations with current modes of existence. The strategy extended conventional wisdom raising questions about the future of the status quo while highlighting deficiencies and trade-offs between flawed alternatives. (ibid: 174, 198) With the Digitarians, for example, digital technology and all its implied functionalities – metrics, surveillance, data banking and transparency – take centre stage. Citizens journey around in their computer driven 'Digicars' fully controlled by an exceedingly organised governance system dictating every move. Based on algorithmic systems that prioritise price and optimisation, vehicles are designed to offer the best most economic route through a Tariff system calculated according to the P5 index: price, pace, proxemics, priority, and privacy. (ibid: 175-179) With no way of escaping the artificiality of their habitat, agency is lost in favour of a datafied world. In contrast, Anarcho-Evolutionists assert man's subordination to nature, believing that humans should modify themselves to exist within the limits of the planet, and not vice-versa. They are a self-organised society who travel around in groups with human or wind powered vehicles. The Very Large Bike (VLB) for

example is designed to journey long distances maximising effort and resources in its functionality. (ibid: 182-184) The distinctive physiques of Anarcho-Evolutionists supposedly verify this, functioning as evidence to their chosen mode of transportation and maximised through training, bio-hacking and self-experimentation. As the designers note: “Cyclists have overly developed thighs, balloonists are tall and willowy, and so on”. (ibid: 184)

One of the more radically different technological landscapes from our own is explored through the Bioliberals, whose world is fully driven by biotechnology and the values it entails. Essentially a society formed of farmers, cooks and gardeners, Bioliberals live in complete harmony with the natural world, travelling in organically grown biofueled vehicles customised to each owner’s individual needs. (ibid: 180-182) While unconventionally slow and smelly, Biocars, and the world they represent, offer a glimpse into how far we might have to go in order to make up for all the damage we have already done.

And Finally, the Communo-Nuclearists exist as a highly disciplined mobile micro-state. Among the quirkier contributions to the project, they live on a three-kilometre-long, nuclear-powered, mobile landscape whose population is fully planned and regulated down to their one-out one-in policy. The assemblage of train carriages provides a veritable playground filled with labs, factories, gardens, gyms, nightclubs, fish farms, swimming pools and the like. The route travelled is devoid of humans and rich with nature adding to the perception of pleasure and luxury that seemingly follows life on the edge of civilization. (ibid: 185-187)

What emanates from this is that each of the four micro-shires may be described as transcendental in that they question their conditions of potentiality, staging the future as a field of possibility rather than a fixed construct. The result is a series of playful and well considered scenarios supported by scale models which worked to enliven the narrative, creating a context for thinking about contrasting future worlds. The idea was to experience oneself consciously in relation to a variety of new and unexpected situations, to reflexively question where technology is leading us, to critically reflect upon where we are headed, and where we want to go. Read as a whole *UmK* combined the poetic, critical and progressive while giving form to a multitude of possibilities whose materialisations gave way



to notions that there is more than only one future to choose from. Ultimately this terrain of ‘What if’s’ invited in the action of speculation while serving to provoke the imagination and incite reflection and conversation.

### Viewed from a Critical Distance

Figure 6.2 – Context image of the exhibition showing the main central table used to display the models of each of the four transportation systems of UmK.

image: form.de



Like an archaeological dig from the future, *UmK* emerged somewhere in between speculation and materialisation—seducing the visitor to fill in the blanks, while reflecting on the kind of technologically mediated world they wish to inhabit. Yet while leaving grammars of ambiguity open to audience interpretation, the exhibition proved vulnerable to the compulsive need for museums to be didactic.

Within the gallery the main emphasis shifted from an example of, to an exhibition about, Design Fictions. Scale models representing the imagined transportation systems of the four kingdoms filled a large table in the centre of the space. (Fig. 6.2) These, together with a series of fictional narratives and visual representations, provided the contours, plots and imagery necessary to sustain the story. By contrast, documentary photographs, didactic wall panels, and a reading room filled with books that inspired the designers’ work served as a pedagogical layer which ultimately compromised the potential for a willing suspension of disbelief.

Figure 6.3 – Digital Photo displayed in the exhibition, which depicts a child interacting with the nuclear-powered train of the Communo-nuclearists.

image:  
unitedmicrokingdoms.org



For example, next to a model of the continuously moving nuclear-powered train of the Communo-nuclearists was a series of photographs of a child playing with the model (Fig. 6.3), as if it was the latest addition to the Brio toy series. This juxtaposition was further intensified by a wall panel describing the importance of model making and the digital photograph to fictional design practices. Likewise, contrasting the slow moving, organically lab-grown vehicles of the Bio-liberals was a frame by frame image sequence documenting the making of a ‘Biocar’ model.

While these interpretive devices revealed the methods and methodologies of Design Fictions, this behind-the-scenes exposé represented ‘a breaking of the fourth wall’—asserting the supremacy of didacticism over speculation, while infringing on the visitors opportunity to wonder and imagine. This didactic veneer, in the end, suppressed *UmK*’s immersive, imaginative and imminent potential, resulting in a work that registered neither quite as fiction nor exposition. It seems that although the assumptions that accompany Design Fictions were captured through the work itself, its framing mechanisms in the museum lacked the ability to sustain imagination. Ultimately the inclusion of pedagogical markers to

guide the audience in interpretation worked contrary to the intentionality of the project. In Dunne's words:

The design is meant to act on our imaginations and spark new thinking, reframing problems, opening up new perspectives, being provocative rather than offering potential solutions to something. So in this project we are not offering better ways of thinking about transport in the UK, I hope, but more conversations around how transport, ideology and culture interact together. (Dunne, 2013b)

That said, while *UmK* as a work was conceptualised as a design fiction that unfolds itself through speculation, its modes of exhibition did exactly the opposite. The one-directional narrative employed as a means of mediation split the audience's attention between an objective reading of what Design Fiction is as a practice and a subjective understanding of the work itself. And while there is an argument to be made for revealing the working methods of design fictions to larger audiences, the ability to actively engage the visitor in speculating about a future England was damaged through these simplistic binary tactics of inside/outside. What the exhibition ultimately produced was a situation whereby the audience's relationship to the work was built from a critical distance supported by acts of judgment rather than speculation – keeping with the power/knowledge dynamic of the conventional museum setting. Moreover, the display techniques used were intimately connected to the notion of education. Visitors were taught not only about the United Micro Kingdoms, but also about the methodologies employed in creating Design Fictions. This approach to the exhibition as integrated didacticism based on principles of an educated consumer spectatorship (Lind, 2013) failed to recognise the importance of affect and imagination while losing the element of struggle so integral to works of design fiction. The designers articulate this as follows:

The project's value is not what it achieves or does but what it is and how it makes people feel, especially if it encourages people to question, in an imaginative, troubling, and thoughtful way, everydayness and how things could be different. To be effective, the work needs to contain contradictions and cognitive glitches. Rather than offering an easy way forward, it highlights dilemmas and trade-offs between imperfect alternatives. Not a solution, not a "better" way, just another way. Viewers can make up their own minds. (Dunne And Raby, 2013: 189)

As this quotation of the designers underlines, a key strength of design fictions centre on their ability to allow the audience to bring into play their

own thinking and imagination and thus realise what is not yet subject to the world. It is about cordoning off parts of the plot so it can open out into new dialogues and discourses with the audience. However, within the space of the museum *UmK* revealed the apparatus of the fiction to be a performative body whose actions were sustained by ambiguity but overruled by didacticism, resulting in a project whose life seemed somewhat snuffed out by the very space enlisted for its support.

At issue here, then, is not the success of the project, but the role of the exhibition in legitimising works like *UmK*. If we return to Bleecker's definition of Design Fiction and his emphasis on its focus on creative provocation, raising questions, reframing problems, opening up new perspectives and sparking new ways of thinking, (Bleecker, 2013: 7) then it feels as though the exhibition's default position that everything has to be easily packageable and disseminated requires reworking. Notably absent from *UmK* was any real engagement with what is in fact the fundamental cornerstone of Design Fiction: imagination. The combined effect of the disarray caused by emphatic didacticism and objective truth left the exhibition seemingly devoid of the ability to emancipate the audience, and yet according to the designers it is the museum exhibition that holds the most promise as a space to explore and enrich our 'self-understanding'. (Dunne and Raby, 2013: 154)

In some ways it is here that *UmK: A Design Fiction* unintentionally raised its most intriguing question: If the goal of *UmK* was to engage in and enable new realities—to spur critical questioning on our blind faith in the efficiency and extravagance of our technological future—can we imagine an exhibition model capable of embracing new forms of encounter over the order and stability of the traditional museum? Can we conceive of a curatorial approach aimed at the politicised space of the imagination, capable of not only nurturing but ultimately fuelling this form of design? This would be a space that privileges criticality, provocation and questioning. Current museum conventions simply don't suffice.

. . . . Chapter seven

# Beyond the Monologue:

## Embodied Criticality in Critical Design Exhibitions

### 7.1 Introduction to the Chapter

The following essay will propose a theory of presentation that includes an analysis of the place of performativity within critical design's production and reception. It will highlight the development of spaces engaged in innovative curatorial and educational practices with reference to recent critical design exhibitions and projects. I will suggest that the exhibition forms we have inherited neither satisfy the complex behaviours of critical design, nor work towards building productive relationships with this category of practice. Performativity is chosen because it implies action. It reflects the search for an exhibition practice which moves beyond simple communication to a form of embodiment that embraces production, collaboration, and experimentation. On the one hand this implies a shift away from master narratives and disinterested modes of learning, replacing the authoritative, a-temporal exhibition-form set in place to fulfill the requirement of providing meaning. On the other hand it suggests the exhibition as an arena of criticality, or as Filipovic contends, "a crucible for transformative experience and thinking" (Filipovic, 2013). That said, my questions here are many: Can museum exhibitions escape the tyranny of immanent meaning and function instead as fields of possibilities? How might performance construct experiences that foster speculation and improvisation? To what extent does critical design demand a new role for the audience's voice? What potential does an exhibition have in moving its audience into a state of self-realisation,

allowing them to inhabit a problem rather than simply analyse it from the sidelines? In asking these questions, my hope is to focus on the museum exhibition as a site for producing, contextualising and making critical design and its ideas public. By this I do not mean that there are no other forums for this form of design to exist, but rather, I am acknowledging the significance of the museum exhibition as one of the main institutional spaces for critical design practice. The guiding aim is to provide an inventory of methods that may be used to present critical design in a way that is explicitly oriented towards active participation and open-endedness. The focus will be on temporary exhibitions that have taken place in museum institutions throughout the western world. The decision to address temporary exhibitions was chosen for the simple fact that their inherent nature of impermanence offers the museum greater opportunity to push theories, explore themes, and challenge conventions; making them far more valuable research subjects for this study. In a comparison of two recent critical design installations that took place in museums I will consider how such exhibitions act as vehicles for a modality of lived experience involving performativity, flexibility and experimentation.

*I Cling to Virtue* (2010) by British designers Onkar Kular and Noam Toran in collaboration with American writer Keith Jones and *Coalition of Amateurs* (2009) by Berlin based designer Jersey Seymour dictate a different, more positive, role for the exhibition beyond a site of representation, objectification and immanent meaning. Each of these examples, I will show, shift the role of the exhibition from being 'a unitary system of unequivocal 'utterance' or finalised display (O'Neill & Wilson, 2015: 18) to become a dynamic process of co-production, a structure of experience and an active space of meaning-making. When explored within a framework of embodied criticality informed by Irit Rogoff (2006) both works can be approached as entering the activity of exhibition making from a particular viewpoint, namely that of actual embeddedness. I propose that each work exemplifies the distinction Rogoff makes between critique and criticality (2003), which she contends exists within the concept of a field of possibility. Moving from the analytical frame as a tool to understand the world, both exhibitions invite an inhabitation with the problem being explored, engaging in performative functions of observation and participation.

In order to conceptualise these designers' enactments of criticality and embodiment this article examines two lines of thought. Firstly it offers a brief outline of the recent histories of exhibition making, which point to a shift in practice from the exhibition as a closed space driven by didacticism and notions of imminent meaning, to an open platform centred on both performativity and subjective experience. On the other hand it considers the relevance of Irit Rogoff's concept of embodied criticality as a method by which critical design can not only be investigated, but also engaged.

## 7.2 Museum as mediator

Throughout their history design museums have developed around the idea of the display of exemplary objects chosen to promote good practice, appropriate patterns of consumption, national temperament, and progress, with an emphasis placed on formal and material value. (Hooper-Greenhill, 1992) With their mandates set for the conservation and representation of cultural artifacts and the education of the public in an appreciation of aesthetic value, messages are often seen to involve only the visual elements of an object on display. This view is often associated with a notion of the Kantian gaze and the belief that the eye, acting as the subject, is the key determinate in establishing a relationship with an object in a museum, a visual reliance that often leads to accusations of fetishisation of the object. (O'Doherty, 1999)

There are of course different forms of design curation – those that are based on a more didactic model, that prioritise education through categories determined by theme, geography and chronology and those that are closer to an experimental model that see the role of the curator as critical and the museum as a vehicle for dialogue between people and objects. More generally the practice of exhibiting design through critical models of experimentation enables the overturning of the museum's long-established commitment to reason and rationality, while at the same time creating a more humanistic and theoretical practice capable of restoring the often overlooked subjectivity of meaning in design. (Vergo 1989:3).

With this in mind, the following builds off a growing body of literature that considers the museum exhibition as object of cultural enquiry. An emergent theory that sees the role of the exhibition postulated through processes of research and experimentation – rather than simply a tool for

representing pre-defined ideas and principles. (McDonald, 1996, pg. 1-14; Whitehead, 2007, pg. 26) Previous literature indicates that the 'new' museology, which gained momentum in the 1990s, set in motion the principle that museums were fundamentally institutions of ideas not objects. (Weil:1990) More specifically, the museum was presented as a discursive space and the exhibition as speech act or utterance within the overall discourse. (Hooper-Greenhill, 1992; Bal, 1996; Ferguson, 1996; Storr, 2007) This notion of the exhibition as an unscripted site for cultural enquiry fundamentally forgo's any notion of the exhibition as neutral or static. Here the museum departs from its image as a temple of humanistic relics and connects with ideas of flexibility, criticality and experimentation. This 'living machine' as Hans Ulrich Obrist (2001) writes, "offers a moment to reconsider museums and exhibition making as contexts which are no longer bound to the affirmation of canonical meanings but are open to do exactly the opposite and to act as speculative contexts". (Acconci and Obrist 2001, 151) This brings to mind art historian Piotr Piotrowski's 'critical museum' which he frames as a heterogeneous institution whose practice is characterised by its actions and presence in the activity of public space, self-critique, and changes to artistic geography. (Piotrowski 2011) In his article, *Museum: from the critique of the institution to a critical institution* (2011) Piotrowski calls for an expanded function of the museum that aims to question and critique the status quo. For Piotrowski, the critical museum would actively participate in debates and issues fundamental to the contemporary world, while generating a dialogical space vital to the city.

Correlatively, this idea positions the museum as a new space of knowledge – a site of possibility and potentiality in which the museum can be approached as a relative not absolute truth. From this perspective the museum is able to move beyond being a space of representation to become a space of active presentation; from a space of consumption to one of production whereby emphasis is placed on new, less predictable, forms of encounter. This emphasis on uncertainty and unpredictability echoes much of the critical thinking and experimentation that took place in museums as far back as the early 20th century. Notions of the institution as laboratory and the *Museum on the Move* put forth by Alexander Dorner, one of the most celebrated museum directors of the 20th Century, were some of the early examples of institutional practices that prioritised experimentation and new



forms of encounter over the order and stability of the classical museum. Dorner's 'Museum on the Move', developed as part of his directorship at the Landesmuseum, Hanover in the 1920s, represents, among other things, the attempt to approach the museum as an unbounded space in permanent transformation. In Dorner's words: "the new type of art institute cannot merely be an art museum as it has been until now, but no museum at all. The new type will be more like a power station, a producer of new energy." (Cauman and Gropius 1958)

Recent writing on the exhibition enlists this very idea of a move away from a pre-packaged entity preferring instead to approach the exhibition as a space which acts outside the systems of representation and objectification – an unstable structure that both produces and presents. Irit Rogoff, in her *'Smuggling' – an Embodied Criticality* (2006) examines this very notion while assuming a turn in contemporary curatorial practice away from direct intentions and exemplifications to a position centred on 'partial knowledge' and 'partial perception'. This development, as Rogoff sees it, engenders a shift from 'curating' to 'the curatorial'. She states:

For some time now we have been differentiating between 'curating', the practice of putting on exhibitions and the various professional expertise it involves and 'the curatorial', the possibility of framing those activities through series of principles and possibilities. (Rogoff 2006, 03)

Rogoff carries this insight further proposing 'the curatorial' as critical thought that strives for new ideas. She writes: "In a sense 'the curatorial' is thought and critical thought at that, that does not rush to embody itself, does not rush to concretise itself, but allows us to stay with the questions until they point us in some direction we might have not been able to predict." (ibid, 03) As this quotation underlies, her interest in the curatorial lies in its ability to open up spaces for both works and audience to explore not just the known unknowns: the things we know we don't know, but more importantly the unknown unknowns: The things we don't know that we don't know. (Rumsfield 2009) In a more recent publication Rogoff and London based writer Jean-Paul Martinon situate the curatorial as concerned with reflexivity rather than a final product (exhibition, installation etc) or working method. They assert the curatorial as 'obliterating' the boundary between thinking and doing. Ultimately situating it as a disturbance, an

utterance, a narrative that encourages new ways of thinking or sensing the world. (Rogoff and Martinon, 2013: ix - xi)

Paul O’Neill in his *The Culture of Curating and the Curating of Culture(s)* (2012) further problematises the term as an act which strives for friction and new ideas. O’Neill argues for ‘the curatorial’ as “a durational, transformative, and speculative activity, a way of keeping things in flow, mobile, in between, indeterminate, crossing over between people, identities, and things, encouraging certain ideas to come to the fore in an emergent communicative process...” (O’Neill 2012, 89) Thus for O’Neill ‘the curatorial’, points to a recoding of practice as production. A turn from curating as a spatial exercise that gathers and represents to a dynamic methodology centred on collaboration, participation, performativity and the discursive. In this sense ‘the curatorial’ offers a space for multiple viewpoints and experiences which together create a collective endeavour that remains forever open to contestation and adjustment. The emphasis on openness and performative meaning privileges modes of becoming which embrace a combination of speculative action with elements of chance through open-ended forms of production. (O’Neill and Wilson, 2015: 12) Following this we might argue ‘the curatorial’ as a live medium, or rather as O’Neill describes: “...a forcible production that is never fully determined.” (Ibid, 120)

### 7.3 Embodied Criticality

Yet regardless of the varied interpretations of the curatorial, the concept itself endeavours to denote a method of working that disrupts consolidated forms of practice, transforming the frames through which both art and design are produced and understood. At its most basic ‘the curatorial’ questions the roles and limits of the exhibition while suggesting a form of practice with an ever expanding array of aims and goals. Celebrated here, then, is the exhibition as a site of active engagement, conversation, collectivity and co-production. Consequently I would argue that this conceptualisation of ‘the curatorial’ can also be linked to Rogoff’s notion of the embodied criticality of curatorial knowledge production (2006), which in itself offers a very powerful model through which to actualise critical design practices in the museum. As Rogoff explains:

What interests me in ‘criticality’ . . . is that it brings together that being studied and those doing the studying, in an indelible unity. Within what I am calling ‘criticality’ it is not possible to stand outside of the problematic and objectify it as a disinterested mode of learning. (2006: 2)

These arguments suggest that meaning is not a pre-determined element of a work but instead generated through a performative function that takes place in the present. What Rogoff proposes is a form of ontology, a ‘living things out’ whereby the exhibition is positioned as a site of real time experience and the viewer as participant rather than spectator. This move towards the exhibition as embodiment represents a flexible operation that disregards the constraints of traditional exhibition-making in favour of an abiding unity between audience and work.

Rogoff sees this enthronement to occupation as intimately tied to society’s shift away from criticism towards criticality.

That is that we have moved from criticism which is a form of finding fault and of exercising judgement according to a consensus of values, to critique which is examining the underlying assumptions that might allow something to appear as a convincing logic, to criticality which is operating from an uncertain ground of actual embeddedness. By this I mean that criticality while building on critique wants nevertheless to inhabit culture in a relation other than one of critical analysis; other than one of illuminating flaws, locating elisions, allocating blames. (Rogoff, 2006: 2)

What emanates from this is that criticality starts from the premise that modes of inhabitation and participation overcome the assumptions of power and judgement directly tied to both criticism and critique. In fact it is through inhabitation that Rogoff contends ‘a shift might occur that we generate through the modalities of that occupation rather than through a judgement upon it.’ (2006: 2) As already noted, this gesture of criticality offers a space for multiple viewpoints and experiences. It invites the viewer to engage in a conversation challenging their own preconceptions and understandings through lived experience. This kind of criticality is one that renders ambiguity productive, placing emphasis on liminality, adaptation and boundlessness. More importantly it positions the exhibition as a site which no longer seeks resolution, but instead emphasises the performative function of critique while setting the relational as the condition for possibility of meaning.

This argument for the exhibition as comprising an ethics of embeddedness with the aim of activating the audience to engage with different modes of thinking has important implications for critical design practice. If design's embodiment as critical practice is, as previously suggested, primarily bound to notions of self-reflection and social emancipation then what is required is a mode of reception that would situate the work within a more discursive scenario. Perhaps most importantly it would position critical design as a tool to engage its public in questioning, debate and discovery and would necessarily include the production of a self-reflexive discussion.

As Onkar Kular says in relation to critical design:

A key to speculative [critical] design is that it is open ended; where the final result is not fully anticipated by the designer, but is seen as the response given by the user or audience. This attitude creates a shift in the landscape of design; where the Customer can become the Audience, and the end user is, in fact, also Collaborator. This shift then ripples out into the way in which work is produced, and the form of the institution that houses it. In particular, the museum and gallery working in this context may no longer function simply to display artefacts and objects, but become active agents in the research and exploration of the theme. (Kular et al. 2013: 50-51)

The emphasis on the exhibition as active agent in the production and legibility of critical design follows the aim of embodied criticality which works to engage the audience as bodily participant while functioning as a transformer of seemingly fixed relations and positions. In this sense the exhibition is conceptualised as an event that unfolds when performed by the visitor. This understanding of the exhibition emphasises a move away from the static relationship between object and audience established in the traditional museum. It considers instead the museum exhibition as an unstable structure in constant renegotiation. The emphasis is on the creation of conditions for both thinking and doing, whereby the exhibition privileges an embodied criticality within which the viewer is asked to question where they fit in, and to consider their own personal knowledge and modes of inhabiting the world. The exhibition here is conceived as a heuristic space open for active experience and encounter. This is a performative concept whereby the viewer is conceptualised as a constituent of the work.

In order to understand how embodied criticality can function as an operational device for producing and presenting critical design in the

museum, the remainder of this essay will be dedicated to an exploration of two site specific installations, *I Cling to Virtue* (2010) by Noam Toran and Onkar Kular in collaboration with Keith Jones and *Coalition of Amateurs* (2009) by Jersey Seymour. Classified under the rubric of critical design both works employed embodied modes of criticality which privilege engagement, possibility and emancipation while inviting visitors to attend to subjective responses as authoritative readings of museum display. The following will examine how an embodied criticality functioned within the works and to what extent this should be taken into account when conceptualising exhibitions of critical design.

#### 7.4 I Cling to Virtue (ICTV) – Onkar Kular, Noam Toran, in collaboration with Keith Jones

Onkar Kular and Noam Toran's multimedia installation, *I Cling to Virtue* (2010) (Fig. 7.1) produced in collaboration with Keith Jones fundamentally proposed the exhibition as a potential space of critical enquiry, interlinked to the political. Adopting the form of an exhibition the project attempted to enter into a dialogue with current museum paradigms through a seemingly traditional display of objects in a museum. But rather than the display of illustrative objects chosen to promote appropriate patterns of consumption, national temperament, authenticity, and craftsmanship, the stated intent was rather to explore the boundaries between history, and memory, artefact and artifice.

Figure 7.1 – Installation view of *I Cling to Virtue* at the Victoria & Albert Museum, London. (2010)

image: onkarkular.com



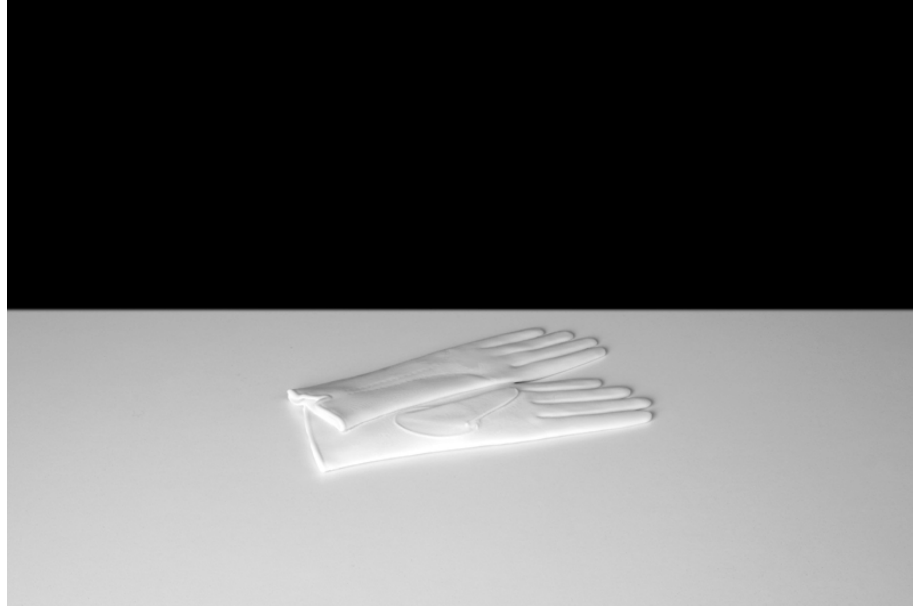
Commissioned by The Victoria & Albert Museum as part of the 2010 London Design Festival ICTV took over the Jones wing of the Museum, which had previously housed the bequest of the Jones family (a series of domestic effects and heirlooms typical of an affluent 19th-century Kensington family). The site specific installation revealed the intricate trajectories of the Lövy Singh clan, a fictional Jewish-Sikh family from East London. Set in a typical museological display were twenty-six ghostly white 3d printed mementos that at first site read as a veritable treasure trove of curiosities. From a child's tricycle, to a pair of glasses; a pocket watch, Big Mac container, camera, and Bar Mitzvah cake, each object took the form of a blank page of history upon which memories could be conjured. Furthermore, seamlessly positioned throughout the cabinets of display, were two video monitors presenting black and white film clips. *End Credits*, the first of the two sequences, acted as a rolling portraiture of Monarch's family members shot in a style reminiscent of early 20th century film. The second video *Corridor* featured a faded memory of a hospital. Filmed in the first-person perspective the video shows a looped path down an empty hallway at the end of which a woman's figure flashes in and out of site, as if a fleeting recollection of a moment tied to place. The installation was supported by a booklet whose opening page consisted of a genealogical timeline of the families past, seamlessly interspersed with historical and political events of the 20th century.

Furthermore, the booklet included an assortment of short personal narratives that corresponded to each of the twenty-six objects' individual roles in the notable memory of Monarch Lövy Singh. The white gloves (Fig.7.2), for example, represented not only Monarch's maternal grandmother's failed attempt to swim the English Channel, but more importantly the moment his grandparents met. As the story goes, Monarch's grandfather Zalman helped his grandmother Judith escape a mob of reporters by taking her hand and running to safety. Some days later he would show up at her door with a pair of gloves to warm her cold hands.

Letting the stories jump from one object to another, the designers' initiated a trail of inconsistencies that probe the capacity of memory to act as a trustful indicator of reality. In a caption relating to the A4 Manilla Envelope, for example, Monarch returns to the white gloves but this time under the premise that Zalman is a notoriously unreliable narrator. Remembering a

Figure 7.2 – Rapid prototyped white gloves by Onkar Kular and Noam Toran for *I Cling to Virtue* 2010.

image: onkarkular.com



video recording he made of his grandfather recounting his old stories, Monarch describes:

In them, he [Zalman] rapturously built a world around the family, narrating stories and describing events that wildly traversed the London docks and the Ford Dagenham assembly plant, the Falkland Islands and the Dresden minefields, the early days of television and the Battle of Cable Street, linking them often, and always somewhat improbably, to a pair of women's gloves. The tape, which my mother now has, is the strange and beautiful remainder of that man and his memories. (Toran, Kular, Jones 2010)

Read together the collection of family anecdotes allude to the elusiveness of memory and the unreliability of history. As stated on the cover of the booklet “Memory is never in perfect control of what it preserves, and a memoirist is largely a fiction-maker . . . If the artifacts and artifices assembled here lead anywhere or point in any one direction, it is *towards* that ever disquieting, haunted space between memory and memory's object.” (ibid)

In this sense the exhibition became both the material and medium of the work rather than simply a mode of display. In prioritising speculation ICTV abstained from the didacticism and enlightenment commonly defined as driving criteria for more traditional design exhibitions. It focused instead on modes of uncertainty and criticality while attempting to stimulate speculation through the connections and discrepancies built between the objects, captions and genealogical timeline of the work. In the designers' words:

The curatorial voice of the installation is the flawed, biased memory of Monarch Lövy Singh, who proposes not a single, progressive, coherent story of his family, nor of the century through which his family lived, but rather one that is multiple and fragmentary. What results is a complex narrative revealed through distilled short stories and ghostly objects. (ibid.)

While creating situations left open to interpretation, here the objects not only told the story of the Lövy Singh clan, but they also left a blank slate for viewers to analyse and critique the relationship of objects to the formation of human memories and our sense of self. In a statement of practice published in 2013 Kular, Toran and Jones make this problematic explicit:

Our work has focused and will continue to focus on the very subtle registering of what needs to be present and what can be left out in order for an artwork to signal its status, including how it is to be read or engaged with, at the same time as suggesting different ways of conceiving the relationship between artifice and artifact. In this precise sense, our work assumes the sedimentation of certain cultural forms (ways of storytelling and reading, seeing and imagining and thinking), with implications not only for their actual material forms (their concrete cinematic, sculptural, or narrative dimensions), but also for the kinds of desires and expectations that these forms excite and historicize experientially. (Hayward et al, 2013: 98)

Though the designers describe *ICTV* as explicitly signalling its status to the visitor, It would be easy enough to see *ICTV* as a conventional exhibition, which many did. To be viewed in an institution like the V&A is to become subject to its strong conventions and institutional voice.

But does this mean that *ICTV* was not successful? As with any exhibitionary experiment there is sure to be overreach, confusion and failure. But what remains is that it carries the potential for change. In fact I would argue that this line of questioning is largely irrelevant. For it is in this very space of uncertainty where the work is open to function as a field of possibility rather than an identifiable entity. (Rogoff 2015). As previously noted, rather than seeking to augment knowledge, *ICTV* encouraged an engagement with a specific form of reflexivity reliant on perception rather than understanding. In this sense, the focus shifted from an outward function to an inward effect. The work served as part of an internal space, which it shared with its viewer, producing a personal impact where there can be no whole picture beyond individual attempts to make sense of the work. Specifically its meaning came from use, and changed depending on how you engaged with it.



Here, there is a move away from an exhibition about critical design towards the process of criticality – how the exhibition becomes critical design and so functions as museological debate. Perhaps what is most important to *ICTV* is that it is not about exposing the truth, but instead pursuing its availability. In this way it is the conversations and thinking that take place as visitors are confronted with the work that become crucial. Indeed the work amounts to questions rather than answers, and it is these questions that take the work elsewhere, through the visitor. Consequently, what we should be asking is not whether or not the exhibition works, but instead what kind of situation does it produce? How does it situate its viewers?

By assembling ‘fake’ objects, constructed stories, and imagined timelines within the space of a museum, *I Cling to Virtue* deconstructed the institutions emphasis on authenticity, beauty, and originality. The project as a whole opened a discussion within museology about reconsidering traditions and conventions of historiography and the museum. Whose history do we collect? What is the role of authorship? What artifacts are worth putting in museums? Whose truth and whose reality? In other words, underlying the overall theme of the installation, substantiated through the choice of setting, the objects selected, and the sequence of narratives, *ICTV* told an incomplete fiction with the hope of captivating the imagination of the visitor, provoking them to question and debate issues of elitism, the history of collecting, traditions of the artifact, and the museum as a repository of facts. In a review of the exhibition design historian Stephen Hayward described the staging of *ICTV* in terms that underscored the tactics used to distance current paradigms, translating the given of museum traditions into moments of uncertainty.

The sense of what an object is, and what it may mean, moved seamlessly between different levels of representation; the resin ghost objects trigger ideas of actual objects, images of objects, and recollections of objects. Similarly, the interpretations “dissolved,” to use the cinematic metaphor, between the consciousnesses of Monarch Lövy Singh, that of the co-authors, and that of the individual visitor. (Hayward et al, 2013: 95)

*ICTV* told the story of Monarch Lövy Singh precisely *not* as a linear narrative independently bounded to history, but as an emerging form dependant upon the visitor to fill in the gaps with their own subjective

responses as authoritative readings of museum display. As Katherine Moline and Jacqueline Clayton express in their article *Reworking the archive: Experimental arts, memory and imagination*: “The effort required to connect the objects, historical dates and narratives comprising *ICTV* is not inconsiderable and the installation, as presented, required the viewer to undertake that work.” (Moline and Clayton, 2014:170)

In this, *ICTV* invited visitors to question institutionally directed interpretation while provoking ideas relating to ephemerality, the obscurity of history, globalisation and the institutions that reflect society.(ibid) In other words as soon as the visitor began to piece together the relay that existed between the various modes of capturing the objects they became central to the work. In this instance, the visitor literally performed the work emphasising the criticality of embodied personal experiences. Through this performativity viewers were asked to understand themselves as inhabitants of a reality based on perception and the ‘fiction-machine of memory’. Although it is acknowledged that the installation at first sight did not encourage bodily participation the format of *ICTV*, through the juxtaposition of disparate narratives and the performative production of meaning, invited visitors to experience themselves as involved participants in institutional critique, putting the museum and its empirical practices in question. As Moline and Clayton assert:

*ICTV* interrupted this empirical framing of objects as so much natural history by inscribing objects with family folklore. Imbued with personal associations, the booklet, for example, revealed that the narratives surrounding objects are embellished and distorted over time. The scraps of gossip recorded in the booklet foregrounded the selection of objects in museum settings as an act of imagination. Such processes, like memory, are always incomplete. The work thus alluded to the fragmented nature of current institutional practices. (Moline and Clayton, 2014 :170)

Important to note is that while engaging in an active form of institutional critique, *ICTV* questioned the traditional values of design and material culture at the same time as materialising emergent concerns around the design’s relationship to making and practice, materiality and identity. Each 3D printed object functioned as a place maker for memories while raising awareness of the transformational and situational qualities of objects. What emanates from this is that what *ICTV* set out to perform was participation. Participation, seen as a technology of embodied criticality, with an emphasis

on performative meaning production as a tool to activate the visitor to experience and question their own individual reality. In the designers' words,

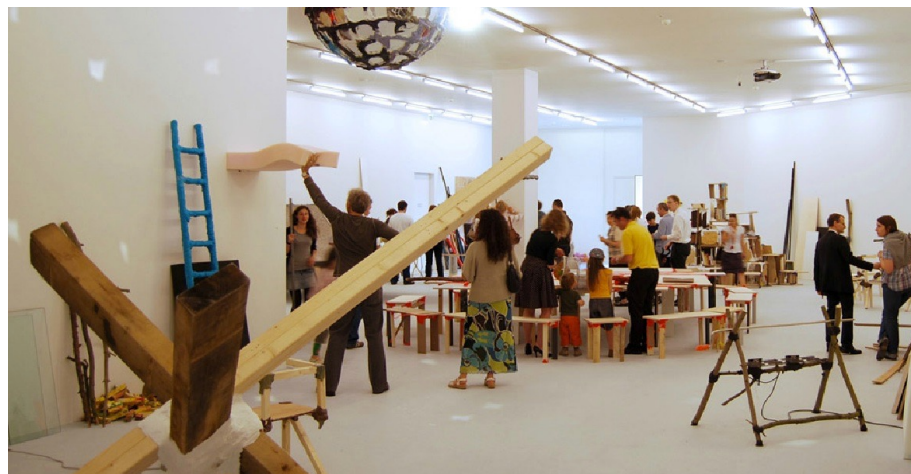
If an 'intention' can be described, it is an effort to dilate particular moments in order to produce an effect of enlarging not only Monarch Lövy Singh's 'world,' but also a reader or viewer's own as it intersects with his. The point is that no historical period should be left unchanged by an encounter with Monarch Lövy Singh's memory. Not, that is, those historical periods he summons, not the moment of his own recollection and curation of these, and not the one that we as readers and viewers inhabit when we experience it. (Hayward, Jones, Kular, Toran, 2013: 98-99)

To conclude ICTV seemed to centre on the relational quality of memory as the condition of its possibility, which in itself demands a criticality focused on an activated visitor/participant. In this way it follows Rogoff's argument of criticality as acting not as a distanced and static analysis but instead as an "actual inhabitation of a condition in which we are deeply embedded as well as being critically conscious" (Rogoff 2006: 5). The criticality that ICTV articulates is therefore focused on a relational participant who engages with the work as a site of contemplation, questioning and discourse production rather than an illustration of truth.

## 7.5 Coalition of Amateurs – Jerszy Seymour

Figure 7.3 – Installation view of *Coalition of Amateurs* at Mudam, Luxembourg, 2009.

image:jerszyseymour.com



This notion of exhibiting critical design through a mode of embodied criticality also applies to Jerszy Seymour's *Amateur Workshops*, a series of exhibitions considering the potential of the amateur. Since the early stages of his design career Seymour has been preoccupied with design's role in the

creation of life situations and the idea of the NON-Gesamtkunstwerk. His interest is to create designs that target the mind more so than simply inhabit our world. Indeed for Seymour, design is not about the construction of objects. It is a medium for producing new ways of living – for creating moments to collaboratively question and ponder our roles and relations in the world. His work recurrently problematises an understanding of design as the general relationship we have with the built world, the natural world, other people and ourselves. Emphasising a disengagement from industry, marketing and capitalism his practice looks for spaces where design lives autonomously from those subjects while attempting to revitalise the position of design in society. (Seymour, 2009)

In Seymour's site-specific work, *Coalition of Amateurs* (2009) (Fig. 7.3), design served as an exercise on letting one's creative impulses run wild. In the main gallery at MUDAM in Luxembourg he provided a mess of stock materials, from planks of wood, to aluminum tubes, foam sheets, spray paint and chicken wire. Scattered amongst the raw materials were concrete volcanoes filled with heated polycaprolactone wax, an incredibly strong 100% biodegradable medium. The wax was provided for both designers and visitors to use as a binding material to not only join the disparate materials to create everything from art to objects, but more importantly for facilitating communal acts of subjected shared production. (Latourelle, 2009) In an interview carried out in 2011 Seymour explains:

I use this structural wax that connects different things and people as a metaphor and I called it a 'changeable, transformable material for changeable, transformable desires'. It was really just to say, here's this material and here's a series of experiments that you can do with it . . . I don't see the material as a solution so much – you could also do this with a hammer and a nail – it's much more about how to express potential through it. (Seymour and Pesce, 2011)

In staging the work as a site of chaotic production and experimental play, *Coalition of Amateurs* offered visitors open access to materials, a production technique, and a space to construct their own creations, while discussing and debating ideas of the amateur. The idea was to create a workshop space in a museum where everybody was invited to come and participate in what the amateur could be. As Seymour himself states, "I think the key to the way that I work is doing. It's about evoking this idea that you can be empowered

by doing. Like saying, here's a material that reacts fast and you can find ways to build your life around you." (ibid)

Figure 7.4 – View of the exhibition *Coalition of Amateurs*, Madam Luxembourg, 2009.

Image: Andres Lejona



Through a series of invited and uninvited interventions, the exhibition grew to include a number of striking designs including various stools and chairs for sitting, a ladder, table, and sculptures which were seamlessly scattered amongst a series of works in progress and works barely began (Fig. 7.4). While acting as a true exemplar of what Seymour calls ‘collaboration’, the installation’s methods led to the design of the Workshop Chair, a mass produced wooden chair designed by Seymour and directly inspired from the results of the exhibition. In Seymour’s words: “When I sample or take things from somewhere, I call that a collaboration. It’s the same when people take from me, rather than some idea of a democratic participation.” (Seymour, 2014) For Seymour it is not about doing things together in agreement. In fact independence plays a big part in the work. It is about the visitor being able to rethink and redesign their material world in a way they can take from it whatever they want. The idea is that everything is a possibility.

In this sense *Coalition of Amateurs* was constantly in flux with the work on show never being final or static. The exhibition was in many ways dependent on the visitor to engage, but not all did. In fact sometimes it was very unclear as to whether the work in the show was simply there to be observed, or whether it could be touched and interacted with. Thus even though the visitor was invited to participate, many remained spectators

preferring to simply wander the space observing the work in situ. What emerges here is a problematic blurring of ideal and actualised realities. While *Coalition of Amateurs* aspired to participation as a politicised working process, the reality of the situation was an exhibition which seemed to operate with a two fold gesture of activity and dormancy. The production and reception of the work was therefore shaped within a performative logic in which the visitor required the designer's signal and direction in order to participate in the work. It was this active invitation through both the designer and visitor making in the space that encouraged further participation. Without it all that was left was the memory of an event for the spectator's contemplation. Furthermore, despite Seymour's intentions it remained unclear as to whether visitors who engaged in the making were also deep in critical thought, or whether they simply saw this as an opportunity to play in the space of the museum. Did they see themselves as amateurs, in particular as many of the visitors were professional designers themselves and invited guests of the designer? Is it a necessity for the visitor to physically participate in the work? Or do works like *Coalition of Amateurs* have the capacity to communicate to both participants and spectators? While sympathetic to these questions and criticisms, it is important to bear in mind that there are no definitive methodologies for successful critical design exhibitions. But what needs to be appreciated in this work is Seymour's determination to put pressure on conventional modes of design while redefining functions of the museum space. What matters are the ideas, questions and possibilities that result from these experiments that explore the limits of how the visitor and designer might interact within the space of the museum.

This capacity for trying out and testing ideas both physically and mentally and creating a space for sharing ideas and discussion is a major topic in Seymour's work. In Seymour's words the workshop embodies:

a non utopic way of discussing utopia that starts as a functional action space. It looks to distance itself from the satisfaction of fetish desire, by material commodity and products, while replacing it with the creation of excitement and the fulfillment offered by doing, being and sharing. We guide ourselves as children, illogical, irrational, but caring and compassionate. We climb the peaks of meanings and explore valleys of uncharted psychological states in wonder and excitement and some feeling of conspiracy. Where we get to is not as important as the journey we travel. Viva la utopia. (Seymour: 2015)

As this quotation from the designer underlines, Seymour's central interest lies not in the end result but in the lived experience of making and doing. This emphasis on performative production in order to explore the idea of an amateur society follows Rogoff's theory of embodied criticality whereby the very act of inhabitation offers a space to challenge the visitor's perception of reality through the lived experience rather than through a judgement upon it. (Rogoff, 2003)

In *Coalition of Amateurs* Seymour critically scrutinises design's underlying attachment to capitalism emphasising the user as collaborator and maker. By creating a functional situation, introducing polycaprolactone wax as a new material and metaphor for connecting things and emotions, the visitor is asked to question the relationship between design and the amateur by physically participating in the making of the work. In his introduction to the exhibition Seymour observes:

We realise the necessity to put everything into question, indeed we trust more in the questions than the answers. It is not in utopia we are concerned but with its question. Since with communism as a memory and capitalism collapsing around us, it is a paradigmatic shift of perspective that we need to renegotiate our relationship with the world around us and open existential potential and discuss life situations. (Seymour 2009)

Seymour's "paradigmatic shift" is represented through both subject and structure of *Coalition of Amateurs*. While employing the exhibition model as a workshop for further investigation and discourse production, the project created conditions that were both analytical and experiential. Rogoff uses the term criticality to denote the moment where one is both shaped and shaping what they are confronted with. Accordingly, *Coalition of Amateurs* invited the visitor to speculate about the potentiality of an 'Amateur' society by living it as an *experience*. Put differently, the 'Amateur' was not a theme represented through a series of individual objects put on display. Rather it was an invocation, brought about by shifting the production of design beyond the fields of experts to a broader audience and inviting collaboration.

While employing the exhibition model as a performative, explorative and critical practice, the project created a threshold wherein the materialisation of design is conceived as an open-ended experience, and the user repositioned as both collaborator and participant. Such purposeful and controlled use of the performative invites the visitor to not only participate in

the creation of the work but to also rethink the rules under which they experience the world. As a result the exhibition situation is extended into a fluid open structure which invites a multiplicity of discourses and speculations. The work champions a form of analysis through doing, while positioning the museum and its spaces as vehicles for research, production and discovery. In this instance the amateur is not objectively represented but constantly produced anew through the active participation of the visitor in the space. As the title of the work suggests, this exhibition is not about the representation of the 'Amateur' but about the combined action of Amateurs – a point that is reinforced by the work's dependency on the audience's bodily participation in the present. Moreover, by foregrounding the exhibition as an open-ended cumulative process of creation, engagement, action and possibility, *Coalition of Amateurs* employed the exhibition as critical design. As a result, it embraced elements of uncertainty and unpredictability into its working order, releasing the authorial grip on the production of meaning through collaboration. The overall effect is a series of incomplete gestures that in themselves work towards a socialisation of the design process. Because of this structural openness - which effectively collapses the boundaries between work and exhibition, *Coalition of Amateurs* sets forth an operative model whereby design is used as a means of producing new experiences, of creating situations for all possible thought.

In this sense by focusing on the visitor's bodily experience *Coalition of Amateurs* questioned the 'usual' processes of knowledge generation in an exhibition. Instead of engaging in didactic learning, Seymour offers a moment for the audience to emancipate and to question their own experiences and understandings and to articulate their positions on an Amateur society. All of this suggests that the exhibition here literally performs as a work of critical design, inviting an engagement with the audience directed towards perception rather than understanding. This idea of the exhibition as a modality of critical design situates design and its presentational context as co-constitutive elements rather than dichotomous counterparts, a point which will be further examined in chapter 9. That said, as a work of critical design situated in the museum, *Coalition of Amateurs* prompted visitors to question design's authority and capitalist agendas. What is significant is that within the institutional setting of the museum, agency was handed over to the visitor, inciting experimentation and initiative, while



maintaining emancipatory potential. According to this logic, the exhibition acted as a polyphonic working space positioning *Coalition of Amateurs* as a mode of embodiment – a criticality of the Amateur through an insider perspective. As such, the work acts contrary to the established stock of museum atmospheres and pedagogies. If the traditional museum was predicated on authority, discipline, grand narratives, and totalising theory (Bennett, 1995) then the introduction of active spaces of negotiation and collaboration between the institution, design and its publics is a clear indication of the project’s approach to the institution as live medium. In other words, this move away from the ‘culture of persuasion’ produced not only the highly complex research structure of the *Coalition of Amateurs*, but ultimately shifted the very notion of exhibition making into a mode of embodied criticality. It is this performative function of observation and participation that allows the visitor access to a different mode of inhabitation with the museum. Importantly, then, the focus on criticality rests not in what is being represented but on the modes of presentation and experience. It is in this sense that the condition of embodied criticality is understood to shift the common perception of the museum as a ‘closed space’ to an open platform which encourages a living out the very subject we are concerned with. This move away from direct intentions and exemplifications invites us to consider a curatorial gesture able to actively engage with its subject matter, situating the visitor as active and critical participant.

It is here, I would argue, that a shift to a modality of lived experience offers, as Rogoff contends: ‘an opportunity to ‘unbound’ the work from all of those categories and practices that limit its ability to explore that which we do not yet know or that which is not yet a subject in the world.’ (2006: 3) By engaging this form of experimental reflexivity the project underscored a turn from the exhibition as a representational medium based on fixed interpretation to a site of possibility and potentiality, connected with ideas of flexibility, collaboration, experimentation, enactment, and thinking.

## 7.6 Conclusion

What transpires from the examples surveyed in this essay is that designers are searching for new methods and criteria for producing, engaging with, and disseminating works of critical design. The criticality both works articulated

is focused on the exhibition as a space for new ways of thinking and sensing the world. I have characterised the projects under discussion in terms of their openness, uncertainty and unpredictability while emphasising the exhibition as a material space for performativity, participation and criticality. This repositioning of the exhibition as a modality of lived experience signifies a move whereby the very act of exhibiting critical design is made available as an entity where embodied criticality takes place, privileging an active engagement with audiences directed towards perception rather than understanding. It is here, I would argue, that projects such as *ICTV*, through its self-reflexive examination and *Coalition of Amateurs*, through its performative dimension, allow us to access a different mode of inhabitation with the museum. Moreover, these practitioners are expanding the possibilities for the production, dissemination and consumption of critical design. They are using the exhibition as a tool to create works that provoke questions, thinking and debate for which the exhibition as form is employed simply as a trigger. Their efforts are not intended as a display mechanism to bring finished works of critical design to a public, but rather they demonstrate the possibilities of the exhibition context as a medium of critical design, a space to imagine alternative realities. While functioning on two levels – as critical design and as exhibition – each of the works presented challenge closed meanings and prescriptive outcomes while using the exhibition as an open, question-generating, complex space wherein both thinking and action take place.

This emphasis on the exhibition as an unstable form offers, as Rogoff contends, a chance to move the frame of our questioning from ‘what is it?’ to ‘What does it make possible?’ In this way the works take on a field of possibility rather than an identifiable entity, embracing a model of working that is flexible, autonomous and responsive to the needs and behaviours of critical design. Importantly then the examples of *ICTV* and *Coalition of Amateurs* are pivotal resources to bear in mind in the consideration of how exhibition formats can accommodate the changing nature of critical design practice, and how criticality can be embedded in exhibition practices as a mode of legibility which repositions the exhibition as a programme for critical awareness, democratic participation and self-reflection. But rather than a definitive solution to be employed across the spectrum of design practice, these examples must not be understood as new patterns of

institutionalisation, but instead constructive moments, whereby the curatorial is used as a method to expand and support an active dialogue with design and its publics.



. . . Chapter eight

# [EXHIBITION REVIEW]

## Risk as Rupture: Risk Centre by Onkar Kular and Inigo Minns

Arkitekturmuseet, Stockholm, Sweden  
21 March - 05 May 2013

*“With risk  
comes great reward.” Thomas Jefferson*

### Introduction

What is risk? The question is seemingly straightforward and comes with an immediate understanding: risk is the possibility of unwelcome circumstance corresponding to the potential hazards associated with a chosen subject, object and environment. It is a general term that embodies ideas of uncertainty, perilousness, loss, injury and adverse effect. If at one time risk was a calculable uncertainty, (Zachmann 2014) now it would seem that we have entered an age of extremes whereby risk is understood to be directly correlated with threat and should be avoided at all costs. As such, we are constantly faced with the anticipation of risk’s negative consequences, rendering us untrusting to the point that every aspect of life becomes a potential source of danger and anxiety. To be sure this generalised *perception* of ubiquitous danger, subscribed to in the western world, has coincided with increasingly risk averse attitudes and a residual ‘culture of fear’ that promotes hesitancy and over-caution. As Ulrich Beck rightly observes,

“With risks, avoidance imperatives dominate.” (Beck 1994: 09) More importantly, he argues, “Someone who depicts the world as risk will ultimately become incapable of action.” (ibid) On one level, this current culture of fear, and safety for its own sake mentality may actually be producing a sanitized world void of engagement, action and emancipation. And yet, with risk comes possible opportunity. Or rather, when employing risk as a device for innovation and exploration we summon the potential for a greater good. From this perspective it would seem that risk is as ubiquitous as it is varied, as indispensable as it is undesirable. The question becomes: How might we make risk perception socially visible – to problematise representations of risk in a manner that we can engage with and experience?

In the exhibition, *Risk Centre* (2013) (Fig. 8.1), British designer Onkar Kular and fellow Architect Inigo Minns exemplify an engagement with this line of questioning, further exploring the subject of risk in its many pretexts. Curated by Magnus Ericsson and exhibited at the Arkitekturmuseet in Stockholm the exhibition was staged as a Risk Assessment Facility and educational performance space, supported by scripted moments and a series of public programs intended to physically engage the visitor in the many ways risk is recognised, assessed, conveyed, and regulated

Figure 8.1 – The entrance to the Risk Centre which depicts a selection of newspaper headlines relating to stories of risk in Stockholm.

image: onkarkular.com



On entering the museum, visitors were faced with a vast mise-en-scène depicting a condensed version of Stockholm through what can best be described as miniature ‘film sets’ portraying a series of familiar places including street scenes, a private residence, building site, internet café, lake

front, and public square. The visual starting point was a wall papered with news headlines which contained within them messages of how public media communicate risk. Referencing topics such as ‘Popstar sues city of Stockholm for pavement accident’ and ‘Famous Playground closes following Risk Assessment’ each headline acted as an introduction to concepts of risk, safety and hazard. As the visitor travelled through the space of the exhibition, each micro-environment further examined and deconstructed perceptions of risk through an array of hidden hazards – a kite caught in the electric wires of a utility pole; an ashtray near soft furnishings; a dark passage; a bridge; a staircase; a pedestrian crossing – and was designed to allow the visitor to explore and evaluate their understanding of risk in its many guises. (Kular et al. 2013) Moreover, amidst the strangely familiar settings sat a handful of clandestine ‘easter eggs’ which further elucidated questions of an ‘economy’ of fear. For example, discreetly positioned amongst the general clutter in the living room were both a peach and hammer, in reference to ‘You can’t argue with a car’ (1976) a short film conceived to feature the dangers of a road, and ‘The Risk Society’ a book by Ulrich Beck (1992) which expands the traditional concept of risk to include the social experience. In an interview for the catalogue Kular observes:

Evaluation of risk, at many scales, is a common thing to do within our everyday lives, and according to some theories, is a critical part of our development from childhood into adulthood. Many disciplines, such as; finance, healthcare, design and education; formalise this process with specific practices and activities... that educate the public towards avoiding risks; effectively institutionalising, and ultimately formalising, what might otherwise be practiced as ‘common sense’.  
(Kular 2013: 36)

Through an intimate exploration into the themes of ‘right to play’, ‘privacy and safety on the internet’, ‘risk in the everyday’, ‘traffic and the public realm’ and ‘being a junior citizen’ *Risk Centre* mimicked this system of preventative thought while orchestrating the visitor into an exploration of the invisible, taken for granted, actuality of risk in the everyday.

It is important to recognise however, that Kular and Minns’ work aimed neither to support notions of the economy of fear nor to deconstruct it. Instead it was intended to create situations left open to investigation, interpretation and questioning, inviting the visitor to participate productively. Since the early 2000s Kular’s practice has regularly employed design as a tool to engage with and question contemporary social and cultural issues and

Figure 8.2 – A scenario from Onkar Kular’s Risk Centre, in which the dangers of an unidentified black bag were explored.

image: onkarkular.com



has often culminated in a combination of objects, environments and storytelling mediated through both exhibition and performance. (Kular et al. 2013: 32) His central interest lies in creating scenarios for speculation and engagement employing design as lived experience. This becomes most evident in the accompanying exhibition booklet which included 10 scripted scenarios relevant to the individual environments within the Centre. ‘*What Is In The Bag?*’ (Fig. 8.2) was a scene in the exhibition, in which visitors were asked to play out different scenarios of what they believed could be in an unidentified black bag left on the road. The script invited visitors to divide themselves into two groups. Group 1, standing under the sign marked ‘Tänk om?’ (What if?) would start the exercise by giving one example of what they believed could be inside the bag. Group 2, positioned under the ‘Konsekvens’ (Consequence) sign would then respond with what they thought the consequences of their example could be. From questioning the contents to imagining the outcome, visitors were encouraged to collectively contemplate their role in navigating the landscape of risk that surrounds them.

As a form of introduction to the scenario, a footnoted framing story accompanied the script further involving the visitor in the reality of our culture of fear.

Unidentified Bag At 4pm on Tuesday 6th November 2012, a passenger discovered an unattended bag in the Arrivals area of



Dabolim Airport, Goa, India. Chaos ensued, with Airport staff and Security unsure of what to do with the unidentified bag. There followed an agonising two hours of speculation on the contents of the bag before the Bomb Disposal Squad arrived. Inside the bag they found a freshly baked cake. (Kular and Minns 2013)

While designed to teach children responsible actions when faced with uncertainty and risk, each scenario acted equally as a trigger intended to stimulate speculation, reflection and debate. What's more, the visitor in this setting assumed the position of an activated and physically engaged subject collapsing the spectator/performer division. This emphasis on participatory performance sought to engage the visitor in the very idea of risk and its social visibility through tactics of negotiation, relationally and collaboration. '*RULES, RULES AND MORE RULES*' further verifies this while signalling the shrinking freedom of action gained through growing control. The script asked visitors to play with a set of museum objects displayed on plinths while discussing and reflecting on the purpose of rules, and whether in certain cases they should be challenged. The accompanying story said as much:

Stated on an information sign outside the Dorchester Borough Gardens, UK: 'The public are 'kindly' reminded that there should be: No Cycling, No Skateboarding, No Drinking, No Barbequing, No Skating, No Dogs without leads, No Music and No Fouling.' An additional comment has surreptitiously been graffitied on the sign adding: 'No Breathing' (ibid)

Each theatrical intervention encouraged visitors to actively engage in a dramatisation of the psychological and physical realities of risk. As such *Risk Centre* acted less as a solution to a problem (the culture of risk aversion and fear) and more as a series of questions that drew attention to the problem. (ibid: 50) In Kular's words:

This approach does not aim to be problem solving, rather it forms an open question or situation that the audience can interpret and respond to. In doing so the traditional relationship between the user and the design is transformed so that the design becomes a tool and the user is elevated to co-author. (ibid: 32)

Unquestionably, the *Risk Centre* functioned at a significant distance from standard product design. Like a succession of film sequences it offered a sphere of possibility in which scenarios were explored and concepts tested. Design in this sense engaged with the possible, even as it deferred from the probable. Indeed the work served multiple purposes. It was a research

project which revolved around the idea of producing a scenario to address and transform our relationship to risk. It aimed to raise questions about the role of design in our understanding of cultural and popular issues, and more specifically, how design can be used as a medium to engage with and question the cultural and social realities of risk perception. Thus, *Risk Centre* had little to do with design in the conventional sense, but instead shifted the field's tradition of problem solving, to a practice which gave prominence to the performance of a problem (in this instance the performance of risk).

### **Risk as Rupture**

Interestingly with this dynamic shift in the role of design the museum also becomes a topic of enquiry. Unlike conventional didactic approaches to museum display *Risk Centre* explicitly embodied the performativity of research into its working order. Thus the museum became part of the investigative and experimental process of the work. (ibid) The point is that by engaging this form of experimental reflexivity *Risk Centre* extended the scope of the design exhibition beyond presentation and display to include production, enactment, staging and enquiry. In this context risk was productively presented as a means to offer the visitor an opportunity to critically engage and question their understanding of risk, all the while emphasising the exhibition as dependant on a plurality of actions and voices.

According to this logic, while the overall theme of the work centred on the cultural and social realities of risk perception, the manner in which it was presented to the visitor suggested another understanding of risk altogether: as experimentation and rupture. In part this positions the *Risk Centre* as a juxtaposition between the presentation 'of risk' and presentation 'as risk'. One implication of this double entendre is that the very parameters of museum display can come to be questioned. As mentioned in the Introduction of this thesis, the dominant order of design exhibition has tended to operate within the confines of standard museum practice, whereby objects are put on display as illustrative fragments of good practice, appropriate patterns of consumption and progress with an emphasis placed on formal and material value. (Hooper-Greenhill 1992) By comparison, *Risk Centre* employed the museum exhibition as a mechanism to enact risk. More generally, we might say its strategy of risk was embedded in the way it engaged with its publics. Staged as an imperfect simulacrum – a simulated

space that encouraged reflection and response – the exhibition manipulated techniques of film and theatre to engage in an exploration on the subject of risk. As Kular notes: “This auto-theatre technique; where the learner/ audience is embedded in a situation, is also used in education as a way to help content move from something merely known, to being something felt and experienced – and ultimately understood.” (Kular et al. 2013: 40)

As one example, ‘*Performing the Accident*’ (Fig. 8.3) was a staged event whereby a qualified stunt man enacted a series of slow motion accidents in a workshop environment set within the exhibition. Intended for children, each action sequence was demonstrated and explained to the participants who were later invited to perform a sampling of the stunts (falling down stairs, or tripping over a curb) within the mise-en-scène of the exhibition. Through this juxtaposition of the representation and performative production of risk, the visitor experienced themselves as relational and constitutive elements of the work. In this way, by employing a workshop structure, inviting the visitor to literally perform ‘the accident’, Kular and Minns positioned the meaning of the work as dependent on the collective actions and interactions of the objects, scenarios, actors and visitors.

Figure 8.3 – Image from the Slow Motion Accidents workshop depicting pavement fall. The workshop took place in the Risk Centre

image: onkarkular.com



More specifically, by way of its practice, rhetorics and techniques the exhibition endeavoured to engage the visitor through spaces driven by negotiation, relationality and collaboration. It emphatically resisted grand narratives and totalising theory, preferring instead to function as a mediator centred on situational learning and experience in both time and space. In this

way the project served in querying not only the social and cultural realities of risk perception, but also the set ways in which museums and their exhibitions function. Importantly, then, *Risk Centre* set out to uncover risk culture while simultaneously becoming a product of its own subjectivity. Rather than limiting itself to a poetic intervention about risk, the project established a legitimate ground for another understanding of risk, *as a working methodology*. It employed risk as a curatorial strategy whereby the rules of the museum were purposely subverted as a means to explore new languages for research and reflection. Setting risk to work as a function of new knowledge formation.

As a collaborative platform, *Risk Centre* drew attention to the construction and boundaries of the exhibition. At the same time it extended the museum's conventional remit into unfamiliar territories, providing an active space for discourse, exploration and engagement. At odds with what we are accustomed to encountering in the museum, the *Risk Centre* brought a dramatic mood and atmosphere to the Institution. Through both staging and performance the project offered a moment to encounter the exhibition not as a medium for representing a work, but for explicitly inventing it. It folded the work and exhibition into one, collapsing established roles of the museum, designer and curator by way of its actions.

What is implied here is the museum exhibition as a specific form of critical design. The exhibition is, in this sense, not necessarily something that displays or represents, but something that employs chance and unpredictability into its working order, releasing the authorial grip on the production of meaning through acts of collaboration. The point is that the *Risk Centre*, unlike typical exhibitions of design, embraced contingency and incompleteness as a means to address and transform our relationship to risk. The project as a whole positioned the exhibition as a research action in itself. It offered a perspective on the museum's potential to function as a platform of questioning, experience and production through the enactment of situational enquiries and performative mediation. Thus, in presenting the exhibition as critical design *Risk Centre* contributed in a radical way to the promotion and understanding of ways in which the museum can act as an active agent offering a speculative and experimental context for both thinking and reflection. As curator and writer Georgina Jackson writes in her article: *And The Question Is . . .* "there is potential for exhibition-making to

function as a space for the emergence of questions about the world in which we live.” She continues: “In this way, exhibitions become spaces in which the suspension between question and answer permits the continued proposition of meaningful ways of thinking and realizing the world anew.” (Jackson 2015: 78)

Paramount to the underlying scope and ambition of the Risk Centre was this explicit engagement with questioning that Jackson refers to in the above quotation. Precisely in this way the *Risk Centre* itself becomes a model for criticality in which enquiry is prioritised over the authority of the institution. In this framework, the exhibition is not used to illustrate a theme, but instead develops its own dramaturgy based around discontinuities and thus establishes a discourse. Importantly, what was created in the *Risk Centre* was a space of constant negotiation between the work, subject, object and space of the exhibition.

As mentioned in the interduction of this thesis, one of the challenges facing museums today is how to provide the space around which critical design practice can flourish. While it is easy to fall back on the question ‘How do we do this?’ what becomes clear with works like *Risk Centre* is that what is more important than providing a curatorial framework for critical design is providing the tools with which the visitor can ask questions and draw their own conclusions. (Fowle: 2015) After all, in such an example, it is the awareness of how risk was performed within the setting of the exhibition that becomes crucial to developing an understanding of the institutions distinctive approach to the production of knowledge as it relates to critical design.

In this way, the *Risk Centre* is not only a call to think about how critical design as a practice can disrupt and creatively question the status quo while revealing our role in the making of the social world. It is also an opportunity to better understand how museum exhibitions can help mobilise and mediate critical design practice. However, we must not make the fatal mistake of approaching this instance of rupture as a new pattern of institutionalisation, but should instead understand it as a responsive curatorial approach. What projects like *Risk Centre* ultimately reveal is a division between those who approach the exhibition as a mode of display, and those who want to use it as a medium of their work. While both approaches have their merits, what is

more important is that we continue to build a curatorial practice that takes shape alongside the needs of practice.

. . . . Chapter nine

# AS Research:

## The Exhibition as Epistemic Environment for Critical Design

### 9.1 Introduction to the Chapter

This chapter tackles the critical design exhibition by examining the following two main premises: 1) Critical design as *research*, in terms of both an object of research and an entity in which and through which research takes place; 2) The critical design exhibition as *experimental system*, as the actual generator of thinking ‘machine for making the future’ (Rheinberger 2007). The overall objective of starting from these two premises is straightforward: to position the critical design exhibition as a context of discovery – a material space for thinking – distancing itself from the more didactic forms of exhibitions that still dominate practice today, and to pose ways to establish a far more dynamic and open relation between critical design and its staging. What will follow will be an examination of critical design as a form of research which seeks not so much to make explicit knowledge production but rather to provide a space for thinking. Consequently it positions critical design as an open undertaking centred on thinking in, through, and with design. I propose the exhibition as epistemic environment for critical design, an environment that secures and creates conditions to support the thinking dimension of critical design practice while unlocking an active agency in the audience. It is a space where research and knowledge production is evoked *in situ* and *in action*. In turn, I will demonstrate how the exhibition as an epistemic space triggers an audience into a reflexive state aimed at changing the way they think. My aim is to explore the critical design exhibition as epistemic practice whereby the

exhibition can function as both technical object (the experimental conditions) and epistemic thing (unfolding objects that invite a kind of pursuit) depending on the role it plays within the experimental context. (Rheinberger 1997)

## 9.2 The Exhibition as Research for Critical Design

When British educationalist and writer Christopher Frayling (1993) examined the stereotypes of design research he described three types of research (with reference to Herbert Read) which could grow out of design: 1) *Research into design*, in terms of historical research, aesthetic or perceptual research, and research into a variety of theoretical perspectives on design; 2) *Research through design*, in terms of materials research, development work, and action research; 3) *Research for design*, in terms of the expressive tradition, where thinking is embodied in the artefact, in the sense of visual or imagistic communication. Frayling considered the latter as research with a small ‘r’ which he earlier defined as “the act of searching closely or carefully” (Frayling 1994: 1) He states,

So research with a little r has been used, in the last four hundred years, of art practice, of personal quests, and of clues and evidence which a detective must decode. The point, says the OED, is that the search involves care . . . it isn’t about professionalism, or rules and guidelines, or laboratories. It is about searching.” (ibid)

What interests me in Frayling’s account of design research with a little ‘r’ is the emphasis he places on comprehending the possibilities of design research outside of its instrumental roles. He describes *Research for design* as an expressive idiom rather than a cognitive one – steeped in autobiography rather than understanding. In a similar sense, *Research through design* has been described by design theorist Wolfgang Jonas as ‘knowledge gained through the medium of designing’ (Jonas 2016: 74), which once again highlights the importance of searching. But this does not thoroughly cover the dimensions of design research with a little ‘r’. Critical design when thought of in relation to research calls forth something of a new category of design research – using research with a little ‘r’ – one defined by Swiss educators Simon Grand and Martin Wiedmer as *Research as Design*. In their article *Design Fiction: A Method Toolbox for Design Research in a Complex World* (2010) they argue that “the conceptualization of design and design



research as a practice and research field, which particularly focuses on the world as it could be, should be taken as the actual core for defining and practicing design research". (ibid: 2) They argue further that this very idea bears close resemblance to an understanding of design fiction, which systematically questions and deconstructs the self-evident by materialising, visualising and embodying controversies and perspectives in the form of objects, scenarios, installations and performances. (ibid 5, see also Bleeker 2009) In a more recent article Grand further argues for both Design Fiction and Critical Design as distinct ways to approach design research, both of which he states focus on the world as it could be: What if? as the actual starting point for conducting, positioning, reflecting on, and practicing design research. (Grand 2012:171) Here the designed outcome is not viewed as an end point in the search for a solution to a problem, but instead assumes an 'experimental value' which acts as an "entrance point for critical thinking about the self evident, not only as the world could be, but rather to find a new, distant perspective on reality as it is". (Grand, Wiedmer 2010: 5) Consequently, the research seeks to enhance our experiences not just with what we 'know' and 'understand' but with 'who' we are and 'where' we stand.

In drawing uncertainty into research practice a space opens for what design theorist Terry Rosenberg calls a poetic criticality. Rejecting a scientific approach to design research and practice he argues that one cannot consider critical practice within the established order of the sciences and humanities, with their focus on certainty and consistent and reliable knowledge. Instead he argues that critical design must be understood as a practice which "moves critically in spaces between or beyond theory so as to speculate, provoke and create questions, new understandings and, in some instances, new answers in a number of problematics." (Rosenberg 2007: 2) In this way, viewing *design as research* in terms of its affective and performative component highlights its open-ended character, emphasising a different kind of knowledge steeped in discovery, not justification. Indeed Rosenberg argues that this form of critical practice produces a knowledge built specifically with uncertainties - a pre-reflective knowing, which offers a way of engaging the world poetically rather than knowingly. (ibid: 7) In his view "Knowledge is transfigured from potestas - the 'authority of knowledge' - to potentias - the potentiality of knowledge(s) - in the

poetic.” (ibid) However he suggests that critical practice is not just about potential knowledge but it is also about not knowing. (ibid.) This inquisitive process to critical practice therefore, offers an approach to research that must be sufficiently open to realise what we have not seen before while challenging the interpretive skills of the audience. Research in this case is collaborative, open, exploratory and emergent, driven by a desire for finding, not knowing, thus working with reflexivity and thinking as opposed to knowledge and learning. To paraphrase art theorist Henk Borgdorff: Critical Design research therefore does not really involve theory building or knowledge production in the usual sense of those terms. It is more directed at a not-knowing, or a not-yet-knowing. It creates room for that which is unthought, that which is unexpected – the idea that all things could be different. Critical Design invites us and allows us to linger at the frontier of what there is, and it gives us an outlook on what might be.<sup>14</sup> (Borgdorff 2014: 173) This willing experimentation with unknowable outcomes is the mark of critical design. There is no longer a primary emphasis on the certitude of a tangible known outcome. Critical design, in this sense, becomes a method to reframe existing problems while distributing the agency of research between the designer and the user. From the present point of view then, critical designers are not specialists in problem solving, but more so in arranging situations in which finding becomes possible. In fact one could go as far as to say that in the context of *Research as Design* the whole notion of the expert can be replaced with what Bruno Latour defines – building on Callon, Lascoumes and Barthe – as the co-researcher. He states:

we are all engaged . . . into the collective experiments on matters as different as climate, food, landscape, health, urban design, technical communication, and so on. As consumers, militants, citizens, we are all now co-researchers. There is a difference to be sure, between all of us, but not the difference between knowledge producers and those who are bombarded by their applications. (Latour 2012: 228)

Forming part of his argument on the collective experiment Latour summarises all of the rules of method under the slogan “No innovation without representation” It is time, according to Latour that we have a collective say on the innovations in our world, and decide for ourselves what is good for us. (ibid)

Among other things, then, this shift from approaching the user as consumer of products and services to co-researcher means that critical

<sup>14</sup> In ‘The Conflict of the Faculties’ Henk Borgdorff argues for an understanding of Artistic Research as an open ended process directed at discovering, not what is, but what might be.

design demands a change in its terms of engagement, or to paraphrase Latour: *No critical design without presentation*. Thus it can be argued that critical design is validated (as a space for thinking) through interaction with both persons and environments, which acknowledges the notion that critical design is intertwined with the illumination of a person. Put more simply, in order to become a space for thinking, works of critical design need presentation –a staging– so as to move from mere practice to a collective experiment for thinking. To some degree, it can be argued, critical design practice has concentrated its efforts on the development of methods and practices focused on the creation of spaces for thinking, without allowing the thinking to take place. It hasn't really considered or addressed how to actually engage a public in this thinking. Which begs the question: Where do the co-researchers figure into the equation?

As mentioned previously, the aim of critical design is to allow its users to think so as to engage with past, present and future worlds, both critically and differently (Rosenberg, 2007:6). Complicating matters further, when outcomes are neither knowable in advance nor necessarily bound up in material form, and when users play an integral role in the process of design, it becomes necessary to question how does the approach take form? And how are users invited into the overall process? If we return to the example of Onkar Kular and Inigo Minns' *Risk Centre* (see chapter 5), the work is emblematic in this context: Using the museum exhibition as the medium of their work their outcome worked towards reframing the concept of Risk (from financial to physical, from civic to legislative, from personal to digital) in unexpected ways. Through a series of performative gestures ranging from playing out scenarios (The guidance script) to participating in workshops (Performing the Accident) to observing others engaging with the space, the work invited the user to question their personal understanding and relationship to risk while pondering risk as a force that shapes our environments, behaviours and interactions. The Risk Centre did not function like a standard exhibition whereby objects are put on display for a viewing public. Instead it acted as an open platform which actively engaged with the subject of risk through both experimentation and reflexivity. Indeed the *Risk Centre* aimed to open up the question of risk while exploring the potential of the exhibition as a medium to perform a work – to act and make others act. It collapsed all boundaries between a design work and its exhibition while

embracing elements of chance and unpredictability into its working order. The project as a whole declared that its desired function to address and transform our relationship to risk could not be secured in advance. Instead the exhibition was restricted to a matrix of possibilities dependent on an audience to activate the outcomes – positioning the museum and its spaces as vehicles for both research and discovery.

This repositioning of the exhibition as a research generator –a space for experimentation– signifies a move whereby the very act of exhibiting critical design is made available as an entity for speculation and reflexivity, which privileges an active engagement with audiences (in this instance, co-researchers) directed towards perception rather than understanding. It is in this staging where the exhibition moves from an ascribed space of objective knowledge and learning to a potential space for exploration and discovery. By creating these objects or situations with multiple potentialities, designers (researchers) and audiences (co-researchers) are invited to ‘think’, which ties in with science historian Hans-Jörg Rheinberger’s notion of ‘experimental systems’. Equally, by emphasising the inherently constructivist, critical, experimental and imaginative nature of *design as research*, as understood in the above, we can interpret a direct correlation to the unconventional perspectives in science and technology studies (STS) and their recent preoccupation with the important role of experimentation and the experimental system, which carries the reflexive and affective aspects of epistemic practice. (Latour 1993; Knorr Cetina 1999, 2001; Rheinberger 2007)

In the next section I will briefly review arguments on epistemic practices, those which conceive of knowledge objects, things, or events as defined by their relational, processual and open-ended character while emphasising their ability to materialise questions. I will revisit the idea of critical design as an epistemic practice while highlighting several features that capture the poeology of *design as research* as a means of inferencing the dynamism of this form of practice that acts not to move beyond where we are, as a goal-directed movement, but rather to move away from our present state of affairs, without necessarily knowing where to. (Rheinberger 2013)

To specify how critical designers create these situations for finding, one needs to discuss in some detail what I am referring to as the ‘context of

discovery', which considers works of critical design as objects of research but also as the entities through which research takes place, and through which we, as co-researchers, are invited to partake – we are invited to think. This will be discussed in the section that follows, looking specifically at a new generation of designers who are engaging in the exhibition model as a mode of critical design. I suggest that the methodologies that frame the curatorial propositions within this emerging form of design practice are repositioning the exhibition as a material space for thinking in which and through which social emancipation can occur. The following section underscores a turn from the exhibition as a representational medium based on fixed interpretation to a site of possibility and potentiality, connected with ideas of flexibility, experimentation, research and thinking. The final section considers the challenges we face to disassociate the exhibition from its fixation on being a teaching machine. I will briefly touch on Simon Sheikh's perspective of exhibitions as 'reproducers rather than producers of knowledge and thinking', and his desire to maintain an 'unproductive' time and space within the exhibition. (Sheikh 2009) I propose the critical design exhibition as a vital (in the sense of emergent, responsive) context open to multiple viewpoints and experiences which together create a collective experiment that remains forever open to contestation and adjustment. Referring back to the *Risk Centre* this reiterates the idea of the critical design exhibition as a medium in the process of becoming, which engages other becomings. It is an experimental system, as understood by Rheinberger: a vehicle which serves to materialise questions. (2015)

From this perspective the exhibition model is able to move beyond being a space of knowledge production to become a space for thinking. To return to the *Risk Centre* one last time: from a space where we learn about risk, to one where we are invited to think about our relationship to risk in the world. Out of this perspective it becomes possible to approach the exhibition medium as an unbounded space of not knowing whereby one is free to test what it means to be in the world. (Rogoff 2008) This shift in emphasis from knowledge to thinking is best described by Sheikh who states.

Thinking is, after all, not equivalent to knowledge. Whereas knowledge is circulated and maintained through a number of normative practices – disciplines as it were – thinking is here meant to imply networks of indiscipline, lines of flight and utopian questionings. Naturally, knowledge has great emancipatory potentials,

as we know from Marxism through psychoanalysis, but knowledge, in the sense being what you know, what you have learned, is also a limitation: something that holds you back, that inscribes you within tradition, within certain parameters of the possible. And thus within certain eliminations of what it is possible to think, possible to imagine – artistically, politically, sexually and socially. (Sheikh 2009: 6)

Importantly, this notion of the exhibition as a transformative and speculative activity reliant on possibility and potentiality, thinking and perception, and lack of completeness of being, emphasises the exhibition medium as a context for critical design in which the experimental is paramount. This section presents a way of conceiving of the dynamism, unboundedness, and thinking of critical design exhibitions as the heart of the ‘context of discovery’, which ultimately heralds an understanding that thinking is not simply a matter of the mind, but also includes a material and embodied dimension.

### 9.3 Epistemic Practices in Science and Beyond

When we speak of scientific research we often think of a laboratory filled with experts wearing white coats working towards proving or disproving specialised theories through a series of experiments, repeatable at will, whose results, if justified, would at some point in the distant future be presented to a public. Such a view, if taken seriously, elicits two different yet inseparable elements. The first is what Latour defines as the “trickling down” theory of scientific influence whereby knowledge transfer is one-directional. “The public could choose to learn the results of the laboratory sciences or remain indifferent to them, but it could certainly not add to them, dispute them, and even less contribute to their elaboration.” (Latour 2004: 18) As an expert driven system, it presents itself as ‘truth’ tested by scientific researchers, and taught to a listening public. The second is the portrayal of scientific research as method-driven, repeatable, systematic, rational, objective and universalisable. In this classical formulation experiments are seen as singular, well-defined empirical instances embedded in a context of justification dependent on explicit instructions which reveal the methods of one’s logic while justifying one’s conclusions. (Frayling 1995). This understanding of science, however, runs counter to the more recent ‘practice turn in the philosophy of science’ (Rheinberger 2007, Knorr Cetina 2001, Latour 2004 ) which seeks to liberate the context of discovery from the

context of justification, shifting the focus to experimental systems framed through subjectivity in place of experimentation as a theory-driven activity centred on objective knowledge. (Borgdorff 2012) Sociologists like Knorr-Cetina and historians like Rheinberger have in fact argued for an understanding of the experimental system as the centre and motor of scientific research, which inherently situates scientific research as far less method-based and far more focused on dynamic, creative, constructive and normative actions. (Knorr-Cetina 2001: 187; Rheinberger 2007) According to Rheinberger experimental systems offer unknown answers to questions we are not yet able to ask. Such systems, he contends, quoting French biologist François Jacob are: ‘Machines for making the future’. They are designed to allow for unprecedented events to occur. They do not seek to augment knowledge, and are in fact not meant to generate answers, but rather to materialise questions. (Rheinberger 2015; 2013 (1997): 220) In an essay entitled ‘*Artistic Practices and Epistemic Things*’, Borgdorff makes the comparison between research in both art and science through an understanding of the experimental system. Referencing Rheinberger he maintains that,

experiments are not merely methodological vehicles to test (confirm or reject) knowledge that has already been theoretically grounded or hypothetically postulated, as classical philosophy of science would have it. Experiments are the actual generators of that knowledge – knowledge of which we previously had no knowledge at all. (Borgdorff 2012: 189)

In the context of experimental systems, formed of both technical objects (stable context for experimentation) and epistemic objects (the part under investigation), it is objects of knowledge (epistemic objects) that play centre stage. (Rheinberger 2015; 2007) As I have discussed briefly in chapter 4, epistemic objects function as fluid objects that have ontological openness. They are open, question-generating and complex, always in a state of definition, but never defined. Epistemic objects produce meaning and function as signs. They are objects of investigation that enable the emergence of the new and the unforeseen, while acting as signs for further searching and unfinished thinking. (Knorr Cetina 2001; Rheinberger 2007; Borgdorff 2012) As Knorr Cetina argues:

The signifying force of partial objects (of epistemic objects in general) resides in the pointers they provide to possible further explorations. In this sense these objects are meaning-producing and practice-

generating; they provide for the concatenation and constructive extension of practice. One can also say the significance of these entities resides in the lack they display and in the suggestions they contain for further unfolding. (Knorr Cetina 2001: 192)

The reality of an experimental system, characterised through the realisation of epistemic objects, thus resides in its fundamentally open perspective on what is or could be. (Borgdorff 2012) Similarly in critical design practice, critical works are the epistemic objects, they are the generators of that which we do not yet know. They create room for that which is unthought. Critical design practice, like experimental systems, is thus centred on opening new perspectives and unfolding new realities. To paraphrase Michael Schwab critical design practice is a case in point where we acknowledge from the start that the research 'object' or 'issue' does not have a fixed identity - which invites in principle, unfinished thinking (Borgdorff 2012: 181)

This fuzzy epistemology of critical design practice, where thinking and things intertwine, is what enables us to see things differently. "As long as epistemic objects and their concepts remain blurred", writes Rheinberger, (and I argue the same applies for works of critical design) "they generate a productive tension: they reach out into the unknown and as a result they become research tools" (2010; 156) This emphasis on unpredictability while being open and attentive to the unknown, is what makes works of critical design vehicles for materialising questions.

But as Borgdorff reminds us, it is imperative to keep in mind that the specific contribution that practices like critical design make to our understanding, insight, thinking and experience lies in the manner in which the works are articulated, expressed, and communicated. (2012: 186)

Borgdorff proposes that the component of dissemination that accompanies material research may go in three directions: 1) A rational reconstruction of the research process; 2) interpretive access to the findings; 3) A verbalisation or conceptual mimesis of the artistic outcome. (ibid:168) The third possibility, in his eyes "involves an emulation or imitation of, or an allusion to, the non-conceptual content embodied in the art" (ibid) He asserts that traditional research in the sciences and humanities are essentially concerned with the first two forms of dissemination (the context of justification) while attempting to establish an argument for this third possibility (the context of discovery) as being integral to the specificity in how art research is articulated and communicated. Fundamentally for Borgdorff, it is the non-



conceptual nature of art that sets our thinking in motion inviting us to reflection. As Borgdorff states: “Art invites us and allows us to linger at the frontier of what there is, and it gives us an outlook on what might be. Artistic research is the deliberate articulation of these contingent perspectives.” (173) Borgdorff was speaking about art. But the concept applies no less to critical design.

In the following section I will argue that the specificity of critical design lies in this third possibility of dissemination, as outlined by Borgdorff. As research, critical design does not require a method of dissemination in the traditional sense. There is no need for an interpretation of the work, or a reconstruction of the design process. This form of explicit expression of the thinking embodied and enacted in the works risks bounding up the research process, closing down any notion of the co-researcher in the process. What is instead required is that designers concentrate on articulating and communicating the issues explored solely in and through the production of critical design. This is the ‘context of discovery’ in critical design practice which assumes a performative dimension for both the work and co-researchers. Dissemination in this case would seem to take on a completely different set of meanings and suggest a different set of questions. For example, How can we create works of critical design in a way that situates the audience/activator/co-researcher in a role that blends the production of design and its mediation? How can we conceive of critical design in a way that accommodates this blend while including within it the potential to bring thinking into being? At the core of this understanding of a ‘context of discovery’ lies the very spaces in which critical design is created and explored. While much of critical design practice is currently found in graduation shows, written up in academic journals, or reported on in mainstream media (Audio Tooth by James Auger and Jimmy Loizeau)<sup>15</sup> I want to focus specifically on the critical design exhibition which I discussed at the beginning of this chapter.

<sup>15</sup> see Auger (2013) for a comprehensive discussion of the problems and benefits of mass media dissemination of critical design.

Critical design exhibitions, I argue, are entities in which and through which research takes place. By critical design exhibition, I am not referring to exhibitions of critical design –which put works of critical design on display for a viewing public to consume – but instead to critical design works who use exhibitions as part of their medium of practice (which can themselves be found in critical design exhibitions). Here the emphasis is on

Figure 9.1 – Afterlife Coffin which includes two microbial fuel cells that would be used to generate electricity from organic matter, The electricity generated would be stored in the accompanying dry cell batteries held in the capacitor bank on the underside of the coffin.

image: auger-loizeau.com



how exhibitions might be understood as an alternative model of critical design practice, not as spaces for information distribution or formal knowledge production, but as other forms of coming together focused on directions over concrete outcomes.

These works, I maintain, subscribe to a movement in curatorial practice whereby exhibitions are increasingly approached as sites where both research and knowledge production are evoked in situ. As curator Christel Vesters states: “They [exhibitions] are not merely the outcome of a curatorial research done by a dedicated expert, but in and of themselves sites where various modes of research and various modes of thinking are enacted.” (Vesters 2016:1) She goes on to distinguish ways in which exhibitions can be understood as thinking spaces arguing that in the same way we can think about, with, and through art (I have argued the same for critical design) we can also think about, with, and through exhibitions. (ibid) Vesters writes that this form of exhibition opens a political agency aimed at changing the way we think while encouraging a different way of relating to the world we inhabit. (ibid) She proposes that this shift in exhibitions from spaces dedicated to aesthetic contemplation to dynamic sites for thinking things differently is directly influenced by the spatial layout of the exhibition. (ibid: 14) This understanding is grounded in the notion of embodied criticality, (discussed in chapter 4) that is that exhibitions should allow their audiences to inhabit problems or situations rather than offering opportunities to analyse or objectify from the sidelines. (ibid)

## 9.4 AfterLife – James Auger and Jimmy Loizeau

To take an example, *AfterLife* (2008) (Fig. 9.1) by James Auger and Jimmy Loizeau is a work that questions human relationships with death and the afterlife. The project proposes the design of a coffin capable of harnessing the acids derived from human decomposition. The device uses an electrochemical reaction to convert organic matter into electricity which is then contained within a conventional dry cell battery which could be used to power up a machine, or technological device after a persons passing. While this particular case study has been used previously within conversations on the importance of managing the uncanny in works of critical design (see Auger 2012; Gentès and Mollon 2015) I argue that it offers equal value to a discussion on the exhibition as a context of discovery.

*AfterLife* was first exhibited in the Museum of Modern Art's (MoMA) exhibition *Design and the Elastic Mind* (2008). The display included a 3D visual and technical drawing of the coffin, a photograph of a battery with engravings that read: *JOHN ADAMS, 1959 - 2001 , SHINE ON DAD*; a text describing the project, and a video produced as a mock commercial emphasising the service provided by the work and its value as 'the only genuine guarantee of life after death'. (Auger and Loizeau video) According to the designers the MoMA exhibition was a complete failure. As Auger states:

Unfortunately the viewers of the exhibition chose mostly to ignore the intellectual aspect of the project to focus on the more unsavoury aspects, namely tampering with the process of death, the passing of a loved one and the material activity of the human body during the operation of the fuel cell. This resulted in simple revulsion as the benefits of the concept were overlooked (2013: 16)

The problem was that in this context the work was mainly engaged through an aesthetic contemplation which focused the audiences' attention toward the functionality of the coffin and the processes of decomposition. The staging of the work supported the perception of a consumerist product destined for the market, while offering no potential for criticality (a living out the situation; see chapter 3) or for an exchange beyond consumption.

Alternatively in 2009 *AfterLife* was exhibited at *Experimenta 09*, the Design Biennale in Lisbon, Portugal. For this iteration the designers reconsidered their approach to exhibiting the work shifting the emphasis

from the coffin design and fuel cell to the existence and function of the AfterLife battery. (ibid) To produce this shift they invited 15 colleagues to either propose what they would do with a loved one's battery, or what they would imagine a loved one would do with their own battery. So for example one of the respondents wrote:

*If my father passed away, this is how I would use his battery. I would power some kind of electrical bird warbler. To be left in the garden, a unique noise though, formed from bird sounds common to Cheshire and rural Wales. It should not warble constantly, it should be around breakfast. This is because my father – early in the morning – can often be found out in the Garden (having pissed on the compost) in pants and vest, whistling along with various birds, for extended periods. It has to be said, he is pretty good. - Jack Schulze 2009*

Figure 9.2 – The object displayed alongside Schultz's AfterLife narrative.

image: auger-loizeau.com



Together the 15 narratives, each displayed with an object representing the desired scenario (Fig 9.2), formed the focus of the installation in Lisbon. This arrangement introduced an emotional and human perspective into the work that was not present in the MoMA exhibition. In this iteration *AfterLife* seemed to create room for what was unthought and unexpected while indicating ways to gain access to the work. Through simply introducing an array of possibility to what *AfterLife* could be, the project offered a fundamental incompleteness. This condition of contingency, as Borgdorf contends 'is what invites us, again and again, to see things

differently” (2012: 196) This more personalised approach to *AfterLife* emphasised the open unfinished nature of critical design. It activated the user/audience to experience their own individual response to the work (how would I use the battery of a loved one? or What would I want a loved one to do with my battery?) while contemplating a subject they had perhaps not considered before. (ibid: 20) Through the use of scripting and storytelling, the designers were able to invite the visitor to carry the work forward, experiencing themselves as relational and constitutive elements of the project. In this sense, the exhibition took on the role of the experimental system that had been absorbed into the work. It acted not merely as a space to display the project produced by the designers (as in the case of the MoMA exhibit), but in and of itself was a site where research and thinking were enacted *in situ* and *in action*. (Vesters 2016) Furthermore the exhibition as a context of discovery offered the visitor an active agency, engaging them in a specific form of ‘experimental reflexivity’ targeted at perception and not understanding.

This approach to the exhibition as experimental system shifted the focus from the designed object, understood through detached modes of rationality and objectivity towards a socially constructed ‘epistemic thing’, an object associated not with its materiality but with its ability to open new perspectives and unfold new realities. (Rheinberger 2004; Borgdorf 2012) In this sense the exhibition played the role of a dynamic site for thinking things differently. It acted not as an object of closure, a last word, but instead as an opening which aimed for engagement over agreement. To paraphrase Rheinberger, here, the critical design exhibition I would argue acts as an experimental system in its own right. It is the set up of an experiment not merely the recording of data, facts or ideas, nor a transparent medium of thoughts. It gives thinking a material substance, and specifically one that enables something to emerge. (Rheinberger 2006, 5) What emerges in this example is the provocation of a discussion or an imagining of life after death. Moreover, the exhibition as a form shifted from being a regime of didactics to a space which offered the potential to think about alternative possibilities of everyday life that may not be obvious otherwise.

## 9.5 Evidence Dolls – Dunne & Raby

Figure 9.3 – Installation shot of *Evidence Dolls* at the Centre Pompidou in Paris, July 2005.

image:



This idea of the exhibition as an experimental system for critical design brings to mind Dunne & Raby's *Evidence dolls* (2005) (Fig. 9.3) (see chapter 3) which willfully employed a lack of totality in the exhibition as a tactic for engagement. In fact, it was through the very same juxtaposition of objects and narratives, explored in the previous example, that the audience was invited to carry the work forward. The work, which explored the impact that genetic technology might have on ideas of love, romance and dating, was presented as an installation consisting of 25 dolls (with illustrated surfaces) displayed on a large table, 4 DVD players showing edited interviews with single women discussing how they might use the dolls in their lives, and 55 blank dolls resting on shelves. Here too, the exhibition acted as a space where research and thinking took place in situ and in action. The recordings of the 4 interviews placed amongst the objects offered personal stories while operating as a catalyst to enter into a dialogue with the work. From statements of concern: Lady 01, *"A genetic future seems so far away, even though it may not be. I'm scared of it, if we start to allow things like developing humans outside of nature, what do we become?"* to imaginings around living with the dolls: Lady 02, *"If I had one for every single relationship there would be lots of them. A cupboard full. It would be difficult having memories around, sometimes that's uncomfortable. If it was*

*a bad relationship you would probably destroy it. Cut it up into little bits, run over it with a steamroller, flatten it. You could have funerals... that would be cathartic.*” the narrative montage evoked a specific kind of thinking space which worked to unlock an active agency in the visitor (co-researcher) aimed at facilitating different ways of thinking while enhancing their experiences with who they are and where they stand. Like Auger and Loizeau’s second iteration of *AfterLife*, Dunne & Raby positioned the exhibition as an experimental system through a staging that invited embodied, situated and enacted forms of cognition. At the same time it forced the visitor (co-researcher) to think through his/her own position in relation to the social, cultural and ethical impacts of genetic engineering.

## 9.6 Conclusion

What these examples point to is how critical design can function as a space for thinking within the parameters of the exhibition context. To return to *AfterLife* for a moment, Auger and Loizeau’s engagement with challenging the public’s perception of notions of life after death extends beyond merely presenting the work within a clearly defined narrative or knowledge structure. By manipulating the staging and mediation of the work to include personal narratives that left room for uncertainty the designers shifted the exhibition from a space of aesthetic contemplation to a dynamic site for thinking things differently. Echoing Borgdorff’s contingency approach, the designers invited the visitor (co-researcher) to linger at the frontier of what there is, while offering insight on what might be – ultimately appealing to the visitors imagination to carry the work forward. Each of the preceding examples illustrate a consciousness of research with ‘r’. It is the search that they are inviting the audience to participate in, whereby the exhibition assumes an experimental value which acts as an entrance point for critical thinking about what we ‘know’ and ‘understand’ as well as ‘who’ we are and ‘where’ we stand. Opening up the theme of the exhibition as an experimental system for critical design allows for a different field of action that positions the exhibition as a context of discovery that seeks not so much to produce knowledge but rather to provide a space for thinking *in situ* and *in action*. What is implied here is the exhibition as a specific system of critical design, which treats its subjects as uncertainties, and itself as proposition. In this sense, the exhibition acts not only as a form of mediation for critical design

practice, but more importantly as a site for enacted research. But it can only do so by remaining flexible, unpredictable, and open to the unknown, allowing the visitor to inhabit problems or situations rather than offering opportunities to analyse or objectify from the sidelines.



. . . . Chapter ten

## [EXHIBITION REVIEW]

The Criticality of Informatics:  
Timescape by Local Projects in  
Collaboration with Ben Rubin, Mark  
Hasen, and Jer Thorp

National September 11 Memorial Museum, New York City,  
U.S.A.

*“No Day Shall  
Erase You From The Memory Of Time.” Virgil*

### Introduction

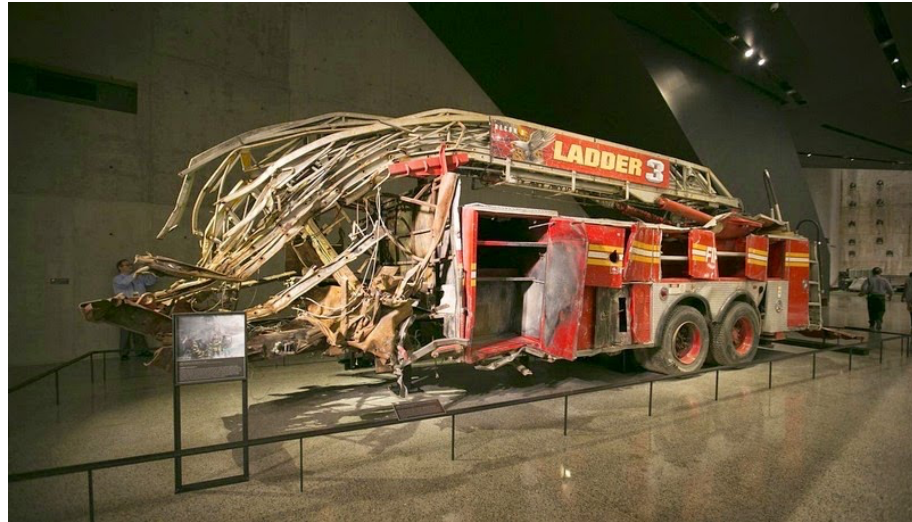
This article explores the possibilities offered by employing critical design as a curatorial strategy in the museum. It considers the indeterminacy and unpredictability of critical design as offering the potential to extend the museum beyond grand narratives, while emphasising the institution and its practices as vital (responsive) structures for thinking. Examining Local Projects' *Timescape* at the *National September 11 Memorial Museum* demonstrates how critical interpretation tropes involving matrices of relationality, possibility, and criticality, function as points of investigation rather than summation. In such conceptions, predicated on indeterminate strategies, interpretation is positioned as relational and dynamic, a matter of concern rather than something factual and fixed. (Meszaros 2008) This

suggests the potential for an interpretation practice that not only presents different thoughts, but at the same time challenges the thought system that produced them.

## Exhibiting Criticality

Figure 10.1 – The remains of a New York City Fire Department ladder 3 truck exhibited at The National September 11 Memorial Museum. The truck helps tell the story of first responders on 9/11.

image: 911memorial.org



In 2014 *The National September 11 Memorial Museum* opened at the World Trade Center site in New York City. Lying some 70 feet below the twin reflecting pools that mark the vacant footprints of the north and south towers, the museum acts as memorial and museum respectively.

Commemorating the September 11, 2001 terrorist attacks with a brief reference to the World Trade Center bombing of 1993, the museum houses more than 10,000 artifacts, 23,000 photographs, 1,900 oral histories and 500 hours of film and video, that work together to concretise and distill the events of that frightful day. (Memorial Museum 2016)

While challenging the authoritative narrative so common in historical museums, the Memorial Museum emphasises collective memory as their primary mode of display. There is a privileging of the personal as the predominant form, whereby the section of artifacts and media coalesce into a pluralism of experience and testimonies. As Jake Barton, principle designer at Local Projects, the studio responsible for the museum's exhibition design, explains, "The events of September 11 are still raw in our memories, existing somewhere between history and current news. A traditional approach to a historical museum using an 'official' narrative would be impossible. Instead, we presented a collective, ongoing story told by those who lived it." (Barton,

2014) From the introductory exhibition, which offers a collage of testimonies of 417 people describing where they were when they first heard about the attacks, to the recorded sound of the final phone calls played on a perpetual loop, the installations evoke a museum with a plurality of views. This personal approach is further expanded and rerouted by the overall scenography filled with dismal relics and mementos of a past event – a half-crushed fire engine (Fig. 10.1), a tapestry of tower floors and debris compressed during the collapse, images showing people leaping to their death from the burning buildings, and a selection of xeroxed handbills with photographs and descriptions of missing loved ones. Read together, the swathe of exhibits explicitly invoke and emphasise an articulation of 9/11 as a general story grounded in remembrance and morality.

This portrayal of the museum as an evolving living architecture of collective remembrance accords with New York Times columnist Holland Cotter’s description of the Museum as a “communal, life-honoring memorial service perpetually in progress”, where photographs of the nearly 3,000 people who perished on that day cover the walls, and some 14,000 still unidentified remains reside in a room open only to family members of the deceased. (Cotter 2014) However, despite the multiplicity of voices and views within the museum, the portrayal of 9/11 as a grand narrative remains. Whether conscious or not, the problem is that the Memorial Museum is still predicated on a general discourse grounded in the dichotomy of good versus evil that defines and limits much of what is shown within the space. As Cotter writes:

The prevailing story in the museum, as in a church, is framed in moral terms, as a story of angels and devils. In this telling, the angels are many and heroic, the devils few and vile, a band of Islamist radicals, as they are identified in a cut-and-dried, contextless and unnuanced film called “The Rise of Al Qaeda,” seen at the end of the exhibition. (Cotter 2014)

But Cotter continues, “it’s not that the narrative is wrong, it’s that it is drastically incomplete” (Ibid.), which one could excuse from a museum that is poised to avoid singular ‘official’ narratives while regarding itself a work in progress. But we may quickly recognise that the old monological model based on a single official truth underpins the majority of the interpretation exercised by *The Memorial Museum*. In fact, while both plurality and personalisation are the main motifs of the museum, in many ways *The*

*Memorial Museum* subscribes to a ‘folk’ tradition of preserved personal ephemera frozen through traditional institutionalised museum practices. Objects are used to tell the events of the past through interpretation practices associated with one-way communication and thoughtful respect in an attempt to concretise and distill an event. (Williams 2011: 230)

This traditional model of museum interpretation has been called into question over the past two decades. Canadian museologist Cheryl Meszaros has called it the ‘pedagogy of display’ (2008). She argues that while there seems to be a mutual consensus that interpretation entails an educational activity which aims to reveal meanings and relationships rather than simply to communicate factual information, (Tilden, 2007, Roberts, 2014; Knudson, Cable and Beck 2003: xi) the reality of the situation reveals a practice more often than not centred on the presentation of objects in a way that is intended both to communicate certain messages to the public and to instruct them on the importance of those messages. (Cheryl Meszaros 2008: 240) As a result there remains a relatively limited discourse around new frames for interpretation through which spaces of criticality might be created. Meszaros’ observation is made in relation to a questioning of museum interpretation practices that centre on master narratives and a one-way passage from the unfamiliar to the familiar. (Ibid, p.244) As a counterpoint to this fallback mode of interpretation, she identifies what could be deemed a discursive strategy of interpretation, as a valuable model for the museum, and in doing so questions the authoritative traditions of meaning-making in museums. Inspired by Hans-Georg Gadamer’s understanding of interpretation through phenomenology, Meszaros defines an interpretive planning that can apprehend the unfamiliar and defamiliarise the familiar, leading us to a place of inquiry. She states:

Particularly in these formative moments, interpretive planning has the potential and the power to undertake and to model more equitable dialogues with history, authority, and prejudice. Similar to the way that Viktor Shklovsky describes how poetic language defamiliarizes the familiar, helping us pay attention to language that is otherwise invisible, interpretive planning is in a position to help visitors pay heed to routines of meaning-making. This form of interpretation would not work to make interpretation seamless; it would not ask: What are your opinions? Rather, it would ask, as Nealon and Searls Giroux do: Where do the thoughts, ideas, opinions and experience that we call our own come from? (Meszaros 2008: 245)

In this article I will examine one work within *The National September 11 Memorial Museum* that preserves this kind of thinking, and in so doing I will explore the potential for critical design as an interpretive planning device, as defined by Meszaros, that goes beyond a single official narrative, while allowing elusive, contradictory accounts to be examined and critically investigated within the museum.

## Timescape

Figure 9.2 – Installation view of *Timescape* by Local Projects.



*Timescape* (Fig. 10.2), designed by the New York studio Local Projects in collaboration with Ben Rubin, Mark Hasen, and Jer Thorp is a data-mining algorithm experienced as a large-scale wall-projection on the ground floor of the museum. Commissioned specifically to deal with the ways in which 9/11 shapes political debate, current events, and news coverage, the project problematises the museum's grand narrative while emphasising museum interpretation as an unstable practice with fields of possibilities. Presented as an enormous 34-foot long dynamic graph, *Timescape* scrapes and tags meta data from over 2 million news articles from 100 different International sources like the Associated Press, Google News, LexisNexis and Reuters, in an attempt to chart the impact of September 11 commencing with the singularity of 9/11 and extending outwards to the present day. (Local Project 2016) Programmed to sift through daily news – finding key terms relating to 9/11, weighing them according to prominence in a story, and extracting connections among them – *Timescape* uncovers events as they are, in news headlines. Updated nightly, the algorithm assembles groupings of terms

relating to 9/11, some of which are unmistakable: ‘Osama Bin Laden’, ‘Pakistan’ and ‘Afghanistan’, and others seemingly less so: ‘North American Aerospace Defence Command’, ‘Aircraft’, and ‘Federal Aviation Administration’ or the arc of Dick Cheney from the beginning of 9/11 to the end of his career. Each cluster is projected onto the wall along with headlines related to its key terms, resulting in familiar and not so instantly accessible narratives. In Cliff Kuang’s analysis of the work he describes it as, “a constantly evolving chart of news articles connected to 9/11”. He continues,

At times it looks like a spray of data points charted against two axes: time versus frequency. Each point is labeled according to a topic or theme, from lead hijacker Mohammed Atta to the Snowden leaks. As the display cycles, each theme is unfurled in a new, more detailed chart that reveals the series of headlines that relate to it. (Kuang 2014)

Here interpretation becomes a device through which a subject can be approached as a relative not absolute truth. Importantly, the algorithm does not sift out incorrect reports about, for example, weapons of mass destruction in Iraq, it simply shows what is being reported in news headlines. (Shahani 2014). In that way it allows history to unfold as our understanding of 9/11 and its effects continue to develop, while critically acting as a catalyst to raise questions about mainstream media, museums, global politics, freedom and morality. Described in the wall text as “a galaxy of associated terms radiating out of this one event”, the work ultimately acts to stage the flow of information connected to the global media event of September 11, while producing a site for speculative narratives individually animated by data.

This approach to museum interpretation, dependent on both pluralism and a lack of completeness of being, signals an understanding that meaning is not immanent but is instead situated within a field of possibility open for different individuals to make their own connections and produce their own significances. (Rogoff 2006: 2) As Barton explains: “We wanted to focus the design on something that wouldn’t render it overly simple, but would tell the story of both the data and how we were deriving the individual timelines.” The resulting timescape, Barton declares, offers a glimpse at “understanding how the things that we’re seeing and feeling and experiencing today were impacted and even shaped by 9/11.” (Rosenthal 2014) Each timescape functions as a fleeting moment of exchange within the ongoing dialogue on

9/11, whereby key words and news headlines are placed in relation to one another as well as the world their mirror. Such a method ultimately enables us to recognise that we are embedded in a situation, one both settled and unsettled. In this respect the September 11 narrative is put in relation to a wide variety of things. In doing so the museum enables a greater diversity of understanding, whereby visitors need no longer rely on established museum discourses. On the whole, *Timescape* destabilises interpretation as there is very little direction given about what a visitor is supposed to look for and how they are to interpret the work in the wider context of the museum. In this sense, there is no single intended narrative to the work, which frames interpretation as a durational, transformative, and speculative activity. As a result, it invites visitors to produce several interpretations while questioning their understanding of the events of that day, and their ever evolving histories.

### **Critical design: An Interpretive Planning Device for Museums**

To some extent focusing on the behaviours of *Timescape* and its responsiveness to the September 11 attacks helps us to understand how this work might be thought of as a critical interpretive device, which leads the audience to a place of inquiry. (see Chapter 3) In the same way that critical design relates more to problematising and questioning than problem solving and definitive answers, *Timescape* is intended to privilege a space of criticality rather than an institutional position. Primarily motivated by an impulse toward shaping narratives that remain open and ever evolving, the work seeks to map the development of 9/11 against a broader context. In this sense, *Timescape* becomes a point of investigation rather than summation, allowing meaning to accrue in time rather than through a fixed a priori interpretation.

On a primary level, this contributes to an articulation of *Timescape* as a critical interpretation device through which viewers are invited to question their understanding of 9/11, while allowing for open ended processes of engagement, interruption and possibility within the space of the museum. On a secondary level, taking *Timescape* as an example signifies that the relationship between the museum and critical design need not stop at exhibiting critical design for a public to consume, nor at using the exhibition

as a space to produce critical design in situ. Instead it suggests that critical design can now be posited as a form of interpretation device for the museum curator. What is implied here, and also what is at stake in a more general sense, is the transformation of museum interpretation itself, and ultimately its paradigms of truth. This means that a non-coherent narrative is invited into the museum, embracing uncertainty and unpredictability while constructing multi-layered platforms of questioning and experience, whereby neither form, context, nor spectator remain fixed or stable.

We can thus perceive of curating critical design through three lenses; the first is as factual communicability and representation, whereby critical design is presented as a work – shown through models, photographs and videos (see *UmK* chapter 5). The second as research, which enables a more immersive experience prefacing process over final outcome, while positing the work as a discourse network rather than a discrete thing (see *Risk Centre*, chapter 6). Third as a framing device for a topic, which introduces speculation into an already devised narrative structure (see *Timescape*, above).

Critical design in this third context transforms into something that expresses a different role for museum interpretation. In this instance, interpretation moves away from its traditional understanding as a device that helps define the objects on display, while supporting the presentation of the overall message (message unity), to one which enables and enhances reflexive dialogues among audiences and participants – ultimately offering a new coping mechanism for the limitations of the museum as an educational institution.

Let us examine this orientation towards employing critical design as an interpretation device for museum curators further by exploring *Timescape* in a little more detail. By commissioning Local Projects to produce a work that would present the ways that 9/11 shapes political debate, current events, and news coverage, without casting a closed view on the event, the museum opened itself up to criticality (see chapter 4), while recognising the limitations of its own thoughts. This dynamic is perhaps most visible when we consider Local Project's aim for the work, which was to develop accounts of September 11, past and present, without highlighting a linear chronology. Thus, *Timescape* was not about conveying as authentic an image as possible about September 11 while establishing the definitive account, but



quite the opposite. The aim was to both depict the history of the September 11 attacks, but also to simultaneously question and extend our understanding of the event and its network of influence on our world today. This was produced through a dramaturgy based around discontinuity, disrupting the purely national perspective of 9/11 while suggesting a web of newly established discourses and connections to ongoing geopolitical repercussions and wide-ranging side-effects. In this way *Timescape* becomes an intervention into prevailing discourses and memories of September 11, while inviting a range of references that elude to the macro and micro transformation of our contemporary realities.

Similarly, utilising an algorithm that charts the impact of 9/11 through news, *Timescape* generates its own forms of thought and sensation clearly distinct from the overall narrative of the museum. As a result, it enables the events of September 11 and their historical significances to be rendered as a dynamic cultural form and not a fixed story with an concrete ending. Such a perspective directs our attention to understanding patterns, and how particular patterns come to the fore, while others remain to be seen. For Barton, this is most evident when the work surfaces disparate connections. For example, in 2005 when all the airlines start to go broke. He states: “That’s not directly connected to 9/11 – but the algorithm just sort of found that and included it because of the search terms on those airlines.” (Manaugh, 2014). In this sense the work invites an appreciation of how the events of that day connect to the here and now and to a global elsewhere. As Geoff Manaugh says of the algorithm “As the algorithm learns – or at least absorbs and includes – new terms over time, it will also continue to highlight new connections of its own, patterns and clusters lurking beneath the surface like a landscape emerging from mist.” (ibid.)

This network of associations that emerges through the algorithm, and the resultant storylines and trajectories entails a move away from approaching the exhibit as a space of intentionality, exemplification and reproduction into a matrix of possibility, structured through the unknown. In this context, ‘interpretation’ is no longer seen as an overt process of producing definitive narratives, but transforms into something that is in perpetual becoming, that sees interpretation itself as something that performs. *Timescape* therefore acts as a lens from which to reflect back on our world. It promotes chance juxtapositions and associated readings while

contributing to the museum's transformation from being a grand narrative of an event to a space for thinking things differently. Thus *Timescape's* interpretation of 9/11 expresses a different type of awareness of the September 11 attacks, while underscoring the way in which this living, shape-shifting event undercuts a number of commonly held assumptions about the world.

As the museum's director, Alice Greenwald has commented: "there is a kind of objectivity inherent to an algorithm that challenges the human condition of our limited perspective." (Shahani 2014) Art historian Mary Anne Staniszewski counters this when she argues that even algorithms aren't free of bias. (Ibid.) For example, *Timescape* only reads English-language news sources, which she claims is "Very typical of an American point of view of things," (Ibid.) But while *Timescape* may well be biased, biases – as an occurrence of the taken for granted(s) in our world – come to the fore. The point I am trying to make is that part of the work is about making visible this inherent bias in our tools of interpretation, whether in the museum or in the established systems of our daily news. In this sense, *Timescape* is as much about questioning our relationship and understanding of 9/11 as it is about alerting us to how modes of authority are staged and how we get information in the contemporary world. Perhaps the most remarkable feature of *Timescape* is this way in which it presents different thoughts on 9/11 through the news, while challenging the very systems that produce these thoughts. To paraphrase Meszaros, in this space for understanding, biases come to the fore, both in the role they play in opening up what is to be understood and in the way they themselves become evident in that process. As our biases become apparent to us, they can also become the focus of questioning. (Meszaros 2008: 245) The important point here is that *Timescape* functions as a reflexive object that opens up a space for questioning, and as much as possible gestures at a critique of the Memorial Museum emphasising the significance of understanding 9/11 beyond all the representations, objects and stories closed off by the institution. Constituting a network of implicated persons, organisations and relations associated with what in many ways is an unrepresentable event, *Timescape* thus allows the museum to subvert traditional museological practices focused on 'singular

narratives' and 'official truths' and focus instead on the dynamic of duration over stasis and the privileging of juxtaposition, possibility and a story with no end.

## Conclusion

What *Timescape* ultimately attests to is that rather than working to support message unity and official narratives, museum interpretation practices, whether they take the form of exhibitions, education programs, written texts or digital productions (Meszaros 2008) have the potential to activate different ways of thinking in the museum. Indeed *Timescape* relies on the recognition that interpretation can function as investigation rather than summation. The work operates as something beyond the factual and the fixed, not merely as a clearly articulated stable narrative but via a criticality that opens the subject (in this case the impact of 9/11) to fields of possibility and questioning. According to Meszaros, interpretation practices can apprehend the unfamiliar and defamiliarise the familiar, leading us to this place of inquiry. (Meszaros 2008) Understood in this way, interpretation, she says, has the potential "to bring different ways of comprehending the project of human understanding into the museum." (ibid: 241) This open-ended, disruption-orientated view of interpretation opens up a space for critical design, which emphasises the significance of reflexivity, possibility and criticality. To paraphrase Irit Rogoff, a move to critical design as an interpretation device is an opportunity to 'unbound' the museum from all those practices that limit its ability to explore that which we do not yet know or that which is not yet a subject in the world. (Rogoff 2006: 3) This suggests the potential for an interpretation practice that not only presents different thoughts, but at the same time allows visitors to confront where their thoughts, ideas, opinions and experiences come from. (2008: 245) In this way, a move to critical design as a curatorial strategy for museum interpretation offers an opportunity to disrupt grand narratives, while positioning the museum and its practices as vital (responsive) structures for thinking things differently.



. . . . Chapter eleven

# Conclusion:

## Critical design and the Curatorial

### 11.1 Thinking *Through* Design and Violence

In 2015 the Museum of Modern Art (MoMA) in New York invited experts from fields as diverse as science, philosophy, literature, film, journalism and politics to respond to a series of challenging design works that each hold some form of relationship to violence. Positioned as a ‘curatorial experiment’, *Design and Violence* was a project organized by Paola Antonelli and Jamer Hunt that explored the intersection between contemporary design and societal violence in its myriad forms. Alongside examples of product design, graphic design, fashion, architecture and gaming the exhibition included examples of work that are described as critical design. Developed as an open-source online exhibition<sup>16</sup> supported by a series of public debates, a symposium, and a book, *Design and Violence* invited feedback, questions, criticism and even discussion from its audiences. Unlike conventional design exhibitions, framed as institutionally driven communication chambers with a single expert voice, *Design and Violence* was devised as a discursive space through an open-invitation to discussion. It looked for ways to share power and authority, while emphasising collaboration, openness, activation and dialogue. As the curators state: “To better understand the broader impact of design, we invited authors from outside the field to write about many of the projects we selected, hoping they might jolt us out of complacency, professional blindness, and simple overfamiliarity.” (Antonelli & Hunt 2015: 13) They continue, “To expand the range of voices even further, we opened each post to comments from the reading public, invited the object’s designer to weigh

<sup>16</sup> *Design and Violence* was originally proposed to the MoMA by senior design curator Paola Antonelli as a exhibition to be housed in the MoMA’s design galleries. MoMA turned it down. In response, Paola and assistant curator Jamer Hunt housed the project on a wordpress site – outside the museums jurisdiction. MoMA came to see value in the project and moved *Design and Violence* to its own website. It was later published into a book by MoMA press. *Design and Violence* has since been turned into a onsite exhibition at the Science Gallery Dublin, Ireland.

TOA: “Design and Violence with Paola Antonelli “ <https://www.youtube.com/watch?v=RK6lIO3KiPg>

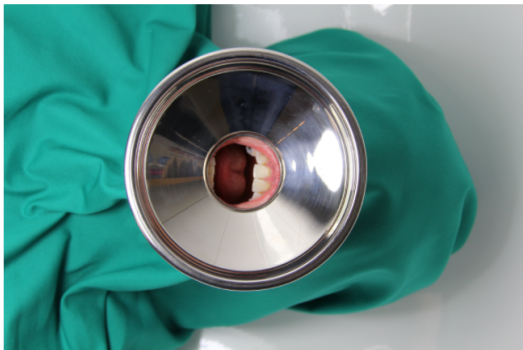
in, and encouraged both author and designer to share the post and solicit comments through social media.” (ibid.)

Figure 9.2 – Screen Shot of Republic of Salvation Post in Design and Violence at MoMA.

<http://designandviolence.moma.org/republic-of-salvation-michael-burton-and-michiko-nitta/>

**DESIGN AND VIOLENCE** Archive Authors About 🔍 📱

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DECEMBER 19, 2013 | 41 COMMENTS

**Republic of Salvation (Michael Burton and Michiko Nitta)**

by John Thackara

*From the curators: Designers Michiko Nitta and Michael Burton often work from a conceptual perspective—meaning that they identify future problems and imagine possible outcomes. In the Republic of Salvation scenario, which is part of their larger After Agri project, they contemplate what could happen if our society were confronted with food shortages and famine. They envision a dystopian fallout in which the government is forced to implement a strict food-rationing policy, whereby an individual's food allotment is carefully tailored to the emotional, physical, and intellectual demands of their employment. The example explored here is that of an industrial worker's diet: composed largely of starch, allowing the body to work for longer periods on fewer nutrients.*

I'm with Wendell Berry on this one: "The cities have forgot the earth and will rot at heart till they remember it again."

These oh-so-urban artists ask us to imagine what the world will be like in the event of a global food shortage, but they exhibit no curiosity as to the causes of this imminent threat. They focus, instead, on ways to change the body so that it can be fed synthetically—a solution that contrives to be both

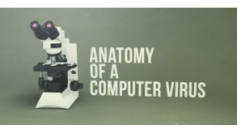
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by Paola Antonelli



MAY 7, 2016 | 4 COMMENTS

Lethal Injection (Chapman, Wiseman, Dawson, Deutsch)

by Ricky Jackson

The nature of *Design and Violence* meant that information and comments wholly opposed to those of the curators and the institution often found their way into the exhibition. For instance, John Thackara's pointed critique on Michael Burton and Michiko Nitta's critical design project, *Republic of Salvation* opened the floodgates to an intense discussion of the politics and ethics of critical design practice in general, spurring comments ranging from "Thackara is spot on. Critical design isn't just a waste of time, it actually does damage to how people understand design" (Matt: January 2, 2014) to "bring me a design fiction that can demonstrate that it fully understands the complex politics of say, birth control in a country like Pakistan and can pose thought-provoking questions about what can be done, and I will not laugh at its shallowness." (Anonymous: January 12, 2014)

Ultimately, differences in perception between the curators on the one hand and the audiences on the other did not only have an impact on the type of information and discussion generated by the exhibition, but these

disparities in opinion also filtered down to the choice of design objects and the curating process in general. As Antonelli and Hunt explain:

as *Design and Violence* developed, commenters helped us to recognize that we were too often featuring projects with abstracted or symbolic notions of violence. Over the course of several months, the projects we selected shifted in orientation; we turned to designs and to authors who could speak more directly to the distorting cruelty of designed violence” (Antonelli & Hunt 2015: 14)

In other words, the focus shifted from a more critical and conceptual approach – featuring projects with abstracted or symbolic notions of violence – to one concerned with a directed and applied strategy of representation. For example, the AK-47, designed by the Soviet military engineer Mikhail Kalashnikov, was featured in *Design and Violence* on October 29, 2014. For this particular post the curators invited China Keitetsi, a former child soldier in Uganda, to respond to the design while asking their audience: What responsibility do designers bear for the products they design? (Design and Violence Website) In this sense the exhibition went from using design as a lens to examine violence in our world, to an exhibition about design used for violence.

Ultimately, in the spirit of experiment, *Design and Violence* set out to engage a public in discussion and debate, while at the same time what came through was that the curators were confronted with the expectations that their reading public have of design. It becomes clear that the public expects design to sit within a problem-solving paradigm, and “not from a position of raising awareness and debate of issues through the creation of fictional scenarios that the creators do not necessarily advocate.” (Parsons, January 1, 2014) This, once again, suggests that critical design demands a particular form of mediation capable of engaging its audiences to think *through* design rather than *about* it.

My primary motivation for using this example is as an opportunity to revisit the arguments developed in the previous chapters. This will allow me to at once summarise the overall thesis as well as point to potential avenues for further exploration and investigation. I have argued throughout this thesis that works of critical design are formed as much through their mediation as in their method or form. And further, that one cannot think of critical design without thinking of its audience. This makes it all the more important to look for spaces which allow for the public to become part of the negotiation

processes. But what this requires is a framework that can provide designers with a support structure to produce and debate their ideas and works with their audiences, and thus bring about critical thought, discourse, and speculation.

Here again, current museum exhibition formats are put in question as appropriate platforms for mediating critical design. In very general terms *Design and Violence* fell short. Instead of encouraging the public to engage with the projects it desired to present, using them as a stepping stone for wider discussion about violence in our world, it was provoked to adopt an alternative strategy by its own weakness. It is perhaps a bit harsh to charge the curators with the responsibility of teaching the public how to think through design rather than about it – by way of an online exhibition – but either way the failures of this example remind us of the importance of mediation for the practice of critical design. Continuing to take *The Republic of Salvation* as example, I will not discuss the project in detail, but will focus instead on the reasons for the museum's failure in engaging their audiences in its discourses. The simplest explanation is that John Thackara's comments on Burton and Nitta's project focused heavily on the validity of the discipline of critical design. With statements from "These oh-so-urban artists ask us to imagine what the world will be like in the event of a global food shortage, but they exhibit no curiosity as to the causes of this imminent threat. They focus, instead, on ways to change the body so that it can be fed synthetically – a solution that contrives to be both downstream and fantastical at the same time" (December 19, 2013) to "If the artists were to focus more on observable nutrient and energy flows, and less on infantile science fictions, they would discover that the roots of our food crisis lie in a bad idea that can rather easily be fixed." (ibid) and a final question from the curators that asked "Do violent, dystopian visions ever lead to positive, substantive change?" (Antonelli and Hunt: December 19, 2013) the exhibition directed the audience's attention on the medium of the work, not its message. The point here is not to argue whether *The Republic of Salvation* is a good or bad design. The point is that this approach taken by the curators, to frame and contextualise the project through its ability to lead to positive substantive change (to problem solve), belied the connection between design and violence, while encouraging instead a debate focused on the blind privilege and political accountability of critical design. The



<sup>17</sup> While each post in *Design and Violence* was open for comment from the reading public, the object's designer(s) and author of the post, it is important to note that the entirety of the comments directed at *The Republic of Salvation* seem to be drawn from a particularly design aware audience. With the majority of posts coming from well known names within the field – James Auger, Tim Parsons, Cameron Tonkinwise, Luiza Prado, to name a few – it would seem that MoMA's framework did create an opportune channel for dialogue *within* the field, but not necessarily with a wider audience.

consequence here was that while the work instigated a lively discussion from the public<sup>17</sup> – drawing in 41 comments from around the world over a period of 2 1/2 years – rather than engaging in a debate on food shortages and famine, the entirety of the discussion concentrated on the validity of critical design as a practice. In essence, it was not the content of the work that interested this audience, only its category of practice.

Suggested in this understanding is not so much the importance of creating spaces for discourse and debate about design (which MoMA was clearly capable of doing), but how to create a space for an engagement through design, which is to say, how an exhibition can function as a participating space for both thinking and experience through the designs it presents. As we have seen with the many examples of practice explored throughout the thesis, such a space is exceedingly difficult to achieve – though not impossible. In fact, a glimpse of the thinking *through* design sought by the curators of *Design and Violence* is visible in one of the critical design projects included in the exhibition. *The Euthanasia Coaster* designed by RCA graduate Julijonas Urbonas (2010), is a provocative work that considers an alternative path to death for the fatally ill. In reaction to respondent Prof. Antonio Damasio's objection to the work - based on the project's allusion to a 'joyful euthanasia' (Domasio - April 23, 2014) one reader wrote:

Your post extends from a singular premise – that death is necessarily a tragedy. As somebody who is in pain every day, i do not believe this is the case. Sometimes life is the tragedy. when ones only experience is overwhelming pain, it is a tragedy to be prevented release. For many there is only one option for release and that is the final option. I feel it likely that one day in the distant future i may choose this option myself. Doing so through the experience of something so amazing that the human body cannot withstand it sounds a whole lot better to me than a boring grey room. To remove all 'violence' from humanity would be to utterly sanitise life, to remove the experience of anything but greys. Certainly the spectre of interpersonal violence is undesirable, but i WISH to be violently happy, violently sad, violently moved. I wish to feel violent acceleration and violent relief. Conflating violence with anything that challenges us is to remove all value from the human experience, to paint the world grey. (mycosys - May 4, 2014)

Unlike the post for *The Republic of Salvation*, which questioned the value of critical design itself, here, the very same framework invited readers to debate, discuss and challenge their ideas and understanding of euthanasia.

This shift from thinking *about* design to thinking *through* design can be ascribed in part to Damasio's perspectives and the question asked by the curators: Is euthanasia a form of violence or a form of compassion?

It seems revealing that two accounts of the works in this exhibition both emphasise how the audience is gently manipulated by the leading question. While this is simply a form of textual influence, which in itself has its limitations, taken together these examples reveal the importance of mediation for whether or not the audience is invited to think about the design or think through it. In my opinion the current disconnect between critical design and its mediation is the most relevant issue in need of discussion within the field today. As critical design continues to raise its profile and demand an ever-increasing awareness in the minds of the general public, there comes a greater need for formats that can support and even enhance designs' new imaginaries, while accounting for all its complexities.

The museum exhibition, as I have argued throughout the thesis, can be an effective and flexible medium for both the production and dissemination of critical design. Often however, its role in critical design is still relegated to a space for justification and knowledge production; losing the potential for speculation and emancipation inherent in the work. In this sense, critical design, my argument continues, is inherently a challenge to the conventional museum. But in return it offers the museum the opportunity to reassess its curatorial practice, to reconsider everything from how curators structure the experience of works of critical design to how they effect the ways in which critical design is both made and circulated to a public.

It needs to be emphasised that critical design is just one among many design practices that challenge current conventions of the museum. Recent developments in electronic and digital design and other process driven practices, such as design activism and social design, are driving the museum to reassess its function, methods, techniques and intentions on account of their immaterial, conceptual, critical and systemic properties. In truth, however, many of these practices offer the museum an opportunity for a certain importance within the local and global public to react faster, to debate, to interact and to produce.

This thesis has explored these challenges with regards to issues around both the production and engagement of critical design. In the preceding chapters, I have plotted the distinct behaviours of the field of practice and

argued that the production of works of critical design is carried out not for the purpose of creating objects that can circulate in the market, but for generating insights that contribute to what we know and understand about ourselves and our world. The conclusions I come to in this thesis therefore have implications not only for the behaviours of critical design, but also the contexts and conditions of its dissemination. There is a certain urgency for critical design to spend more time and energy on its mediation, if social emancipation is to be achieved. It is not enough to keep producing works of critical design if we are not going to figure out how they can be disseminated to a public in a way that permits an experience with the work that has a purchase on the audiences' imaginaries, while engaging them in discourse, questioning, and action. As a consequence, the task today is to foster frameworks for greater interaction with critical design, while recognising the centrality of the presentation of the work in order to make critical design perceptible to a public.

## 11.2 Review of the Thesis

This research aimed to problematise, define and reassess how contemporary museum exhibitions are being used to disseminate critical design practice. These aims were developed on the premise that works of critical design can not be legitimated in advance, but need to be performed with an audience in order to find their purchase in the world. In chapters 1 and 2, I indicated that the objective of this study was, in part, to consider the characteristics of critical design practice and specifically to establish the inadequacy of approaching works of critical design as art. Drawing on the work of historians such as Arthur Danto (1964), Tido von Oppeln (2010; 2013) Klaus Spechtenshauser (2010) and Ramia Mazé (2011) I suggest that critical design is by no means concerned with the dissolution of boundaries between the disciplines of art and design, but instead through its works is contributing towards a philosophical discourse firmly placed within the historical category of design. The conceptualisation of 'a work of design' facilitated an analysis of the self-reflexive understanding of critical design and the role of criticism from within practice. The discussion focused on an examination of the behaviours of the work as key to understanding the role of critical design as revealing and disrupting the invisible set narratives, beliefs and ideologies that surround us,

while encouraging more active forms of intervention and agency. It described critical design as a platform to open up new possibilities for both design and designers but also for rethinking everyday life. It also established that, through the concept of ‘a work of design’, it is possible to censure any notion of artistic autonomy as the very concept undermines the true purposes of the field.

Similarly, instead of looking to outside sources as a way to understand how critical design operates, in chapter 3 I defined critical design as part of an evolving field of operations whose salient features are best understood through the concept of a para model of practice. With reference to Kraus (1980), O’Neill (2012) Paldi (2012) and Rabinow (2012), critical design was identified as a reflexive system constructed through and around issues with the task of fuelling new forms of relations, power and action within society. Building on this assertion, the chapter introduced DiSalvo’s tactics of projection and tracing (2009) to give evidence to the discursive nature of works of critical design, situating critical design as a reflexive act located in the now as a means to map our contemporary conditions – tying it directly to its context. But while DiSalvo’s concept of tactics provide us with helpful and nuanced differences beyond the common, often historically and professionally constrained purposes of design, they fall short of corresponding to the complexity of critical design. In this sense Lury and Wakeford’s (2012) ‘device’ was particularly useful in establishing critical design as a complex ensemble of practices that are organised in response to an urgent need. Reframing DiSalvo’s notion of tactics as ‘devices’ of projection and tracing in networked terms helped to conceptualise the importance of the system to critical design while emphasising uncertainty and vagueness as inherent qualities of its practice. The premise here is that works of critical design are not static forms of representation of issues, but instead active measures which interfere in the worlds in which they are positioned. Put simply, the emphasis is on the creation of conditions for both thinking and action. Here works of critical design are seen as conversation starters and positioned as spaces for being able to think about thinking-differently-about-the-present; spaces for thinking about the possible. (Dilnot 2014) In this, I recognise that works of critical design act as interpretive frames or lenses through which one can peer into the past or future as a

means to understand ‘what-is’ through discoveries of how ‘what-is’ or what ‘may-be’. (Dilnot 2015)

The discussion in chapter 4 positions critical design as linking to theories of Reflexive Modernization (Beck, Lash and Giddens 2001) and its subsidiary concept of the risk society (Beck 1998). The argument made here stated that the reflex-like, open, uncertain, and individualising character of reflexive modernity uniquely matches the structure of device by which critical design was characterised in chapter 3. The discussion showed how Rogoff’s concept of criticality extends our understanding of critical design emphasising object worlds as embedding environments open for thinking and individualisation. It positions critical design as a mode of embodiment, a ‘living through’ the very problem we are trying to analyse and apprehend. While these sociological perspectives support an understanding of critical design as both a practice of and for Reflexive Modernization, the discussion introduced critical design as an epistemic practice in the sense originally described by Rheinberger’s theory of epistemic things (1997, 2007) and Knorr Cetina’s concept of epistemic objects (2000, 2001) The argument made here stated that epistemic practices are characterised by an ‘incompleteness of being and the capacity to unfold indefinitely’ (Knorr Cetina 2001) They generate questions while providing pointers to possible future explorations. It showed works of critical design as never completely understood. Rather works of critical design are approached as vehicles for materializing questions; sites of possibility and potentiality, tied to ideas of flexibility, collaboration, experimentation, research and thinking; and experiences where individualization can occur.

The focus here set up one of the main arguments made in this thesis: that critical design seeks participatory, democratic engagement, which points towards the importance of the very parameters of how the public understand and engage with the work. The discussion revealed that critical design is by no means a neutral thing, that the values and principles on which critical design is predicated are not universal. Thus, while critical design arguably needs strategies to make it visible and understandable, it is not so much its meaning as a category, genre, or object that is important to consider, but more so how each work participates in the construction of conversations and debate about what we want the world to be like.

As mentioned previously the purpose of the thesis has been to approach a new understanding of critical design through a focus on one of its major means of interaction and dissemination – namely, the museum exhibition. By following a grounded-theory approach my research considered the different kinds of roles the museum exhibition can play in fostering a productive relationship between critical design and its audiences.

The broadened conception of critical design that I developed in the first half of the thesis informed the discussion of the guidelines and criteria that can aid in assessing how the museum exhibition can act as an appropriate medium for the mediation of critical design. I have argued in this study that critical design practices task themselves with engaging in and enabling new perspectives on reality, drawn not from the actual but the possible. By implication, I argue that any design that engages with society through problematising, possibilising, questioning, and activation demands a methodological reading that is, at least in part performative. By this I mean that any dissemination of critical design must necessarily actively engage its audiences, allowing them to inhabit a problem rather than analyse it from the sidelines. Through this I argued that critical design exhibitions should aim to activate their audiences into intellectual emancipation. But this I maintain can be achieved in different ways: either through embodied criticality, which ‘brings together that being studied with those doing the studying, in an indelible unity’ (Rogoff 2006:2), or through epistemic environments that position the exhibition as a context of discovery – a transformative and speculative activity reliant on possibility and potentiality, thinking and perception, and lack of completeness of being. In both instances, the exhibition is positioned as a vital (in the sense of emergent, responsive) space for thinking things differently. I argue it is on this basis that a new relationship between the museum exhibition and critical design must be built. Here, the exhibition is considered not only as a ‘showcase’ for critical design, but also as a form of research process. The exhibitions and exhibited works considered throughout the research point to the potential for approaching the exhibition as a ‘work’ of critical design, not only a platform for didactic forms of display and sites of knowledge production.

Throughout the thesis three specific exhibition techniques are identified – 1) as theme (in which works of critical design are exhibited to explore an overarching thesis or subject), 2) as production (in which the exhibition itself

is used as a medium and as a genre of critical design), 3) as a device for interpretation (in which works of critical design are used as tools to deepen experiences in museums). I argue that in each of these three instances we need to recognise the exhibition as form of experimental activity with the potential to lend support to critical design's dialogic, questioning and reflexive methodologies. In this way we can begin to consider the museum and its exhibitions as a model of emergence as they enter a discourse of performativity that actively engages with their subject rather than merely offering it for consumption. The result is a collective space for knowing and experiencing via the performativity of both critical design and the curatorial.

### **11.3 Major Contributions and Future Research**

One of this study's contributions is that it brings about a set of conceptual constructs and critical criteria with which to address the planning, designing and assessing of critical design exhibitions. In contrast to many earlier studies on critical design which focus on what critical design is, my research contributes specifically towards the importance of its dissemination and engagement with a public and how the museum can work towards creating environments capable of not only nurturing, but, ultimately fuelling this form of design – providing a space to foster a productive relationship between critical design and its audiences. At present, the philosophy and practice of critical design curating is a very underdeveloped discipline. While the world of art curation has a rich history and philosophy of practice, the lack of an equivalent discourse in critical design has led to a situation whereby most of the methods of dissemination and mediation used for works of critical design are directly modelled on fine art or historic museum practices, which do little to support the works dialogic, questioning and reflexive demands.

By basing my research on existent exhibition practices as developed by both curators and designers I was able to uncover the complexities around curating critical design, specifically considering how an exhibition can function as a participating space for both thinking and experience through the designs it presents, and not about those same designs. Through this my intention has not been to solve the problem of the dissemination of critical design. This, for some, could be interpreted as a limitation to this study in

that it does not present concrete solutions or prescribe specific avenues for implementing change. But I would argue that this is in fact one of the important contributions of this thesis: that there can be no fixed recipe for curating critical design. In trying to create conditions of uncertainty, and a space capable of ‘living things out’ it seems counterproductive to present solutions, as it would, by definition, constrain and potentially undermine the work. What this thesis does offer is a knowledge of the importance of understanding what a work is, and its potential to communicate, while advocating for a curatorial practice open to experimentation and risk.

Through this thesis, I set out to demonstrate that the work of critical design hinges on its dissemination and communication to a public – which must be considered an inseparable component of the work itself. The implication is that the designer should not think of the exhibition as an afterthought but as inherent to the work, and that the curator must do the same. To return one last time to *The Republic of Salvation*, the *Design and Violence* platform would have been more useful if it invited the audience to engage differently in Burton and Nitta’s violent dystopian vision as a way to provoke discussion about our current relationship to food cultures and the impacts of agricultural habits on civilization, and to question what this might mean for the future of food. This research has drawn out the urgent need for more focus on modes of disseminating critical design in order to render them more powerful. The central aim of this study has been to find means for disseminating critical design that focus on engaging through the work not about it. This mediation, I have argued, is the necessary link between critical design and its audience. The museum exhibition is not the only medium for this way of working. If we want critical design to become a more accepted practice, its modes of dissemination must be further explored.

I have centred my research around the museum’s exhibition as a legible framework for critical design. I have largely addressed ways in which this medium can form productive relationships with critical design while proposing two exhibition methods for activating audiences into intellectual emancipation: embodied criticality and epistemic environments. With regards to the museum this study has predominantly focused on temporary exhibitions. As stated previously this decision was chosen for the simple fact that their inherent nature of impermanence offers the museum greater opportunity to push theories, explore themes, and challenge conventions;



making them far more valuable research subjects for this study. Consequently I have largely ignored other practices integral to the museum; namely the permanent collection, and along with it the opportunities it might hold. The interest in the permanent collection would be to build a more specialised framework for collecting and presenting critical design. As Scholze states: “Processes and systems are increasingly dominating design practice, with little or no intention to produce a tangible object as the final result. Quite often it is interaction, experience and critical inquiry that are the desired outcomes. Such a situation is challenging for museums that are by definition the place where tangible objects are collected, stored and displayed.” (2015: 62) Some of the models developed in this research could usefully be applied to this context. Critical design could benefit from further investigations into collecting and mediation frameworks that can accommodate the integration of action, process and experience. (ibid)

At the conclusion of this research, critical design has gained a far more substantial presence within universities and museums. With courses taught in various universities across the UK, Europe, Australia, Canada, and the U.S.A., and regular exhibitions including its works, there still remains a deficiency in theory to support new curatorial thinking and practice. Consequently, the possible avenues for future research are many, but I hope that in developing the ideas presented here, that I have made a modest contribution to its promising future.



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