Trojan horses:

ambiguity as a critical design strategy

Emile De Visscher

Through teaching, one can witness young designers adopting a radical critical stance towards consumerism, capitalism and mass-production logic. But how to express and perform this criticality through design projects without being trapped in contradictions? How to keep the solution-driven, democratic, embodied characters of design along with a sharp criticism of society and technology? The speculative approach developed by Anthony Dunne and Fiona Raby within the Design Interactions Master's programme at the Royal College of Art has been a successful and influential answer. But aside from these «provocative, purposely simplified and fictional» technological futures using «dark design» scenarios (Dunne / Raby 2013: 3, 38–43), which alternative critical design approaches have emerged recently? More specifically, can design criticality be found in deployable, contextual, functional proposals? Three recent design projects will be analysed in this chapter. The aim of this investigation will be to test a hypothesis: new forms of critical design are currently emerging – inheritors of certain achievements, but focusing on the present rather than the future, on ambiguity rather than dystopia, and on participation rather than aesthetic appreciation.

The need for dichotomies to establish critical design

Design has regularly been criticized and reduced to a mere stakeholder of aggressive capitalism and marketing strategies (Foster 2002; Julier 2017), becoming a major contributor to unnecessary overconsumption and ecological crisis. In this vision, the designer's role is to soften and simplify, or even hide, the technological, economic, political, social and anthropological issues a product or a service raises.

In reaction to this status quo attitude, the concept of critical design developed by Anthony Dunne in his thesis at the Royal College of Art constitutes a major moment in the history of recent design (Dunne [1999] 2006). In a straightforward and pragmatic call for empowerment, he affirms the need for designers to extract themselves from these constraints. While critical approaches to design, of course, precede this writing (Dautrey / Quinz [2014] 2016), the text is nevertheless a milestone, in the sense that its theoretical, historical and practical construction will provide arguments for the development of projects that were hitherto marginalized.

Dunne justified the use of new media of expression (films, installations, performances), insisted on the designer's independence from market prerogatives and supported the exploration of new subjects. To make things clear, Dunne and his colleague Fiona Raby later established a dichotomy between what they called «Affirmative Design» and «Critical Design», Design A and Design B (Dunne / Raby 2009). One would be at the service of production and industry, while the

other would be at the service of society; one would give answers, the other raise questions; one would create fictional functions, the other functional fictions.

DESIGN A	DESIGN B
affirmative	critical
problem solving	problem finding
design as process	design as medium
provides answers	asks questions
in the service of industry	in the service of society
for how the world is	for how the world could be
science fiction	social fiction
futures	parallel worlds
fictional functions	functional fictions
change the world to suit us	change us to suit the world
narratives of production	narratives of consumption
anti-art	applied art
research for design	research through design
applications	implications
design for production	design for debate
fun	satire
concept design	conceptual design
consumer	citizen
user	person
training	education
makes us buy	make us think
innovation	provocation
ergonomics	rhetoric

Table 9.1 Classification of design A and B by Anthony Dunne and Fiona Raby (Dunne / Raby 2009). A further variation is presented in Dunne / Raby (2013).

Critical design, as proposed by Dunne and Raby, is not a school, a method or a movement, but rather an attitude «which challenges narrow assumptions, preconceptions and givens about the role products play in everyday life» (Dunne / Raby 2007). While some of their first projects were not embedded in futuristic scenarios,[1] Dunne and Raby later focused their practice and teaching on dystopian speculation strategies (Dunne / Raby 2013). They argued for the need to create alternative realities, distant futures and uchronias as means to question

1 Like the Placebo Project in 2001; see the conclusion of the chapter.

2 «L'importance des propositions spéculatives est relative à la pertinence des articulations qu'elles produisent. … Au final, la pertinence des propositions est relative à la constitution de notre monde actuel. Nous ne pouvons aller au-delà. Cet ‹autre cours de l'histoire›, ces mondes alternatifs dramatisés par ‹l'historien imaginatif› qui développerait des ‹possibles›, n'a d'autre fonction que de rendre compte de notre monde actuel, de ce dont il hérite, de la fragilité de l'histoire dont il dérive, des possibles qui l'habitent dans une présence latente» (Debaise 2015: 119, translated by the author).

our current habits, ethical choices and progress-oriented discourses. Their practice can thus be considered as a variation of the science fiction tradition, with the specificity that it uses the medium of diegetic prototypes (Sterling 2005). But speculative design and the later variations it generated (future design, design fiction) has since been questioned. It has been accused, among others, of being limited to gallery contexts (Mollon 2019), of reinforcing the Western idea of progress through dystopia (Schultz et al. 2018) or of developing critiques disconnected from current technological, political or social issues (Revell 2019).

> The importance of speculative proposals is related to the relevance of the articulations they produce. … In the end, the relevance of the proposals is related to the constitution of our current world. We cannot go beyond that. This «other course of history», these alternative worlds dramatized by the «imaginative historian» who would develop «possibilities», has no other function than to account for our current world, what it inherits, the fragility of the history from which it derives, the possibilities that inhabit it in a latent presence. (Debaise 2015: 119)[2]

The risk of speculative design projects lies in its tendency to simplify and polarize positions through extrapolation. As Vella espoused, the ideal and the catastrophic are poisons because they allow us to «hide behind bad a-contextual abstractions» (Vella 2015: 146). The controversies that emerged around the «Republic of Salivation» (2010) installation by Michael Burton and Michiko Nitta at MoMA were emblematic in that regard. The project presented a distant future scenario in which starvation had become the norm and food access would be based on social status, but «commentators pointed out the unquestioned political positioning of privilege when designers could work on projects about speculating on starvation while actual starvation was happening and as a seeming glamorization and cautionary tale about change. *A kind of speculative disaster tourism*» (Revell 2019).

Not all speculative design attempts should be discredited for these reasons. Many of them have proven their ability to generate interesting debates, both internally on the understanding of design practice and in the public space on societal issues. But the introduction of the term by Dunne and Raby and the growing popularity of their teaching

overshadowed other forms of critical design approaches, as Pullin already stated in 2010: «I am never sure whether to use the term critical design to define my own work these days ... The term is so associated with the Design Interactions at the RCA, and its subversive, often dystopian, visions of technological futures» (Pullin 2010: 324).

Are other forms of critical design currently emerging? How do they differ and which other aspects can they tackle? This chapter examines a series of works which do not extract themselves from the present through speculative technologies and futuristic contexts. On the contrary, they would be based on actual knowledge validated by science, technologies they can develop and produce, and present themselves as viable solutions to solve current issues. Their criticality will be embedded in the social and ethical implications of their proposal for the here and now.

Three main aspects will be investigated: technical implementability; the designer's ambiguity; and participation within critical projects. Our first example is a project related to the protection of nature and endangered species. It highlights a difference from Dunne and Raby's impetus to create objects that cannot work. In a second step, we examine a company creating monsters, questioning storytelling practices in a capitalist society. This project acts as a revealing agent of knowledge production strategies, and its purposely ambiguous positioning differs from the dystopian tradition of speculative design. Finally, the issue of scaling will be exemplified through a project of inflatables for activism: here, design becomes an agent for non-violent protests against capitalism and mass production, which was the initial birth context of the design discipline itself. This example questions the solely symbolic power of one-off critical objects, in comparison to the impact of scaling and sharing.

Whales, probes and peccaries

> *Speculative design is challenged by the climate emergency. We can't take the luxury of designing for 2050 when one species goes extinct every five minutes.* (Arthur Gouillard, interview with Emile De Visscher, 2019)

For our first example, we dive deep in the profound ambiguities of our relations to animals. The title of the project, «Augmented Nature», announces the issues it raises: can new technologies help wild species survive the ecological crisis we initiated?

Formed by Eirini Malliaraki, Duncan Carter, Mick Geerits and Arthur Gouillard, Abnormal Studio started at the Royal College of Art in 2018. Their project began with an in-depth analysis of the values

associated with nature and the team worked with biologists and zoologists involved in the preservation of species, analysing their work processes. From these observations, they proposed

> an active and animal-centred alternative to the current conservation efforts. Our premise is that humans are part of nature. Hence, efforts that try to separate species or revert nature to a certain state in the past (re-wilding, preservation) are not realistic. Nature is a dynamic system and evolution is equally driven by species adapting to change but also by transforming the environment for their purposes. (Abnormal Studio 2018)

«Augmented Nature» proposes to provide tools for animals to defend or protect themselves from the dangers of human exploitation. The project revolves around two proposals. The first concerns the humpback whale, a marine animal crucial for its surrounding fauna and flora (Fig. 9.1). It can be considered as a vital ecosystem engineer (Jones / Gutiérrez 2011) in the sense that many other forms of life depend on the modifications it generates in its living environment. However, noise pollution (boats, drilling, radars, probes) «is currently considered one of the most serious arguments to explain behavioural disorders, strandings and whale accidents» (Gouillard 2019). Looking at biotags (passive GPS beacons) that researchers place on the backs of whales to track their movements and behaviour, the group proposed adding an active element: a series of sensors and a wave transmitter to indicate the presence of danger in the surroundings, or to divert the whales from places that could be a threat for their survival, mostly from noise generation that disrupts their communication and navigation abilities. The waves generated are using the extensive knowledge zoologists have accumulated on the communication structure and patterns of humpback whales (Fig. 9.2).

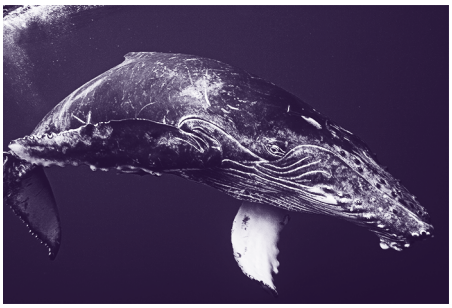

Fig. 9.1 Abnormal Studio, Augmented Nature – humpback whale, 2018. Courtesy of Gabriel Barathieu, edited by Augmented Nature.

The second example concerns the peccary, a wild cousin of the pig. Present in many areas of the Amazonian forest, its survival is endangered. It is, like the whale, a prominent ecosystem engineer, because it spreads a wide variety of seeds through eating and defecating, and turns the earth over very efficiently. Based on existing studies and practices related to industrial pig breeding, the studio proposes to provide a vibrating collar for these animals to enable them, too, to protect themselves from deforestation, hunting and human presence (Fig. 9.3).

Fig. 9.2 Abnormal Studio, Augmented Nature – principle diagrams, 2018. Credits: Mathilde Heu.

Fig. 9.3 Abnormal Studio, Augmented Nature – Peccary, 2018. Courtesy of Jon Woodworth, edited by Augmented Nature.

In the lineage of speculative design, the proposal of these designers is obviously controversial. For it blatantly raises the question of responsibility: who selects the dangers to be diverted from? Who controls these animals; how can we prevent them from being instrumentalized; what democratic process should we establish to obtain the animal's consent? «This project questions the agentivity of wild animals – are they free to do anything they want?» (Gouillard 2019). Biotags (GPS beacons) are currently placed by zoologists without the animal's consent, yet their passiveness makes it unproblematic. But interacting with its behaviour by adding active probes suddenly creates a deep ethical issue. To do this on humans «would be profoundly fascist» (Gouillard 2019) – but on animals? The project questions our conception of wilderness because, of course, we have modified, conditioned and controlled the species in breeding for thousands of years, but adding prostheses to so-called wild animals is another story. What is wilderness referring to when forest, oceans and clouds are polluted, protected or exploited? The project also takes a sharp look at the design discipline itself. Usually considered as the practice «that improves or at least maintains the habitability of the world for its inhabitants (i.e. all of us human beings)» (Findeli 2010: 292), thinking and inventing devices for other non-human entities, a new «animal-centred» design, also raises the limits of our discipline in regard to anthropocentric and Western dominance – individual human progress and comfort at the expense of other forms of life (Fig. 9.4). As we mentioned, this project shares close relations with speculative design practices. Yet one major aspect differs: it is not based on speculative technologies or on distant futures. As Arthur Gouillard, a member of the studio, confirmed to me, «the objective was to remain incremental, not to fall

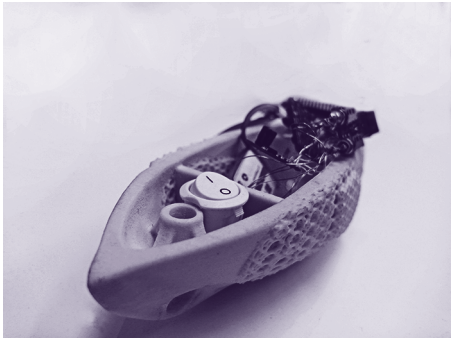

Fig. 9.4 Abnormal Studio, prototype of the Peccari's probe, 2018.

into the trap of unrealistic technologies» (Gouillard 2019). The devices they produced are fully functional, and the effects of the waves and vibrations on both animals' behaviours are based on proven research and effective use in captivity or breeding of similar animals.

In chapter 5 of *Hertzian Tales*, called «Real Fiction», Anthony Dunne supports that «displaying a fully working prototype in a gallery context invites people to marvel at the ingenuity of the designer, and the fact it works, but overlooks the challenges to the status quo its insertion into everyday life might bring about» (Dunne [1999] 2006: 86). He supports the role of the non-working model, taking Michele De Lucci's appliance prototypes presented at 1979's Milan Triennale as examples: «they are clearly representations, models comfortable with their unreality. They are things in themselves rather than shadows of yet to be realized products. They offer real experiences of ideas, rather than unreal experiences of unrealized products» (Dunne [1999] 2006: 86). Yet it seems that this argument is precisely opposite to our example. If Abnormal Studio had produced a prop using unrealistic technologies, their proposal would lose much of its critical aspect because we would be able to criticize its effectiveness and diminish its probability to be implemented. It would become another speculative proposal for a dystopian world. According to Wodiczko, the creator of *Homeless Vehicules* and *Poliscars*: «the minute you present a proposal, people think you must be offering a grand vision for a better future. ... they think it must be designed for mass production, and instantly imagine 100,000 Poliscars taking over the cities» (quoted in Dunne [1999] 2006: 87). This projective process is precisely what makes «Augmented Nature» so powerfully critical. The studio presented the projects several times in different contexts, using role-playing as if they wanted to raise money to create a start-up and research programme to test it. They met with very distinctive reactions from their public (engineers, zoologists, climate activists, designers, etc.), the more techno-optimists there were looking to invest and develop it, the more the ethically engaged were clearly shocked by it. Because it works, because it is potentially viable, we can immediately project its development for every wild animal in the world right now. But then, do we want that to happen? Who will control it? Who will develop it? All the political and critical aspects of the project, contrary to Dunne's claim, are magnified by its implementability.

Inspired by speculative design, I also wanted to have a practical project, one I could implement in the real world.
(Santini Basra, interview with Emile De Visscher, 2020)

Our second example will take us to rural territories. The designer Santini Basra is the creator of a project which is equally original for its critical depth as for its practical simplicity. «Monster Tourism» is considered the first stage of a company called «Cryptozoological Marketing Solutions», proposing a series of actions for rural areas in need of tourist attention, through the invention or reactivation of «cryptids» (Fig. 9.5). Basra became interested in monsters for a very simple reason: he is Scottish himself and studied design at the Glasgow School of Art. Tourism linked to Loch Ness is vital there, with «a business of £41 million per year» according to Willie Cameron, director of Loch Ness Marketing (Cameron 2018). Very early on, Basra became interested in the practice of cryptozoology, «a field typically driven by amateur enthusiasts that exists within an intersection of science and pseudo-science» (Basra 2014). Officially born in 1955 through the seminal book *On the Track of Unknown Animals* by Bernard Heuvelmans ([1955] 1958), cryptozoology is centred on the study of mythical «cryptids» like the Yeti, Nessie or Chupacabra. As Basra explains, «Initial observations suggested that the cryptid might be an amalgam of pre-existing local myth and current local wildlife. They rarely designate entire species, nor move from their habitat» (Basra 2020). As a social practice, «Crypto-zoology often serves as a means of preserving a certain collective history of community and place – and yet it also evolves in regards to societal changes (from male to female individuals, colours, behaviours)» (Basra 2020).

Fig. 9.5 Santini Basra, Cryptozoological Marketing Solutions website, 2014. Credits: Santini Basra.

Basra's project aims to provide solutions to generate tourism in neglected regions by designing monsters. Postcards, a series of tools to produce footprints or tail tracks, an instruction manual, handicrafts and derived products are the few physical propositions of his company (Fig. 9.6). The idea was first studied and experimented for the island of Arran, possessing a legendary monster called the Orran (Fig. 9.7). «The project observes and responds to this relationship between myth and tourist, analysing both the monster's role within the tourist economy, and the process of myth-making» (Basra 2014) (Fig. 9.8).

Fig. 9.6 Santini Basra, Monster tourism, 2014. Credits: Santini Basra.

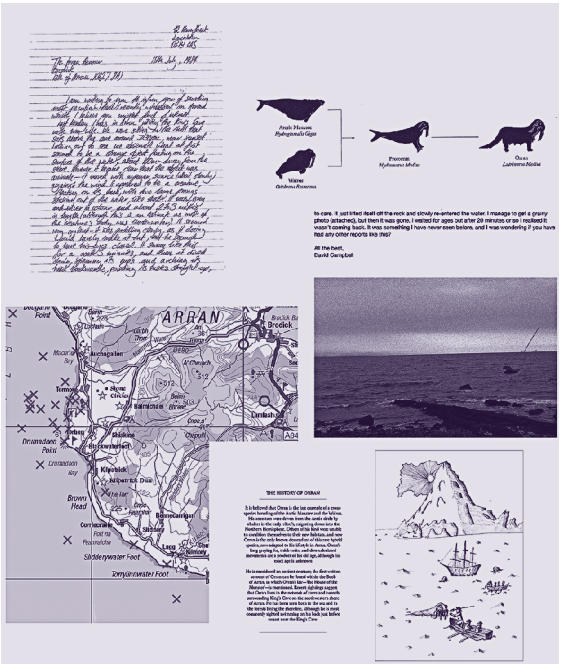

Fig. 9.7 Santini Basra, Study for the creation of Orran, 2014. Credits: Santini Basra.

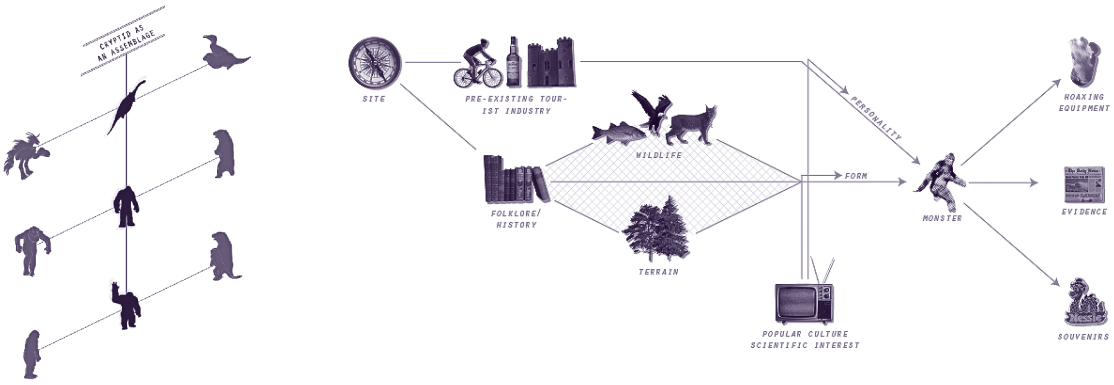

Fig. 9.8 Santini Basra, Study on the evolution of cryptids and myth-making, 2014. Credits: Santini Basra.

As with the previous example, the interest of this project lies in the duality it generates. As Basra himself confirmed to me, «It's definitely built as a serious proposition. I even spoke to one of the representatives of ‹Visit Scotland›, who is financing tourism initiatives here ...The project was thought as a business pitch, borrowing its language and tools» (Basra 2020). The project can be seen as a viable business opportunity, scalable and deployable in many different configurations.

At the same time, something seems a bit offset – the «uncanny» of critical design haunts the project, first because it builds a lie. Business storytelling, and the society of the spectacle (Debord [1967] 1970) that results from it, are twisted and extended to monsters. By doing so, it pushes marketing discourse towards a slightly odd and misplaced area: no one would actually believe in such monsters if they were invented by a company for profit. Yet it highlights the strategy of many brands and politics that use aggressive fake news or green-washing discourses and by-products to legitimize their activities. Are we ready to live in a society where legends, tales and collective knowledge are built by consulting companies?

Furthermore, by designing a proposal addressed to rural areas, the project highlights the forgotten territories of architecture and design. It provides tools for spaces that were typically left aside in the rise of service economies, internet connectivity or transport development. Bringing their community to life, making their culture known, giving them means to make a living, the project holds a political stance through empowering neglected villages. Finally, cryptozoological promotion questions scientific knowledge, the famous «factish» established in university laboratories (Latour 1999: 306), in the face of tacit knowledge and rural legends, stories and beliefs. If monster theories are easy to discredit from a scientific view, their presence in amateur collectives and rural areas are nevertheless a basis for the construction of communities, complex relations with animals and plants, and the constitution of a history and identity. They exist, and are as «real» as microbes or mathematics, in the sense that they organize social life and debate as much as other agents that science validates. Designing monsters is thus also a way to design collective life.

If we analyse this duality within the dichotomy of Dunne and Raby, we will find that the project cannot be clearly boxed into one or the other of the two sides. The project is highly critical, yet it also provides a viable proposition. It can be seen as a good problem-solving solution, but it also raises many societal issues. It can be pitched to public investors, yet it creates a dissonance that questions the constant marketing strategies we are surrounded by. When asking Basra about his main inspirations, he mentioned Tobie Kerridge's «Bio-jewelry» project: «this project is exemplar because it plays between

both lines … well not really … um, I'd rather say it is entirely both – an entirely viable business but supporting a lot of criticality towards our consumerist society» (Basra 2020). This capacity for a project to «be entirely both» seems characteristic – it is not affirmative or critical; it seeks to become affirmative and critical. The interest of Basra's project lies in the ambiguity it deploys. Basra does not present us with a clearly utopian or dystopian proposal, he is neither in the «better future» progress-oriented discourse, nor in the satirical «dark design» strategy of Dunne and Raby (Dunne / Raby 2013: 38–43). The project raises a series of issues regarding current tourism, tales and marketing structures, yet it leaves the moral judgement up to debate. And Basra's ambiguity is not a naïve one. On the contrary, it stems from a very sharp understanding and awareness of the ambiguous relations our society fosters with reality and truth.

Hammer, balloons and mirrors

> *Ambiguity is good … it invites people to read in different ways.* (Van Balen, interview with Emile De Visscher, 2020)

As regularly addressed to critical design projects (Malpass 2015), it could be argued that the two examples presented above have not been «implemented» and «used» as regular objects are when launched on the market. Although this claim could be questioned, because we can consider that both projects' intents were to create debate and raise awareness, which they did, our third example will allow us to observe a similar strategy, but through participation, collective making and use. The «Tools for Action» project has been running since 2012 in multiple configurations on the occasions of climate, transgender or anti-Nazi protests. Founded by Artùr Van Balen, the project takes the shape of «a collaborative platform to open the way for experimentation, creating space for poetic forms of engagement» (Van Balen / Phillips 2020: 1). Tools for Action is a series of designs and blueprints for inflatables, as well as an open collective of activist designers, artists and makers around the world. The origin of the project stems from the success of an intervention, typical of the «protestival» tradition (St John 2008), by the artist group *eclectic electric collective*, of which Artùr Van Balen was part. Involved in the climate activist movements, they produced and sent a giant inflatable to the United Nations Climate Conference's protests in Cancún (Mexico, 2010). This «El Martillo» inflatable was shaped like a 12-metre-long hammer, symbolically smashing people and policemen as if they were nails (Fig. 9.9). Although the inflatable was torn apart after a few hours, the intervention and its destruction by the police became «a symbol of the climate change protests as its image travelled across the world» (Van Balen 2012).

Fig. 9.9 «Art is not a mirror to reality, but a hammer with which to shape it. – Bertolt Brecht / Vladimir Mayakovski / Karl Marx», Eclectic electric collective, El Martillo Project, 2012. Credits: Tools for Action.

Fig. 9.10 Tools for Action Collective, Berlin May 1st protest, 2012. Credits: Tools for Action.

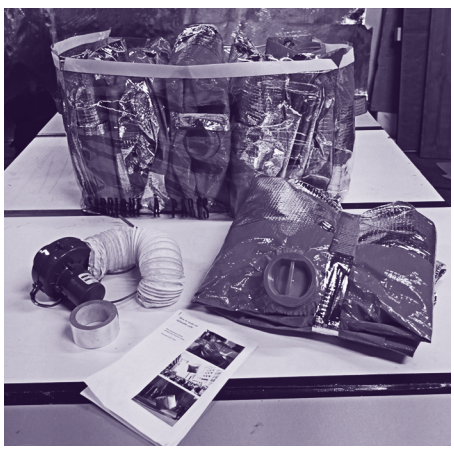

Fig. 9.11 Tools for Action Collective, COP 21 Paris cobblestones, 2015. Credits: Tools for Action.

As Graham St John analysed it: «These mobilizations build on the meta-political tactic of ‹heightening the visibility of power› located in the ‹symbolic challenge› posed by new social movements» (St John 2008: 130). Van Balen then created the *Tools for Action* collective. Many other protests saw similar objects invade space, such as a giant pink slipper for a feminist march in India (2013), a 10m-long saw for Russian opposition rallies in Moscow (2013) or a giant transgender inflatable body in Bogota (2018, led by Tomás Espinosa). These interventions involve unique and complex pieces primarily used for their historical, symbolic and mediatic power. But another part of the project should be analysed further, for its closer relations to design issues. In 2012, the same collective created a cubic balloon for the May Day strikes in Berlin (Fig. 9.10). Thought of as a tool rather than a symbolic form, the inflatable will quickly serve as a protective buffer between the demonstrators and the police. As a matter of fact, this object proves to be particularly effective, not only to protect, but also to hide. The mirror aspect and its large volume prevent police forces from identifying faces and knowing exactly what is going on, «which makes them very nervous» (Van Balen 2020). Moreover, this experience in Berlin showed how inappropriate guns or sticks are to contain such tools: «They had problems with the slippery surface of the material and the scene this created was hilarious: everyone saw how a highly armed squad of riot cops tried to destroy a balloon» (Van Balen 2014).

These giant «cobblestones» were then optimized iteratively. Further thought of as real barricades (coming from the term «barrique», wine barrels chained together to block enemy troops), the addition of Velcro strips and the simplification of the manufacturing process made them a «secret weapon of tactical frivolity», as Van Balen calls them (2014).

Fig. 9.12 Tools for Action Collective, Dortmund barricades and training, 2016. Credits: Tools for Action.

Produced again for the COP21 in Paris in 2015 (Fig. 9.11) or for the anti-Nazi demonstrations in Dortmund in 2016 (Fig. 9.12), they gave birth to indoor training, rallying and blocking tactics and collective choreographies. These objects have an obvious critical and political stance – first, the frivolity of the balloon: they symbolize a frugal, jovial, light-hearted activism. They have the power to turn demonstrations into a game, just as «papier mâché puppets can transform a protest into a carnivalesque situation» (Van Balen 2014). History has several examples of these joyful inflatables used in serious protests, like the one of the radical architect group UFO denouncing the Vietnam war in the 1970s (Fig. 9.13). But it is probably the major Global Day Action of 1998 that initiated the strong tradition of «Carnivalized Politics», a subject of much attention since (St John 2008). Furthermore, their shimmering appearance is particularly powerful. This aesthetic property sends back to the police, and by extension to the state, its institutions and political figures, a distorting mirror denouncing the armed response to the expression of a democratic right. The use of mirrors in demonstrations also has a history, from the Greenham Common Women's Peace Camp in the 1980s as a means of reflecting police brutality, to the recent reappearances in the 2014 Ferguson protests (Abse Gogarty 2016). Finally, fighting and demonstrating with air, as a non-material, a pure nothingness – but air being also a common good in danger – carries a strong political and critical message. It supports and demonstrates the strength of the light, the invisible, the impalpable, as a real power in the face of the stick, the flashball or the shield – that which cuts and slices against that which collects and contains.

Van Balen's project can be considered a very direct representation of «design activism» (Julier 2013), in the sense that it provides a solution for protecting, hiding and enacting the democratic right of protest. In this sense, it is quite different from the two previous projects as it does not hide behind marketing discourse or use any role-playing to produce debate and question our ethical standpoints. However, it raises another essential aspect of design: deployment. One can see how Tools for Action has evolved its object towards a simplification of forms, an optimization of production and a standardization of shape. The appeal of the inflatable is above all practical (it can be folded, stored in a bag, it is simple to build with scissors and double-sided tape, making its fabrication inclusive and shareable), the square

Fig. 9.13 UFO: «Urboeffimiro Nr. 5», Florence, 1968. Photo: Archive Lapo Binazzi.

shape is the simplest to produce, its mirror aspect is linked to economic constraints (availability of survival sheets), its size and lightness prevent it from hurting anyone and it creates a buffer. All these aspects are, in a way, a relevant response to a contextual design brief – providing a «good design» product.

Van Balen's insights prove to be exemplary for our enquiry because they showcase two different strategies: the first through one-off, symbolic and contextual inflatables, the second through optimized, standardized and generic shapes. If the hammer inflatable has seen a wider media impact, its lifespan and its appropriation by other collectives for further events could not take place. On the other hand, the cobblestones have become effective tools for protest in many different configurations. In his thesis, Dunne argued that unique one-off crafty models, if questionable from a product design point of view because they are often impossible to industrialize and economically unviable, offer the possibility to contain the essence of an idea in a more satisfactory way and to transfer its «genotype». It works on an abstract level that highlights the «aesthetics of use» rather than the «aesthetics of construction» (Dunne [1999] 2006: 91). Yet it seems that the cobblestones are more ambivalent and powerful than the hammer inflatables, as they become mass-produced and deployed not only for media-discursive reasons, but also for practical use. Their mass-manufacturing potential calls for multiplicity, democracy and collective power – «choreopolitics of freedom» (Van Balen / Phillips 2020: 2) – rather than unique direct contextual messages. Their status is more ambiguous, between critique and usefulness, which, I believe, strengthens their criticality through multidimensionality:

> Paradoxically, paradox and ambiguity used in the right context can work to reveal and illuminate and to reconcile opposites in a holistic way. They give shape to overlapping and contradictory issues which pragmatic and pedestrian delivery often fails to achieve. For an idea to really speak as an object, that is, a thing in three dimensions, it must have more than one dimension. (Ball / Naylor 2006: 56)

Trojan horses

Many other projects could be included in this chapter, showcasing similar approaches – from James Auger's «Newton machine», to projects of Julian Olivier and the «Critical Engineering Working Group», down to the «Civilize Space» research of Octave De Gaulle. Although the incentive and the processes differ, they all share a deployable aspect, with a critical ambiguity and a deeply thought-through design

process to come up with a viable solution. They all play around the dichotomy of Dunne and Raby, as it is impossible to clearly box them into one or the other side of their manifesto.

When I asked him to clarify the duality of his project, between viable proposition and sharp criticism of knowledge and marketing, Santini Basra stated: «I like the balance between speculative and affirmative design. I believe in the power of design to insert everyday practices and act as a Trojan Horse – reviving the profound issues of the structure it infiltrates» (Basra 2020). Recently, the figure of the Trojan horse for designers has been used by curator Paola Antonelli to qualify the way some designers use their relations with networks of producers, companies, science research labs, norm regulations, consulting companies in order to reveal the social, ecological or political issues at stake in these networks (Antonelli 2020). Taking the recent work of Formafantasma on e-waste or timber as an example, she supports the view that design, because of its profound entanglements with all these structures, can have a critical role in investigating the deep logics and discourses they are based upon. Here, the insertion of design into economic, political, technical and social structures provides it with a unique standpoint to make these structures public through their projects. As with journalists investigating undercover, anthropologists living in non-Western societies for years, or «established» Marxists working in industrial contexts to unveil alienation processes (see Linhart 1978), designers are in a perfect position to become double agents. They can push the logic they study to a point where it becomes critical of the tools they use. The designer as investigator, using Trojan horse strategies to unveil socio-economic realities and raise awareness on the «fragility of the world we inherit», could become a prominent critical actor for the future.

How to further develop this research? There is no need to invent a new academic term to box these alternative approaches together in a movement or a trend. They obviously share some aspects, but also differ in their methods, discourses and mediums. Rather than creating new typologies, further enquiries could gather weak signs of these emerging alternative approaches, but also establish new filiations of critical design in all its diversity. Interestingly enough, we would probably find that some of the early works of Dunne and Raby could provide interesting historical lineage. The Placebo Project (2001), in which they produced eight objects showcasing magnetic behaviours and placed them in a home to study their impact on everyday living conditions, could be considered a very good parent to the examples presented above. They are made for the present rather than the future, display an ambiguous and open-ended moral standpoint rather than a clear dystopian critique, and use participation in context rather than

aesthetic appreciation in a gallery venue. These aspects, which they left aside within their further research, are re-emerging now in a renewed, prolific and exciting critical design scene.

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