IIb.

polluting the possible • *why make prototypes* • *the effects of objects on the world* • *the spheres of communication and production* • ***critical design*** • *A/B manifesto* • *the future cone* • ***this s not a critical design project*** • ***beyond Dunne & Raby***

Polluting the Possible

The conception of information as a "free-floating, decontextualized, quantifiable entity" powers watcher objects and a culture that seems to shear off our idiosyncrasies. How can we fight back?

Lanier provides one possible avenue for revolt when he describes what technologists do:

> Technologists don't use persuasion to influence you, or at least we don't do it very well…. We make up extensions to your being, like remote eyes and ears (webcams and mobile phones) and expanded memory (the world of details you can search for online). These become the structures by which you connect to the world and other people. These structures can in turn change how you conceive of yourself and the world. We tinker with your philosophy by direct manipulation of your cognitive experience, not indirectly, through argument." (6)

In "How Things Shape Us," material culture historian Manuel Charpy makes the historical case for persuasion and expression via objects as he

traces the influence of physical objects on Victorian culture and the manner in which the objects reflect the cultural preoccupations of the time.

Charpy directly ties material culture history to technological history, writing,

> The history of technology has only recently abandoned the epic story of great inventions and has fostered new links with the history of material culture. Such a convergence between technology and material culture is to be found in the way in which technologies — even relatively modest ones — constantly are seen as key to changing social practices and our daily lives. (200)

By way of example, he goes on to cite not only the common story of the industrialization of time, in which the proliferation of cheap clocks make abstract time and railroad timetables plausible, but also the manner in which objects "imposed a daily discipline through their surfaces." (204) High-pile rugs, delicate cuffs, easy-to-crease fabrics, glass furniture, and white underwear took marks easily and therefore worked to enforce high demands for self-control through the threat of tattletale disorder.

Charpy also charts the role objects in reflecting and supporting modern "self-fashioning." "The multiplication of personal objects allowed for the affirmation of the individual and acted as ways to acquire consciousness of the self," he writes, citing the influence of writing desks (fitted out with mirrors for women), dressing gowns, and a proliferation of locked boxes and diaries: "It was this accumulation of new tools that encouraged a new objectification of the self." (Charpy 208) This self-objectification blossoms

into self-souvenirs and the cabinets to host to them, before finally reaching its apotheosis in the mania for collections, where a system of objects becomes a reflection of the collector.

> Collecting objects was an ideal activity of self-fashioning. … Collecting objects implied using one's knowledge but also reorganizing the world around oneself. While the order mimicked a scientific one, by the second half of the nineteenth century is had become an affirmation of taste and the expression of one's personal order. … These collections were material autobiographies to be seen as forms of possessive individualism. (Charpy 210)

As we are the descendants of these early modern people, it is not a stretch to suggest we continue these sorts of relationships with the objects we own and interact with. From here, it is only the smallest step to Lanier's suggestion, to asserting that creating an object that instantiates the relationship we want to see and explore may make this relationship more common in fact and in imagination.

If Charpy — and more broadly, the discipline of material culture history itself — makes the case for the workings of the physical on the cultural, Hayles calls out to the intellectual construction of cultural meanings with her notes on including the literary in her examination of cybernetic concepts in culture: "Literary texts … actively shape what the technologies mean and what the scientific theories signify in cultural contexts," she writes. "[C]ulture circulates through science no less than science circulates through culture. **The heart that keeps this circulatory system flowing is narrative.**" (21, emphasis mine)

Through the creation of devices and objects that operate on reflexive principles, that value context, we can provide imaginative alternatives to the current watcher objects and thereby a possible alternative narrative of coexistence with machines — one on human terms. Through the deliberate stories we tell, we can influence the reception these objects receive. Rather than attempting to block the circulation of meanings, we can introduce our own small bacteria.

System Diagram

System Diagram

The diagram I use to picture this system of cultural construction into which prototypes should be injected is shown in figure XXX. Imagination and the world of art and cultural production communicate concepts that find their expression in physical objects, which are of course only made possible by tools resulting from engineering work. The instantiation of the object itself moves ideas from the sphere of culture to the physical world. Here a loop occurs between the owner of the object and the object itself, where sense experience combines with the owner's conception to turn materials into encoded meanings. At the same time, this relationship is considered internally and projected outwards to other current humans and to future humans, through the creation of future artifacts. That is, current useful items are the next millennium's anthropological grist.

However, as John Styles notes in his study of London Foundling hospital tokens, it is only through the interplay of written culture and physical objects that a full transmission of meaning into the future — or back into the cultural sphere — is possible. (Styles 165, 168)

And so, to fight back, to infect this system, we look to the creation of prototypes and their tales.

Critical Design

While my conception of this system may be idiosyncratic, the idea that creating prototypes of what we want to see in the world in order to influence the flow of ideas into objects is not. Critical design, a movement that surfaced twenty years ago in the work Anthony Dunne and Fiona Raby, instantiates this approach in the world of design. It too was born of a dissatisfaction with technological tales:

> We coined the term critical design in the mid-nineties when we were researchers in the Computer Related Design Research Studio at the Royal College of Art. It grew out of our concerns with the uncritical drive behind technological progress, when technology is always assumed to be good and capable of solving any problem. Our definition then was that "critical design uses speculative design proposals to challenge narrow assumptions, preconceptions, and givens about the role products play in everyday life." (Dunne & Raby 34)

They go on to specify that critique is not meant to be only negative but rather that "it can also be a gentle refusal, a turning away from what exists, a longing, wishful thinking, a desire, and even a dream." (34–35)

To understand in more detail what critical design entails, we can look to Dunne & Raby's *A/B Manifesto* project, where they oppose the characteristics of affirmative, a.k.a traditional, design and critical design. (See figure XXX.)

A/B

A/B

Here we discover a conception of design that uses the approach as a medium for questioning the underlying assumptions of our world. Consider problem solving vs. problem finding, design as process vs. design as medium, and provides answers vs. asks questions: rather than seek to solve given problems, critical design works to unearth and display problems — often by proposing solutions to them. By opposing science fiction and social fiction, futures and parallel worlds, Dunne & Raby indicate their refusal to be swept away by the promises of technical application; rather, critical design looks for technical implication.

They summarize the technique most pithily towards the end of *Speculative Everything*, asking, "Can design operate in this way, borrowing methods from literature and art and applying them to the real world as thought experiments?" (Dunne & Raby 170)

The approach I take in the invested objects project is superficially similar: In the project I create a dream object using the vernacular of standard design deliverables and software development. Both critical design and polluting the possible insist that a dream must become physical to change possibility. Dunne & Raby suggest this operates significantly through consumption:

> In a consumer society like ours, it is through buying goods that reality takes shape. The moment money is exchanged, a possible future becomes real. If it did not sell it would be sent back, becoming a rejected reality. In a consumer society, the moment we part with our money is the moment a little bit of

reality is created. Not just physical reality or cultural but psychological, ethical, and behavioral. (37)

Polluting the possible operates on a plane slightly removed from the practicality implicit in critical design. Rather than manifesting reality through channels of commodity consumption, polluting the possible expects cultural consumption to be a realistic pressure point. Yet, despite this difference of application, both critical design and the polluting the possible expect to change the world in a similar way — by creating deviations from the most probable future into a slightly preferable one.

I was delighted when I initially came across Tobias Revell's version of Joseph Voros's future cone (see Revell), and unsurprised when I found it again in *Speculative Everything* (Dunne & Raby 5). The drawing, which I have interpreted in figure XXXX, illustrates categories from Voros's "A Primer on Futures Studies, Foresight and the Use of Scenarios." It is a concise depiction of the way in which the future is projected from the present, like a slide onto a wall. The minimal labelling of the diagram, and the way the internet often presents it without context, allows each group to imagine the relationship that suits it.

P/P/P/P, all versions, redrawn

P/P/P/P, all versions, redrawn

For Voros the categories are descriptive, based primarily on what is possible given current technical knowledge and probable given current trends. For Revell, the point to highlight, in addition to the working of projection, is the "wildcard" element. These scenarios encourage observers to expand their considerations. The cone describes the work of

design fiction and critical design by describing the space in which they operate.

For Dunne & Raby, the cone is less an expression of spaces than in business-soaked definitions of the future. Scenarios as individual points have disappeared. Instead, these Brutalist cones represent social, almost paranoid futures. The probable is what happens without catastrophe. The plausible contains imaginable disasters.

> This is the space of scenario planning and foresight, the space of what could happen. In the 1970s companies such as Royal Dutch Shell developed techniques for modeling alternative near-future global situations to ensure that they would survive through a number of large-scale, global, economic, or political shifts. The space of plausible futures is not about prediction but exploring alternative economic and political futures to ensure an organization will be prepared for and thrive in a number of different futures. (4)

The possible includes the not-impossible scenarios that remain difficult to imagine. And the preferable in the hands of Dunne & Raby is the expression of power, it is defined by who is able to define it. In the end, this engagement power is their animating question.

> [A]ssuming it is possible to create more socially constructive imaginary futures, could design help people participate more actively as citizen-consumers? And if so, how?

> This is the bit we are interested in. Not in trying to predict the future but in using design to open up all sorts of possibilities

that can be discussed, debated, and used to collectively define a preferable future for a given group of people: from companies, to cities, to societies. Designers should not define futures for everyone else but working with experts, including ethicists, political scientists, economists, and so on, generate futures that act as catalysts for public debate and discussion about the kinds of futures people really want. Design can give experts permission to let their imaginations flow freely, give material expression to the insights generated, ground these imaginings in everyday situations, and provide platforms for further collaborative speculation. (Dunne & Raby 6)

It is here we part ways and polluting the possible becomes something other than a work of critical design.

This Is Not a Critical Design Project

Polluting the possible takes as its premise the idea that the experts are biased and quite likely wrong. The cone-based question here is *How do we make the preferable strong enough to cause deviations from the probable?* and the answer is *By creating ever more preferable scenarios here on the tiny point of the present.* Standing here on the verge of solipsism (without going over), we don't need to use the tools of design to inquire into definitions of the preferable; we know what the preferable is — it is what we as the maker prefer. By enlarging the possible and reflecting on these explorations, we make a preferable future more likely. If we can't want what we haven't yet imagined, then the first step is to start imagining a lot more.

Though large, this is not the only difference. Dunne & Raby insist that critical design must present scenarios that one can imagine emerging from our present circumstances. (4, 43) Polluting the possible would say that insisting on this link means ideas will consistently be too conservative, too based on current power structures.

And Dunne & Raby do continually circle back to neoliberal values even while claiming to question neoliberalism. In defining critical design, they argue that the *critical* can be *positive*, never discussing that demands for positivity above all is a common tactic for shutting down dissent. (34–43) Rather they accept this framing as implicitly true: positive is better than negative.

For this project, though the form is positive, in the sense that it is making real a possibility that I want to see in the world, the effects may not be. I may also fail; I may make something that is useless for its purposes or make something with a terrible effect. I am just aiming for *interesting*.

Conventionality shows through again for Dunne & Raby in their focus on the individual. They write

> Change can happen in a number of ways: propaganda, semiotic and subconscious communication, persuasion and argument, art, terrorism, social engineering, guilt, social pressure, changing lifestyles, legislation, punishment, taxation, and individual action. Design can be combined with any of these *but it is the last one — individual action — that we value most*. We believe change starts with the individual and that the individual needs to be presented with many

options to form an opinion. (Dunne & Raby 160, emphasis mine)

It is this emphasis that underlies their commitment to change via consumerism, as quoted above.

Polluting the possible, which focuses on the individual as a generator of dreams and ideas to be injected into the cultural imagination, would say that if you are effecting change by what you buy, you are still letting others define your dreams. This is not to say there is no room for close exploration, for asking what happens when power doesn't shift. But it is not the best description for our goals here.

Finally, the two approaches differ in terms of why we insist on making the object, the embodiment of the idea, real and physical. Dunne & Raby focus on prop-ness as vehicle to give ideas weight, to make them seem less fictional. (79, 90) For our project, the reasons to insist on the realness, the physicality of the manifestation, the reason to take it beyond sketches, is two-fold: It allows us to to investigate the idea in depth and over time by letting us live *with* the idea. At the same time, the process of creating and use serves as a ground for observation of the various roles involved in bringing it to life — designer, programmer, user, and makes possible a phenomenological approach to the research. This thread will be picked up again in section VI.

Beyond Dunne & Raby

Though Dunne & Raby may be the originators of critical design, definitions of the approach and related uses of design for alternate futures are not limited only to those given by the two. Seeking to place polluting

the possible in terms of the wider definitions of critical design, I turned to Matt Malpass's *Contextualising Critical Design: Towards a Taxonomy of Critical Practice in Product Design.*

In this thesis, Malpass interviews eight key critical design practitioners and reviews the history and products of the related movements found under the critical design umbrella. The final taxonomic sketch identifies two primary axes by which the different varieties may be distinguished: type of satire and type of ambiguity. (211–213) The latter category is outlined in Gaver et al.'s "Ambiguity as a Resource for Design," which makes the case for the use ambiguity "to encourage close personal engagement with systems" (233). It is a technique used by the invested object project and will be discussed in the next section.

The question of satire however does not apply to this project or polluting the possible; in fact, it points to the final break between these and works of critical design. "It is the instrumental use of satire and how it links to criticism, which forms the foundation of critical design practice. Design and satire are integrated to create a rhetorical language, through strangely familiar form and ambiguity that encourages user engagement by forcing a dilemma of interpretation within the user." (Malpass 171)

These rhetorical gambits are in service to "the primary goal of delivering a deliberate message potent enough to spark contemplation, discussion, and debate…." (Malpass 76) To return to the terms of the *A/B Manifesto*, satire is used to "make us think."

The goal of this project is less to spark ideas through provocation than to see what it is like to create and use a system that endeavors to embody a new relationship with information. But what does that actually look like?

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