DESIGN AND VIOLENCE
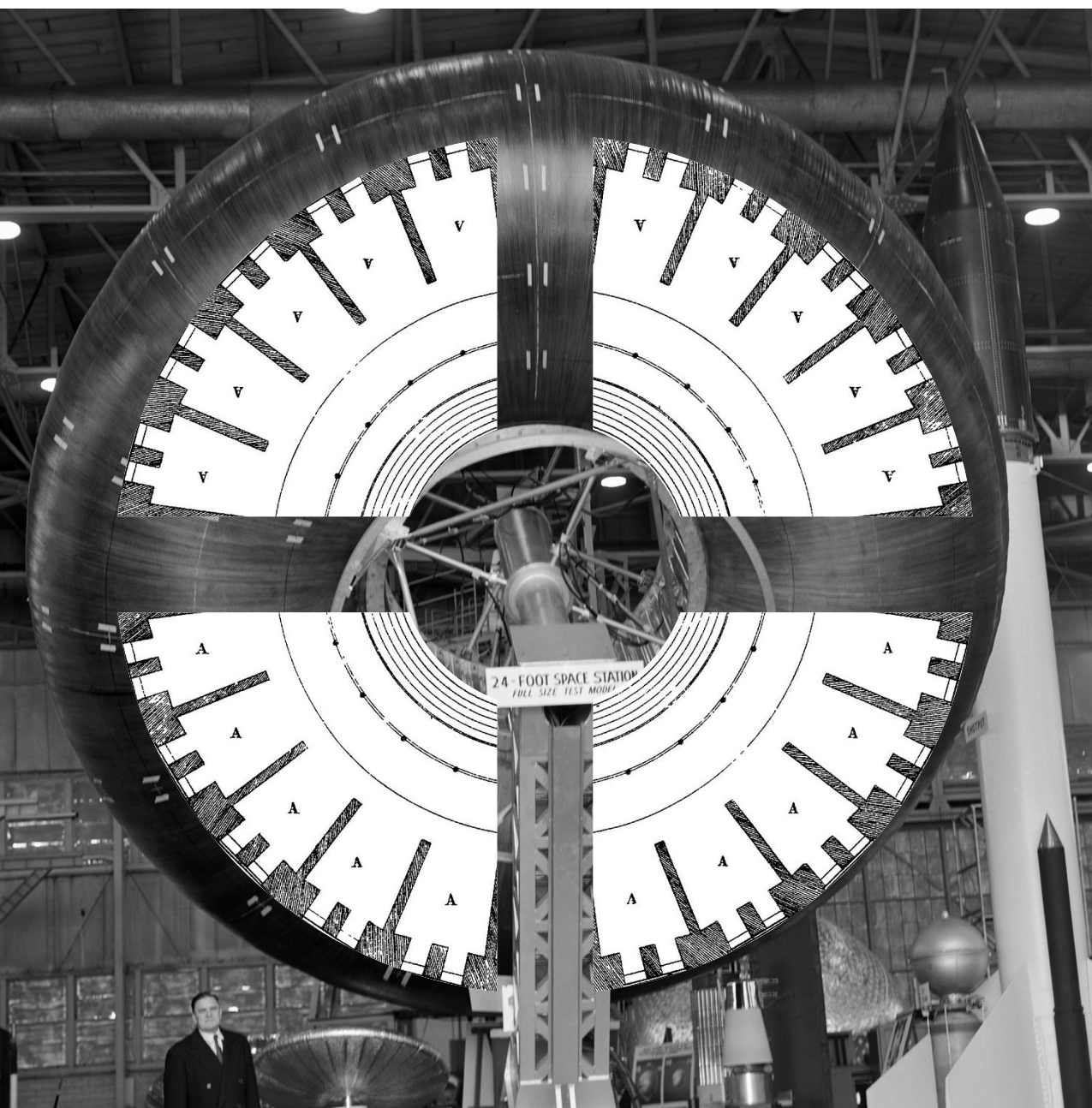
#1

In the introductory statement for the online curatorial experiment DESIGN AND VIOLENCE at The Museum of Modern Art, 'design' was defined within the parameters of the museum's collection as a compelling marriage of economy, elegance, functionality, and timeliness. As co-curators, we — Paola Antonelli and Jamer Hunt — also defined 'violence' very broadly as "a manifestation of the power to alter circumstances, against the will of others and to their detriment." As we said then, although designers aim to work toward the betterment of society, it is and has been easy for them to "overstep, indulge in temptation, succumb to the dark side of a moral dilemma, or simply err". And yet the intersection of design with violence is a history rarely, if ever, told by critics, historians, or designers themselves; the public, therefore, remains unaware — unless they become one of its victims. Over a period of two years, we, along with MoMA Curatorial Assistants Michelle Millar Fisher and initially also Kate Carmody, assembled a range of design projects, objects, and ideas that lived between these two guideposts of 'design and violence'. The works were as varied as the discussions they provoked online, in the galleries, in the public debates we held, and, eventually, in the pages of the book we published.

Our initial conversations were catalysed by two key projects: Harvard psychologist Steven Pinker's book *The Better Angels of Our Nature: Why Violence Has Declined* (2011) and Defense Distributed's 3D printed gun, the *Liberator* (2013). It is impossible to simplify Steven's weighty tome but his argument suggests that we live in a more peaceable era compared to our ancestors; however, the design and dissemination of open-source files for a printable, untraceable gun marked, for us, a watershed that contradict-ed Steven's research. Instead of dissipating, violence seems to have morphed and recombined into novel, intangible, or ghostly forms — into the roadside bomb, cyber threats, the unmanned aerial drone, and the everyday household tool repurposed into a protest weapon. The works we included in our online survey responded to this shape shifting: *Google's Digital Attack Map*, for instance, charts distributed denial-of-service (DDoS) attacks across the world; James Bridle's *Drone Shadow* project evokes and reveals the fear of a distantly-controlled overhead attack; Volontaire's elegant, strong poster series for Amnesty International raises consciousness of gendered violence and female genital mutilation.

Serpentine Ramp by **Temple Grandin**,
c. 1974. Image courtesy of the designer.

And yet the intersections of design and violence are never static, never circumscribable. They continue to mutate and they appear differently, inhabiting discrete localities as often as they become global phenomena; they manifest newly in the hands and minds of individuals, collectives, and in the molecules of materials into which they pass. It thus makes perfect sense for this conversation to move into other institutions in order to spark overlapping yet distinct reflections to those we articulated in New York. Just one of many possible examples: where our last post in the U.S. focused on the lethal injection — written by Death Row exoneree Ricky Jackson — the conversation has shifted in Dublin to the sensitivities and politics of the Eighth Amendment of the Irish Constitution.

Initiating a discussion with our valued colleagues at Science Gallery Dublin — former CEO of Science Gallery International Michael John Gorman in the early stages, and then Director Lynn Scarff, Programme Manager Ian Brunswick, and Exhibitions Producer Aisling Murray — was like sitting down at a table among old friends. Indeed, Michael John and Paola have known each other for a very long time — ever since MoMA's first foray into design and science with the exhibition *Design and the Elastic Mind* in 2008 — and Paola greatly respects and trusts his vision for the intersection of contemporary design, science, and technology and the track record of boundary-crossing exhibitions at Science Gallery Dublin and beyond. Adding Ralph Borland to the mix — a designer whose work has been held within MoMA's own collection since 2006 — as the external curator for this presentation of DESIGN AND VIOLENCE at Science Gallery Dublin made great sense given the longstanding relationship he has had with both of our institutions. The regular conversations between our teams over the past year, led here at MoMA by Michelle Millar Fisher, have resulted in a thoughtful translation and augmentation of the original project. When colleagues know each other well — and we do, even more so after this adventure — dialogue can immediately become frank and deep, which allows partners to fruitfully challenge each other's established ideas and preconceptions. In his parsing of violence along semiotic, systematic, and spectacular lines, Ralph has widened the definition of design that we at MoMA started out with.

The Science Gallery Dublin team has retained several of the works from MoMA's exhibition, and brought them into orbit with a new constellation of objects. In doing so, they have forged perspectives on the intersection of our material culture with our capacity for sometimes terrible but often quite mundane forms of violence. Most importantly, this new manifestation of DESIGN AND VIOLENCE has opened up the conversation to audiences far beyond those originally imagined. The intention of this experiment, in New York, in Dublin, and in any future locale and incarnation, is not to glorify or spectacularise violence, nor to engage in voyeurism or didacticism, but to place these quotidian, theatrical, systemic, and hidden relationships between design and violence into new relief. Science Gallery Dublin also has an amazing record of lively conversation through public engagement with their exhibition visitors. We look forward to the opinions, questions, and actions that will ensue.

**New York City,
September 2016**

In selecting work for this exhibition, it soon became clear that design and violence are potentially all-encompassing themes that might overwhelm us with their breadth.

Violence, in particular, permeates everything around us, as one of the central organising principles of human affairs. One of the definitions of a modern state is that it reserves the right to violence for itself, while excluding it from others it terms dissidents or criminals. Most of the time, state violence does not have to be exercised, but it is always present in the form of a police force or army ready to enforce laws and boundaries.

Unless we include the geological and evolutionary processes that shape the natural world as some form of 'design', the boundaries of design can be more readily contained. But even confined to human actions, we embraced in this exhibition a broad definition of design as not just the work of professionals or the product of mass-manufacture, but as found in everyday, ubiquitous objects and in ad hoc or DIY processes.

This is political: part of the slippery nature of violence is the way it appears to be a disruption of the normal, an aberration, rather than part of the normal state of things. The raw materials and labour processes in the products we buy in the developed world may have been secured through conflict and poverty in the developing world. This is our violence too, not just that of faraway places and peoples.

The urge to identify ordinary things as within the frame of design is a democratic one — while recognising the role of skills and experience in shaping efficient and beautiful objects and systems, we want to bring design, too, into the frame of ordinary, lived experience. We are interested in reading objects for the intentions encoded into them, as well as noticing the way that objects shape the human world around us.

South African artist Thembinkosi Goniwe's work *Dignities*, for example, a portrait of the artist alongside his painting lecturer, shows both men sporting ubiquitous 'flesh-coloured' plasters on their cheeks. On his lecturer's white face, the plaster blends in, while on Thembinkosi's dark skin it stands out starkly. The work identifies the assumptions embedded in ordinary designed objects, and the undignified effect of these on the user. The humble plaster signifies here both the superficial violence of a small injury, and the deep, long-standing violence of racial inequality.

As an additional lens for the exhibition, we looked at how potential work fitted into the frame of 'now', asking ourselves how the exhibits reflected a world that is increasingly urbanised, globalised and networked, in which inequality is rising, and in which new forms of technology are changing the face of labour, warfare and political control. Environmental harm — especially the biggest threat of our time, climate change — is increasingly realised as the violent result of our designs upon the planet.

Dignities by **Thembinkosi Goniwe**, 2000.

The exhibits referred to in this edition cover some of this range of iterations of design and violence. *Blockchain*, the new form of distributed ledger and digital currency that promises to replace trust with code, refers to the violence of our financial systems and attempts to reform it through design. The *Thanatron*, a DIY suicide machine, is an example of how the boundaries of individual rights, including the right to elective self-violence, are pushed through design. *White Torture* points to our legal and ethical systems as sites for design, and to the fact that violence need not leave marks on the body to be devastating to the human psyche. The public artwork *Drone Shadows* refers to the distance at which violence is increasingly enacted, and attempts to close this gap by conveying some of the feeling of living under the threat of a drone strike — an everyday experience in some parts of the world, though not in the countries which control the drones.

As one of the curators and the lead researcher on this exhibition, the topics it raises have particular resonance with my experiences growing up in South Africa during apartheid, and in independent Zimbabwe. From an early age I was filled with stories and images of violence; both the violence of the state's suppression of dissidents, and the romance of violence as a means for revolution. This tension between violence as oppressive harm to another and as a symbol of our capacity for resistance has remained a constant source of provocation for me.

The work that led to my role in this exhibition, my art-design project *Suited for Subversion*, on exhibition at the The Museum of Modern Art, New York for much of the last ten years, came in part out of this provocation. Designed from my experience taking part in large-scale street protests in New York in the early 2000s, it is a disarming suit of armour, clownishly over-protecting the wearer in order for them to claim territory from the state, while humanising them through a pulse-reader and speaker that transmits the wearer's heartbeat outside their body.

During the same period, I saw the artist Saul Williams performing in a park in Brooklyn, and one sentence he spoke (in an early version of his song *Grippo*) has stayed with me ever since as offering some resolution to this tension. It is with these words that I would like to end this essay, along with thanks to everyone at Science Gallery Dublin and The Museum of Modern Art, New York for our shared work on this exhibition.

"Using violence as a metaphor for victory".
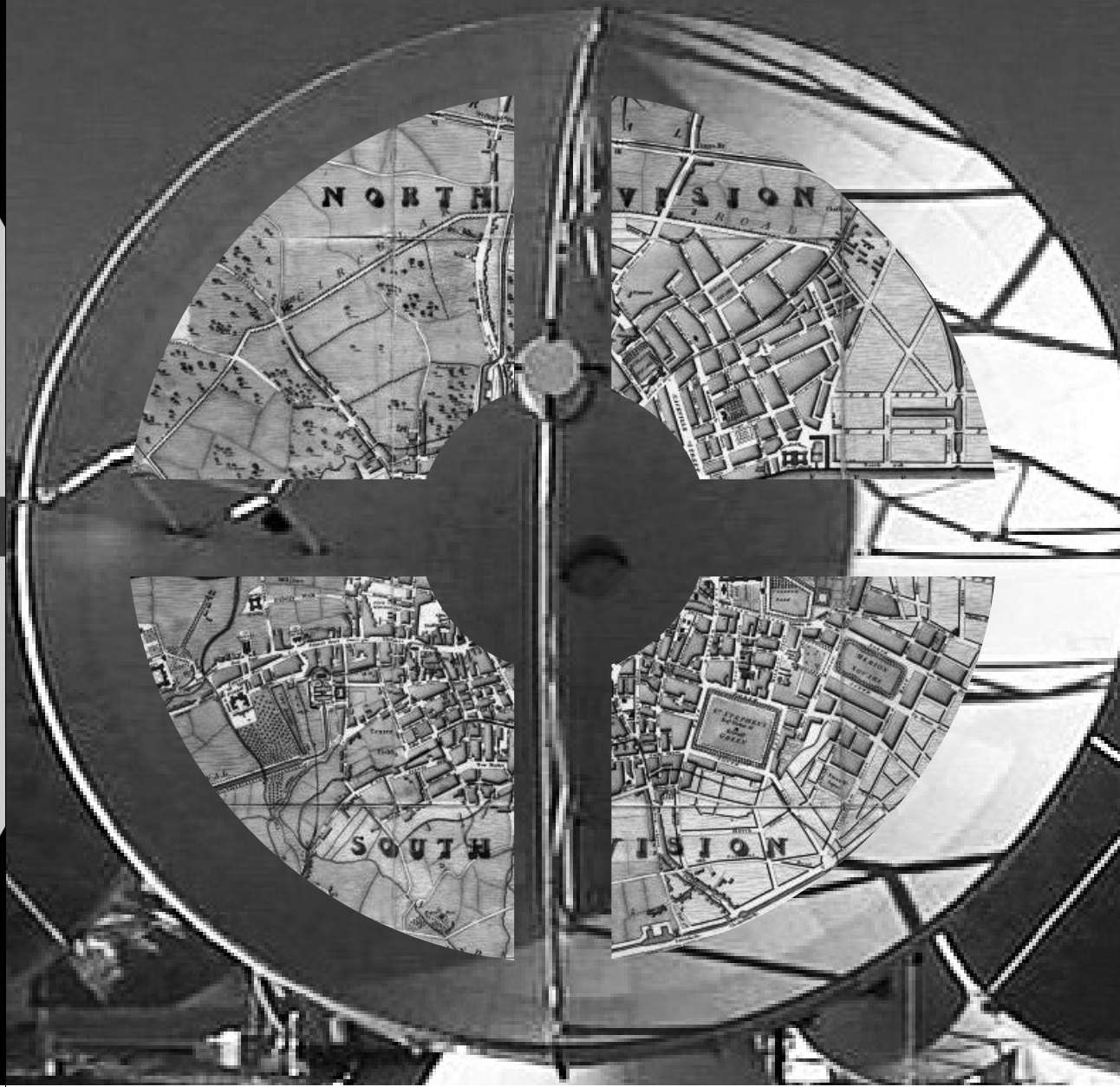
A blockchain is, essentially, a distributed database. The technology first appeared in 2009 as the basis of the Bitcoin digital currency system, but it has the potential to do much, much more — including aiding in the development of platform cooperatives.

Traditionally, institutions use centralised databases. For example, when you transfer money using a bank account, your bank updates its ledger to credit and debit accounts accordingly. In this example, there is one central database and the bank is a trusted intermediary who manages it. With a blockchain, this record is shared among all participants in the network. To send bitcoin, an owner publicly broadcasts a transaction to all participants in the network. Participants collectively verify that the transaction took place, and update the database accordingly. This record is public, shared by all, and it cannot be amended.

This distributed database can be used for applications other than monetary transactions. With the rise of what some are calling "Blockchain 2.0", the accounting technology underpinning Bitcoin is now taking on non-monetary applications as diverse as electronic voting, file-tracking, property title management, and the organisation of worker cooperatives. Very quickly, it seems, distributed ledger technologies have made their way into any project broadly related to social or political transformation for the left.

While recognising the potential of blockchain as one tool that — in a very pragmatic way — could assist with cooperative activities, much of the current rhetoric around blockchain also hints at problems within the techno-utopian ideologies that surround digital activism, and points to the pitfalls these projects fall into time and again. Chief among these is the idea that we can replace messy and time-consuming social processes with elegant technical solutions.

Fostering and scaling cooperation is really difficult. This is why we have institutions, norms, laws, and markets. These mechanisms allow us to cooperate with others even when we don't know and trust them. They help us to make decisions and to divvy up tasks and to reach consensus. When we break these structures down, it can be very difficult to cooperate. Indeed, this is one of the big problems with alternative forms of organisation outside of the state and the market — those that are *not* structured by typical modes of governance such as rules, norms or pricing. These kinds of structureless collaborations generally only work at very local kin-communal scales where everybody already knows and trusts everyone else.

In Ireland, for example, there were several long-term bank strikes in the 1970s. The economy didn't grind to a halt. Instead, local publicans stepped in and extended credit to their customers; the debtors were well known to the publicans, who were in a good position to make an assessment on their credit-worthiness. Community trust replaced a trustless monetary system.

input
12MgpDpXpPZ8t6teuWn8rXgDmb292wcmkr
balance: 0 BTC
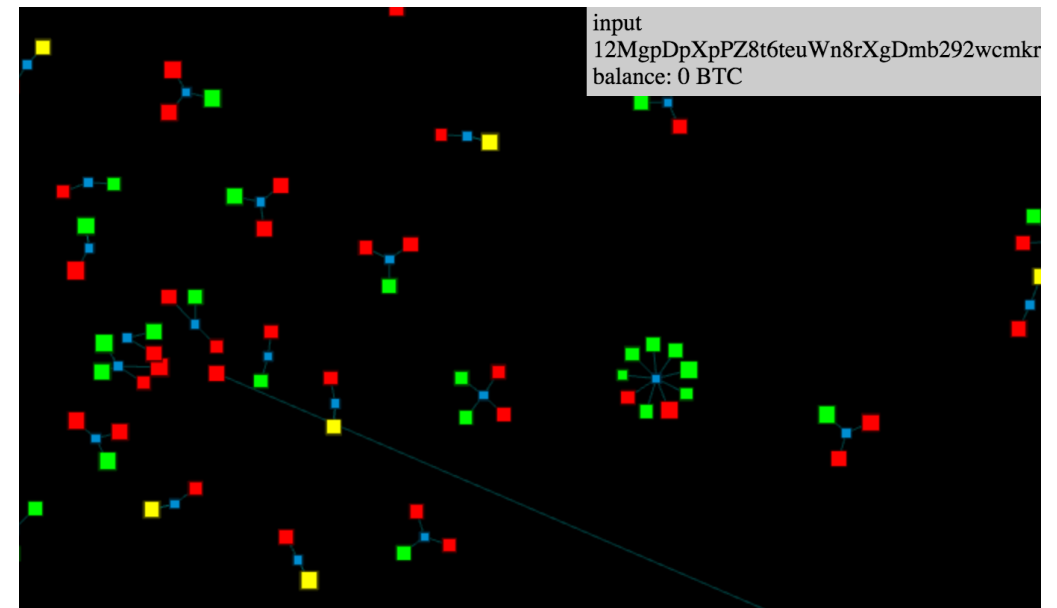
Screenshot of real-time blockchain animation at **dailyblockchain.github.io**

This kind of local arrangement wouldn't work in a larger or more atomised community. It probably wouldn't work in today's Ireland, because community ties are weaker.

Blockchain replaces a trusted third party such as the state or an online platform with cryptographic proof. This is why hardcore libertarians and anarcho-communists alike both favour it. The claim being made is not that we can engineer greater levels of cooperation or trust in friends, institutions or governments, but that we might dispense with social institutions altogether in favour of

an elegant technical solution. All we need is to trust in the code. But this technology doesn't replace *all* of the functions of an institution, just the function that allows us to trust in our interactions with others because we trust in certain judicial and bureaucratic processes. It doesn't stand in for all the slow and messy bureaucracy and debate and human processes that go into building cooperation.

In this sense, the blockchain has more in common with the neoliberal governmentality that produces plat-form capitalists, like Amazon and Uber, and state-market coalitions than any radical alternative. Seen in this light, the call for blockchains forms part of a long line of codified violence enacted through ledgers, automated record-keeping systems, databases and archives that work not to support networks of trust and political dissent but to make these things disappear.

While technical tools such as the blockchain might form part of a broader artillery for networked cooperation then, we also need to have a little perspective. We need to find ways to embrace not only technical solutions, but also people who have experience in community organising and methods that foster trust, negotiate hierarchies and embrace difference. Because there is no magic app for society. And there never will be.

This is a modified version of a paper first published in *Ours To Hack And To Own: The Rise Of Platform Cooperativism, A New Vision For The Future Of Work And A Fairer Internet*, edited by Trebor Scholz and Nathan Schneider (2016).
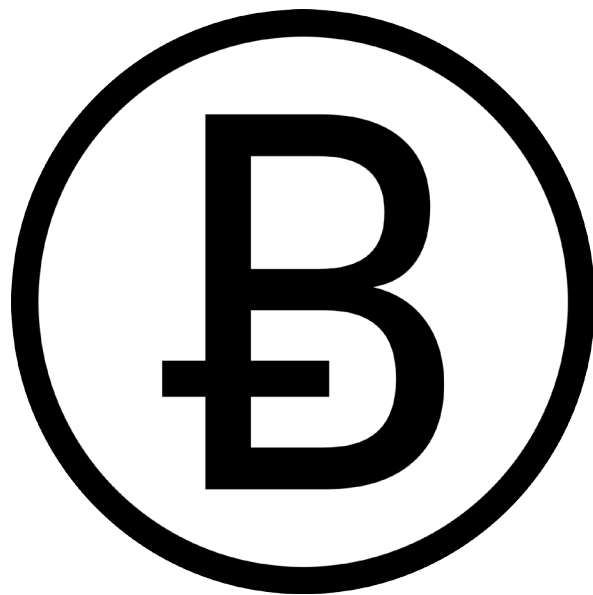
Bitcoin is a decentralised currency – it's neither a brand nor a product or company. As such ECOGEX argues that a symbol (Unicode Character U+0243) should be used to represent Bitcoin rather than a logo.

Bitcoin Symbol by **ECOGEX** (ecogex.com) is licensed under FAL 1.3

DESIGNING TORTURE
SHANE O'MARA

When we think of violence, what do we think of? What images do we see, what feelings do we have, what thoughts do we have? Images of blood, broken bones, perhaps the sounds of someone screaming? One person shooting, punching, striking another; flesh giving way, bruising, bleeding? This way of thinking can lead us utterly astray when considering the violence that can be visited upon the defenceless. One widespread form of violence is torture, and when we think of torture, our thinking is coloured by medieval imagery — bleeding, bruising, beatings, broken bones, and flesh torn and scarred. It's a common mistake. Alberto Gonzales, the former U. S. Attorney General, said in a 2015 interview: "When I think about torture, it's broken bones, electric shocks to genitalia. It's pulling your teeth out with pliers. It's cutting off a limb. That's torture. Is waterboarding at the same level? I'd say probably not." Our thinking about torture is also deeply coloured by movies and television; one person has hidden knowledge, and this can be easily, reliably and veridically extracted through violence.

Governments change behaviour through laws, memos, legal opinions, and other means; many of them are explicitly coercive. Governments have implicit (and occasionally explicit) models of human behaviour change underpinning policy. These models are derived from prior practice, contemporary culture, history and social learning. They are rarely informed by neuroscience or psychology. Lawyers deciding to torture a detainee into revealing information are an example of an empirically or theoretically un-supported lay or folk theory of neuropsychological function in action, implemented under cover of law, and routinised as policy.

Estimates suggest torture occurs in 140 countries worldwide, and that it is significantly under-reported, so it may happen in many more. Democracies, when they torture, prefer 'white' torture — a form of violence practiced because it leaves no marks. The long-lasting effects are inflicted on the brains and minds and behaviour of the tortured and, somewhat surprisingly, often on the brains, minds and behaviour of the torturer also. White torture is a coordinated and deliberate assault on the core functioning of our brains and bodies, and all the more powerful and effective because it affects our fundamental metabolic drives. Suffocation, starvation, freezing, repeated episodes of near-drowning, restraint stress through close confinement in small, overheated boxes, social isolation through extended solitary confinement — none of these techniques leave visible surface marks. The tools for white torture are repurposed from other uses: plastic bags for suffocation, cable ties to restrict and restrain limb movement, food and liquid restrictions to induce starvation, trestle tables for waterboarding, small, uncomfortable chairs for sleep deprivation, adult nappies, ample supplies of cold water.

Interrogation techniques

A US Justice Department memo, released 2009, detailed interrogation techniques that the CIA proposed in 2002 for use on a top Al-Qaeda detainee
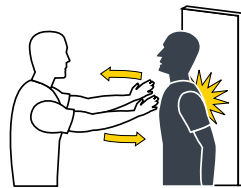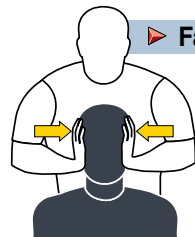
▷ **The attention grasp**

Grab by collars, and draw to interrogator
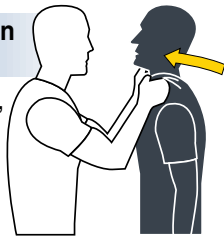
▷ **Facial hold**

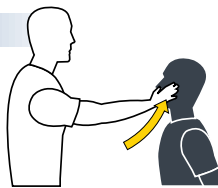Palms on either side of face to hold head immobile

▷ **Walling**

Slam against a false flexible wall made to create loud noise

▷ **Facial slap**

"the purpose... is to induce shock, surprise, and/or humiliation"

▷ **Wall standing**

Designed to make fingers support body weight "not permitted to move or reposition"

▷ **Stress positions**

Includes sitting with legs straight out, and kneeling positions

Sadly, many democracies have never entirely given up the practice of torture — even if it is not officially sanctioned, it still happens. Democracies tend to resort to torture during times of great national stress (think France in the late 1950s; the United Kingdom in the early 1970s; the United States in the post 9/11 period). Deciding to employ torture as a human information gathering tool in a democracy usually needs a terrible act to catalyse and legally institutionalise torture. If torture is the attempt to force information from the unwilling, then it is the effort to force information retrieval from the memory systems of the brains of the unwilling. This is the peculiar place, where governmental policy theories have a mediated interface with theories of brain function. It takes willing lawyers and politicians, but it really takes lawyers, because they write policy documents like the Torture Memos, allowing government agents to starve, semi-drown, sleep deprive, freeze, and stress other human beings with the ostensible purpose of eliciting vital information from them. And all under cover of law.

Designing a systematic programme of torture in democracies requires the co-operation and support of a whole group of public policymakers, none of whom will directly administer the behavioural practices they sanction. Democracies then rediscover Napoleon's great truth: "The barbarous custom of having men beaten who are suspected of having important secrets to reveal must be abolished. It has always been recognised that this way of interrogating men, by putting them to torture, produces nothing worthwhile. The poor wretches say anything that comes into their mind and what they think the interrogator wishes to know" (Bonaparte, 1798). The contemporary historian of torture, Darius Rejali, puts it thus: "There may be secret, thorough reports of torture's effectiveness, but historians have yet to uncover them for any government. Those who believe in torture's effectiveness seem to need no proof and prefer to leave no reports" (*Torture and Democracy,* 2007, p. 522). And we come full circle to relearn the lessons of history and of the behavioural brain sciences: torture as an interrogational theory and practice is a complete and utter failure. And there are better, ethical and humane ways to gather information from other human beings.

Shane O'Mara,
Professor of Experimental Brain Research and Wellcome Trust Senior Investigator, Institute of Neuroscience, Trinity College Dublin.
shaneomara.com

James Bridle's *Under the Shadow of the Drone* does what all great art does: it makes us see what was already there in a new way. His work spotlights a contemporary fact of existence all too easy to forget when we are not directly physically threatened. We now live in a world of drones but most of us don't see them or experience them.

The invisibility of the U.S. drone programme in countries like Pakistan and Afghanistan is, of course, by design. And that's what's so dangerous about this new world. Drones are operated from the shadows on flickering, shadowy 'suspects'. The idea of surgical accuracy is a fallacy; this hi-tech equipment cannot ensure zero civilian casualties, or a clean conscience. The drone was created, and its use continues to grow, with very little political discussion. That's

the point of drones — to take what should be a part of our national discourse out of the conversation and make it unseen, hidden, secret. (Except, of course, to the increasing number of those living under them 24 hours a day.) And that is why it is so valuable that the artistic community is bringing this dialogue back into the open where it belongs, as James Bridle is doing in a way that's both powerful and provocative.

Bridle's installation is at once an echo of the chalk outline of a crime scene that's in the past, and a foreshadowing of a possible crime to come. It acts as a public memorial to the nameless and faceless drone victims. He makes us see or, more important, unable to not see the fact that for many, these drones are a presence both in the air and on the ground.

His work augments our vision, switching the peripheral to the main focus. By bringing the world of drones out of the shadows and making their presence manifest in such a striking way, James Bridle is forcing us to confront what's being done in our name.

Drone Shadow 002 by **James Bridle** and **Einar Sneve Martinussen,** 2012, image courtesy of James Bridle/booktwo.org. Photo by James Bridle.
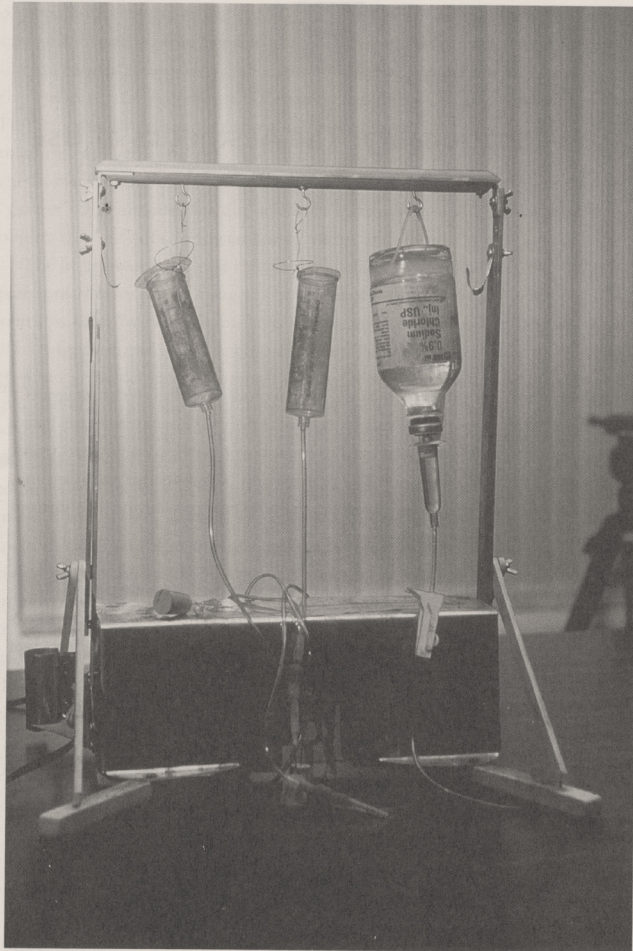
Figure 3.1 Jack Kevorkian's *Suicide Machine* is a powerful piece of "unofficial" design and shows how an industrial object can embody complex ideas through invention as a form of social criticism.

3

Para-functionality: The Aesthetics of Use

This chapter reviews projects from art, architecture, and design that exemplify the functional estrangement I call "para-functionality." The term means here a form of design where function is used to encourage reflection on how electronic products condition our behavior. The prefix "para-" suggests that such design is within the realms of utility but attempts to go beyond conventional definitions of functionalism to include the poetic.

Eccentric Objects: Para-functionality and Non-design

Some naive, curious, or eccentric objects, outside the world of conventional design, unintentionally embody provocative or poetic qualities that most product designs, even those intended to provoke, seldom achieve. Although industrial designers play a part in designing instruments of death (weapons) and pleasure (sex aids) these extreme areas of material culture rarely enter design discourse. Yet Jack Kevorkian's *Suicide Machine,* a powerful "unofficial" design that materializes complex issues of law, ethics, and self-determination, shows how an industrial invention can be a form of criticism (figure 3.1). Critical of a legal system that outlaws euthanasia, Kevorkian has his machine to overcome this. Its ambiguous status between prototype and product makes it more disturbing than pure artworks by blurring boundaries between the everydayness of industrial production and the fictional world of ideas. It suggests a role for design objects as discourse where functionality can be used to criticize the limits that products impose on our actions.

3D design
Colm McNally

Sketches
Ralph Borland
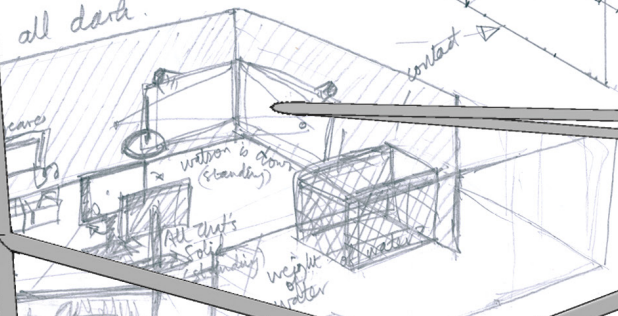
Gallery 4

Watson Down
4:3 × 2 (8 min)
2 × 1.5m each
sound showers
front projection

How to Kill People
4:3 (guess) (25 min)
2 × 1.5 m
Front projection
cinema style
with seats
Speakers or
sound showers

all dark

sound shower

gallery 3

All the Sound into Air
4:3/16:9 (15 min)
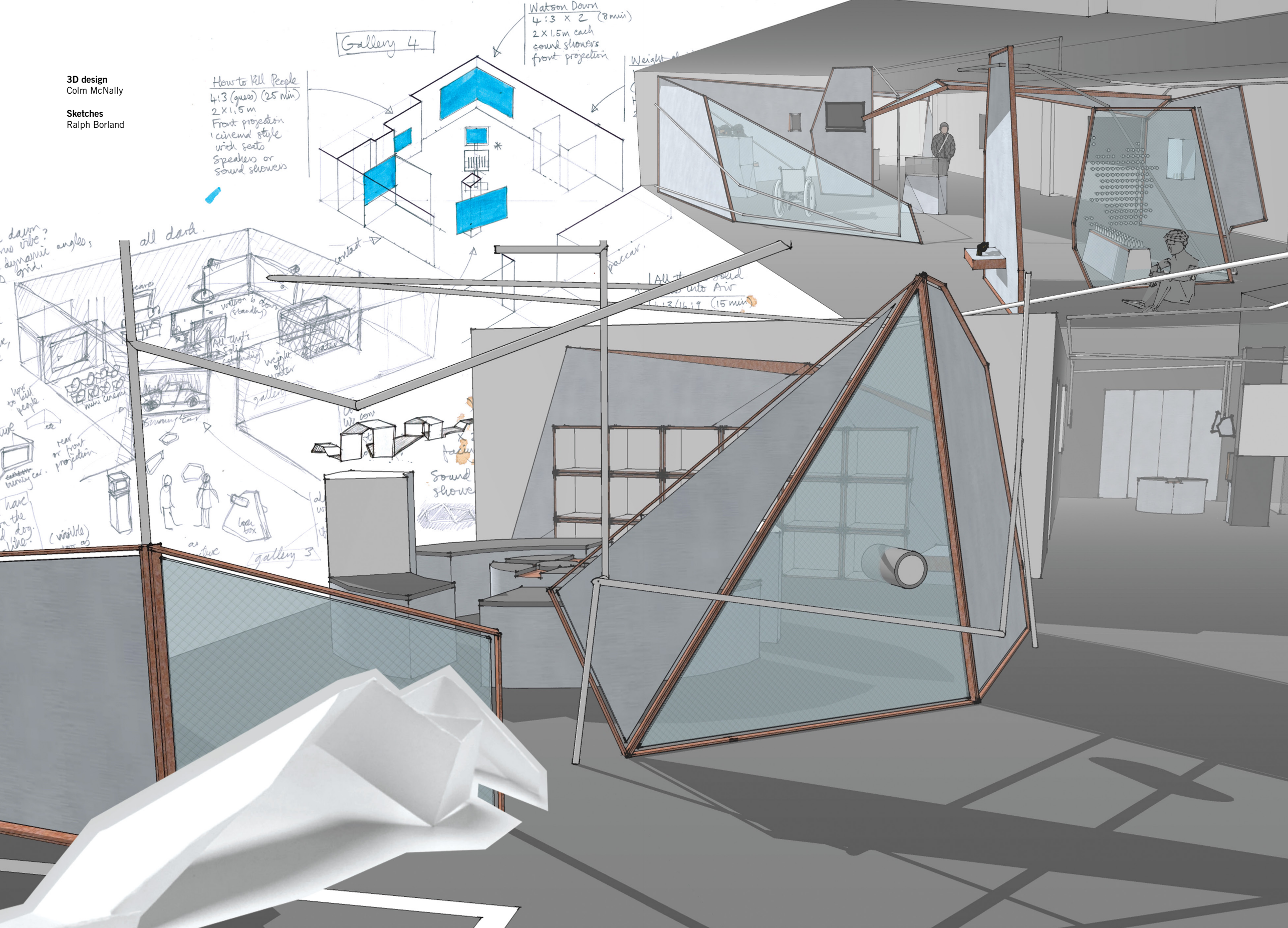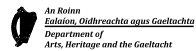
PARTNERS

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This is the first of three editions produced as an alternative form of catalogue for the exhibition in Dublin. This edition focuses on the process leading to the exhibition, the second will incorporate responses to the show and the third will look at the future implications of design and violence.

ACKNOWLEDGEMENTS

MoMA