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LA TRIENNALE DI MILANO

Speculative – Post-Design Practice or New Utopia?

Introduction to Speculative Design Practice

Ivica Mitrović

Discursive and Critical Design Practice

From the modernist perspective, design has been primarily regarded as a problem-solving practice, usually dealing with problems detected by other professions. In this sense, the mission of design is closely linked to the needs of the industry or, in a broader sense, the creation of a better living standard. From such modernist perspective, design is seen as a service activity that primarily addresses clients' needs. However, as graphic designer and publicist **Dejan Kršić** points out, design has always been a signifying practice that generates, analyses, distributes, mediates and reproduces social meaning, especially nowadays, in the context of the new social, technological, media and economic conditions.[2]

The relation between design and art (and other related disciplines) can be observed in several stages, i.e. from the high modernist synthesis of applied arts, visual arts and design in the 1950s, to the scientification of design throughout the 1960s and the emphasis on its rationality and the postmodernist position in which it is once again positioned at the centre of the interrelations of various disciplines, no longer through a complete synthesis, but, above all, through their interaction. Therefore, it comes as no surprise that an increasing number of designers take upon some new approaches to design. These "new designers" act on the borders of traditionally defined disciplines, removing the borders between them.[3]

In their research, these new designers relate to diverse fields of science, primarily computer sciences and engineering, sociology, psychology, architecture, and, in the recent times, increasingly to biotechnology, all with the goal of critically reflecting on the development and role of technology in society. Designers re-think
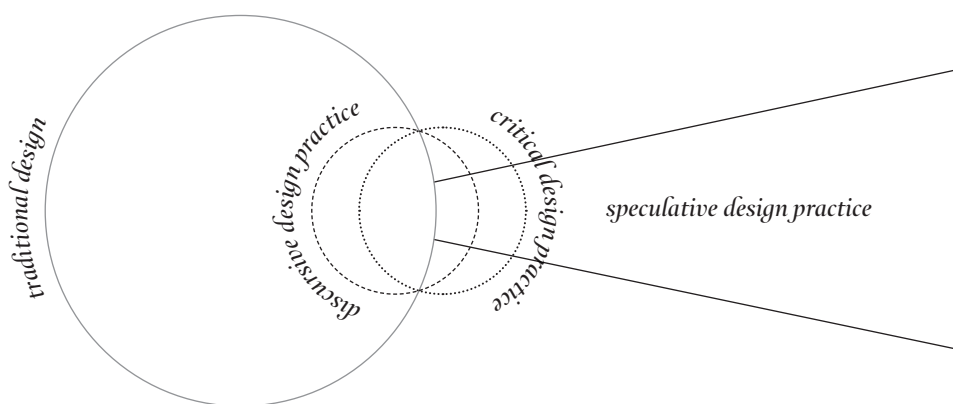
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fig. 1 Traditional design vs Speculative design.

the role of technology in everyday life, without dealing with the applications of technology, but rather by considering its implications. Turning away from the commercial aspects of design with the focus on the demands of the market, they are now engaged with a broader social context. The new designers use design as a medium and focus on concepts and artefacts, and, rather than solving problems, ask questions and open issues to discussion.

The researcher and educator **Ramia Mazé** says there are three different approaches to critical design practice: the first sees designers reflecting on and critically questioning their own design practice; the second approach is based on a macro-perspective, re-thinking the design discipline as such; whereas in the third approach the design discourse is directed towards broader social and political phenomena.[4] Mazé points out that these approaches are not mutually exclusive, as they most often intertwine and supplement each other in practice.

Historical references of critical design practice point to radical architecture of the 196øs, and partially to the critical practice of avant-garde and neo-avant-garde art. They are particularly inspired by the narrative quality and imaginary worlds of literature and film. Design and critical practice create more intense links in the interaction design, a specialized field of design that emerged in the early 199øs as a result of the accelerated development of digital technologies. The classical definition of interaction design describes it as a practice dealing with the ways in which people connect via the products and technologies they use, i.e. with the design of our everyday lives via digital artefacts. Today, it is most commonly associated with the design of digital products, applications or services.

In this context, through his own personal design practice, and later through the establishment of a novel educational approach as the Head of the *Design Interactions Department* at the *Royal College of Art* (the *RCA*) for many years, **Anthony Dunne**, in an approach he termed "critical design", has dealt with the aesthetics of the use of new technologies in the context of electronic products.[5] However, over the years, and in collaboration with **Fiona Raby**, he expanded the focus of his activities to the cultural, social and ethical implications of new technologies, and, most recently, on speculations about broader social, economic and political issues.[6]

Speculating through Design: a question instead of an answer

Speculative design is a critical design practice that comprises or is related to a series of similar practices known under the following names: critical design, design fiction, future design, anti-design, radical design, interrogative design, discursive design, adversarial design, futurescape, design art, transitional design etc. For instance, design fiction is a potential genre of speculative design practice, and "critical design", as defined by Dunne, is a possible approach.
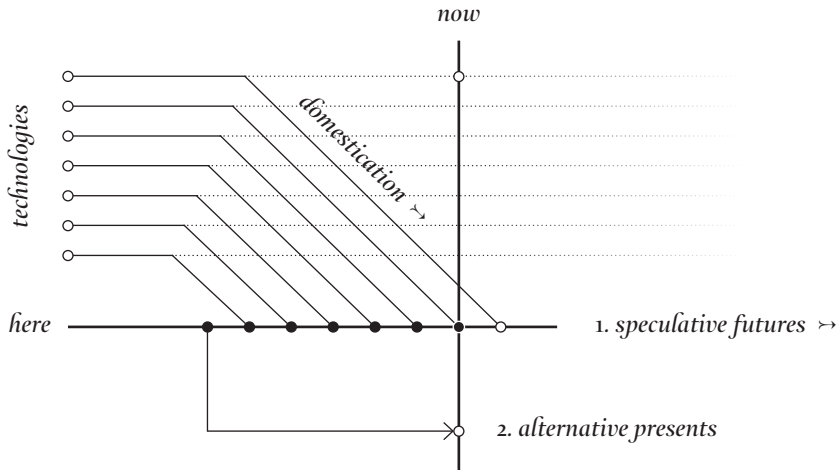
fig. 2 Alternative presents and speculative futures (Auger).

HERE AND NOW: *everyday life and real products available on the market. The higher the line, the more emergent the technology and the longer and less predictable the transit to everyday life. Speculative futures exist as projections of the lineage in future. The alternative reality presents a shift from the lineage at some point in the past to re-imagine our technological present.*

Speculative design is a discursive practice, based on critical thinking and dialogue, which questions the practice of design (and its modernist definition). However, the speculative design approach takes the critical practice one step further, towards imagination and visions of possible scenarios. Speculative design is also one of the most representative examples of the new interaction between various disciplines. It is therefore interesting to see how new designers view their practice: they call themselves trans-disciplinary, post-disciplinary or even post-designers, quite often even simply – designers. Sometimes they do not even declare to be acting from the design perspective at all.

By speculating, designers re-think alternative products, systems and worlds. Designer and teacher at the RCA, **James Auger**, says that this design (i) moves away from the constraints of the commercial practice (steered by the market); (ii) uses fiction and speculates on future products, services, systems and worlds, thus reflectively examining the role and impact of new technologies on everyday life; (iii) and initiates dialogue between experts (scientists, engineers and designers) and users of new technologies (the audience).[7]

Today we can see that capital uses promotion and investments in the technology by programming the technological development to actually colonialize the future.[8] In this technological context, design often acts in the so-called "Western melancholy"[9] discourse where "the problem" of technological alienation, manifested as the extinction of real social interactions, "is resolved" with the production of new technologies or new products as an intention to once again insti-

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gate long gone social interaction. And, whereas traditional design actually legitimizes the status quo, speculative design envisages and anticipates the future, at the same time helping us to understand and re-think the world of today. This approach is most often based on the question "what if?", examining the interrelation between potential changes in the technological development and social relations. Rather than engaging only with a future that we desire, this approach also deals with the future we fear might come true if we fail to critically consider the role of new technologies in the society.

Such an approach to design does not focus on meeting the current and future consumer needs, but rather on re-thinking the technological future that reflects the complexity of today's world. Speculative practice opens space for discussing and considering alternative possibilities and options, and imagining and redefining our relation to reality itself. Through its imagination and radical approach, by using design as a medium, it propels thinking, raises awareness, questions, provokes action, opens discussions, and can offer alternatives that are necessary in the today's world.

Speculative design fictions find their inspiration in science fiction, which has a long history of creating imaginary scenarios, worlds and characters with which audiences become closely identified. Imaginary worlds are an exceptional source of inspiration to designers in their re-thinking of the future. However, such approaches to speculative fiction, as conceptualized, for instance, by the science fiction author and futurist **Bruce Sterling**,[10] are often part of the technological paradigm, and, as such, reaffirm the technological progress instead of questioning or

being critical of it. By the creation of imaginary worlds, and by designing fictions, we actually question the world we live in – its values, functions, its metabolism, as well as the expectations of its inhabitants.

Ramia Mazé underlines that design practices can never be neutral – there are always critical and political issues, as well as alternatives and futures linked to them.[11] Thus, Dunne and Raby emphasize the potential of speculative design for large-scale social and political issues, such as democracy or sustainability or the alternatives to the existing capitalist model.[12] In this context, publicist and activist **Naomi Klein** warns that the present domination of dystopian scenarios in literature and films leads to a view where catastrophic scenarios are unavoidable, which results in making us passive rather than proactive.[13] It should be kept in mind, therefore, that the purpose of speculative design fictions should not be utopian or dystopian science fiction visions of the future, but dialogue on what the future can be.

For instance, with its explicit focus on the future, the speculative design approach offers a stimulative framework for re-thinking visions of networked cities of the future.[14][15] **Liam Young**, a speculative architect who says that his work lies in "a space between design, fiction and future",[16] sees speculative fictional cities of the future as a starting point for debate and discussion, scenarios that we will love or hate, which will "not just anticipate, but actively shape technological futures through their effects on collective imagination".[17] He points out that "cast as a provocateur and storyteller, the speculative architect instigates debate, raises questions and involves the public as active agents in the future of their cities,

and brings us closer to the technologies that are increasingly shaping the urban realm and the scientific research that is radically changing our world".[18] However, speculative design can also function in the so-called "real world", i.e. in companies employing designers to consider scenarios for future trends and research into the adoption of emerging technologies.

Methodology?

Although the speculative approach to design can primarily be seen as an attitude or position rather than a traditionally defined methodology[19], especially since many designers practice the approach without using this term, we can still point out some distinctive characteristic of the approach and determine a basic framework. Since speculative design continuously interacts with other related practices, fields and disciplines, it uses any methodology that is accessible and appropriate at any given moment. For instance, it legitimately uses tools, techniques, instruments, methods, genres and concepts such as fictional narratives, film language, screenplay, storyboard, user testing, interviews / questionnaires, games, but also media and pop culture phenomena, such as hidden camera, elevator pitch, observational comedy, stand-up, etc. Anything considered suitable at a given moment is legitimate.

Design is based on the observation and understanding of the world around us, and by practicing it we endeavour to articulate our needs, desires and expectations. The
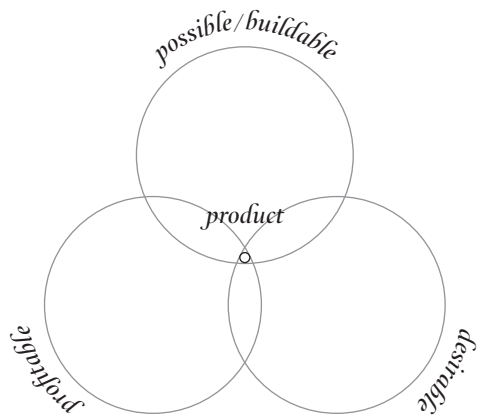
fig. 3 Possible, Profitable, Desirable (defining an idea / concept as a product) (Near Future Laboratory). All products have to be present in the center to be viable on the general market. Speculative products and services (including systems and worlds) can be fictionalized as existing in the center.

problem arises when we want to expand the horizon of our observation in order to identify emergent themes. The question is how to begin with the design of concepts when we do not know what the design space itself will look like, let alone who its users will be. The approach and practice of speculative design is a particularly stimulative strategy for researching the "space" that lies beyond "current" and the "now".

Speculative practice may seem as a top-down approach at first glance, placing the designer at the centre of the process, offering her personal vision, without involving the target audience. However, let's keep in mind that one of the main goals of speculation is the inclusion of the public in the re-thinking and dialogue on new technological realities and new social relations. Also, a successful speculative project is necessarily connected to the research of a so-

cial context, and is fundamentally directed towards the individual needs and desires.

The practice demonstrates that the speculative approach has potential in multidisciplinary teams, where it initiates dialogue and generates a context in which the participants can simultaneously re-examine the boundaries of their disciplines and discover links with other disciplines.[20] The process can be split in a few steps: the first one implies critical design research to define a design space. After this, speculative concepts and ideas are generated and further developed to finally articulate forms which are suitable for communication.

The speculative approach frequently uses methods of contemporary art. However, as opposed to general artistic practice, design uses a language recognizable to a wider audience, and is not confined only to galleries and salons. Publicist and critic

Rick Poynor points out that, contrary to artistic practices, design is not declared an artistic fantasy out of hand, and ignored by companies, institutions and policy-makers.[21] Design is also in close contact with the new technologies and consumer society, popular media and pop culture, which is why today it boasts a significant media and social impact. Pop-culture forms, through novels, films, computer games and so on, often seem to be better platforms for speculative projects than galleries and museums (actually, that is a natural environment for design).[22]

Speculative practice is related to two basic concepts: speculation on possible futures and the design of an alternative present. Speculation on the future generates scenarios of the future that critically question the concept of development, the implementation and use of new technolo-

fig. 4 *The Future Cone (Voros via Dunne and Raby, via Revell).*
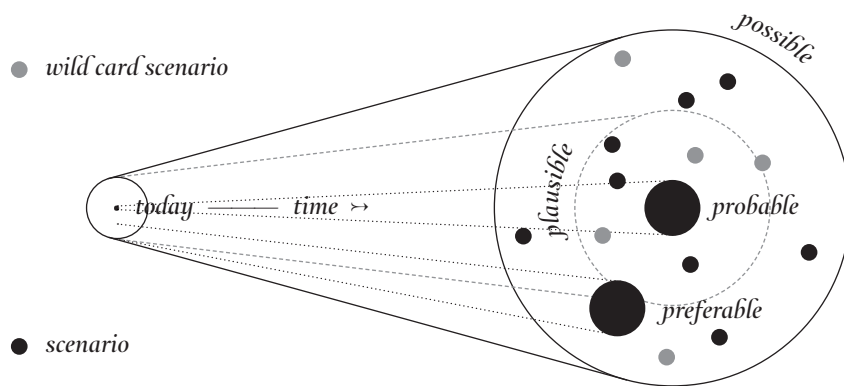
A diagram of potential futures (PPPP). PROBABLE: traditional design space. PLAUSIBLE: alternative futures, linked with the today's world. POSSIBLE: includes all extreme scientifically possible scenarios. PREFERABLE: using speculative design to debate and discuss what is the preferable future. BEYOND CONE: fantasy. WILD CARD SCENARIOS: low-probability and high-impact – to think about and discuss a much wider set of possibilities.

gies and their wider social implications. The concept of an alternative present refers to the creation of parallel urban technological realities. These specific approaches offer a rich narrative potential for the questioning and criticism of technological development, but also of contemporary society as such. The issues dealt with can be exceptionally broad, from big socio-political topics to ordinary everyday activities.

Speculative fictions do not exist solely in a futurist vacuum, because the past (i.e. the present we live in) fundamentally impacts our designed vision of the future. As opposed to the open form of science fiction, in speculative fiction there is a link between the present and the imaginary future.[23] Therefore, when re-thinking the future we must think about technologies and social relations that can emerge from the current world we live in. We must bring into question the assumptions and prejudice we have about the role of products and services in everyday life. The extension of the everyday into the future is what makes speculative design fiction powerful and profoundly intriguing.

Dunne emphasizes that these design processes primarily deal with designing relations, rather than objects themselves.[24] This is why speculative design can, as a result of such processes, offer new speculative products and services, even new social and political systems (worlds). However, the success and impact of a speculative approach, as perceived by the target audience, primarily depends on the believability of the designed artefacts and potential scenarios of the future. The concepts materialize and communicate in the form of narrative or documentary video and film

fictions, fictional products (prototypes), software applications, instructional videos, user manuals, graphs/diagrams, TV news reports, fashion accessories, etc. The so-called "diegetic prototypes" originate in cinematography where they exist as fictional but entirely functional objects whereas in speculative scenarios they serve to create the suspension of disbelief about change.[25]

Speculative practice draws inspiration from the poetics of literature, music, visual arts, film, computer graphics and architecture, especially in their avant-garde forms. Storytelling has considerable power and a deep-running tradition in human history in stimulating discussions and critical thinking. Speculative scenarios are open-ended and offer the audience the possibility of personal interpretation. They frequently include humour, often of the dark variety, close to satire, which activates the audience on an emotional and intellectual level, in a way similar to literature and film. Speculative scenarios are often unusual, curious, occasionally even disturbing, but desirable and attractive to the audience. However, only concepts that successfully communicate with the suspension of disbelief, actually provoke attention, emotions, and stimulate thinking and discussion, which, after all, is the main goal of speculative practice.

Design Practice for the 21st Century or a New Utopia?

The basic reference of the speculative (and critical) design practice is primarily the radical Italian architecture and design practice in the 1960s and 1970s. The founding principles of the radical approach, resistance to the mainstream modernist practice and technological domination, focus on social topics, re-thinking of the profession, very often through a political prism as well, today figure as the main characteristics of speculative and critical practices. The context of exceptional technological progress and domination at the time when radical practices emerged may be related to the present technological context (nano and biotechnologies, data-rich urban environment, ubiquitous computing and so on). And as the radical design was challenging or putting in question the modernist paradigm as the dominant ideology of the time, the new (speculative) design practices are confronting the dominant consumerist ideology. However, it remains to be seen whether the speculative practice has the potential to become the new, post-design practice, "design after design" or yet another utopia and historical reference.

Those who criticize the currently dominant approach to the speculative practice, characterised as "Eurocentric", highlight its excessively focus on aesthetics (on the visual and narrative level), tendency to escape to dystopian scenarios, vanity and separation from the real world. **Cameron Tonkinwise**, Head of *Design Studies* at the *School of Design at Carnegie Mellon University*, underlines that many dystopian scenarios found in present-day speculative fictions (of the Western world) actually (and unfortunately) have been already taking place in other parts of the world.[26] He also highlights that the present role of speculative design should provide solutions for mistakes of the modernist project and re-materialize in our everyday lives the visions of a radically different future. In an online discussion on the occasion of the exhibition *Design and Violence showcased* at the *MoMA*, the critics of this "Eurocentric" approach point out the privileged "Western" position stating that criticism is only possible outside of this comfort zone, by taking a position and organizing activities in the "real world".[27]

In order to expand the exhibition, we tried to answer the question through a series of interviews with the authors of the presented works together with the prominent international practitioners in the filed of speculative design. We have also incorporated a discursive view of the eminent experts in the field of speculative (and general contemporary) design practice.

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a

- Affirmative
- Problem solving
- Provides answers
- Design for production
- Design as solution
- In the service of industry
- Fictional functions
- For how the world is
- Change the world to suit us
  Science Fiction
- Futures
- The "real" real
- Narratives of production
- Applications
- Fun
- Innovation
- Concept design
- Consumer
- Makes us buy
- Ergonomics
- User-friendliness
- Process

b

- Critical
- Problem finding
- Ask questions
- Design for debate
- Design as medium
- In the service of society
- Functional fictions
- For how the world could be
- Change us to suit the world
  Social fiction
- Parallel worlds
- The "unreal" real
- Narratives of consumption
- Implications
- Humor
- Provocation
- Conceptual design
- Citizen
- Makes us think
- Rhetoric
- Ethics
- Authorship

fig. 5 A/B, A Manifesto (Dunne and Raby).
Critical design (b) vs Traditional design (a).

Interviews: discourse

1. **What is speculative (critical) design to you?**

2. **What is the role of the speculative (critical) design in the contemporary design practice, and, in the broadest sense, in the world we live in?**

3. **What kind of (design) educational concept would be prudent as a response to the contemporary world challenges?**

James Auger

James Auger is a designer employed as an Associate Professor at the *Madeira Institute of Interactive Technologies* (M-ITI), Portugal. In his research Auger uses design practice to question the role of technology in everyday life. His work has been published and exhibited internationally, including *MoMA*, New York; *21_21*, Tokyo and the *National Museum of China*.

1 My opinion on this changes daily. A few years ago, I wrote my own definition that describes the practice of extrapolating emerging technologies into hypothetical future products but now I find this limiting as it focuses too much on futures. Currently, I view speculative design as a counter to normative design and its role in the world – a form of design that can operate free from the constraints imposed on market-based models – constraints of economics, aesthetics, technology, politics, ethics and history. Relaxing or removing these constraints allows the designer to imagine new and alternative possibilities and to challenge established systems and roles.

At this time there are three basic themes: ① Arrange emerging (not yet available) technological "elements" to hypothesise future products and artefacts, or ② Apply alternative plans, motivations, or ideologies to those currently driving technological development in order to facilitate new arrangements of existing elements, and ③ Develop new perspectives on big systems.

With the purpose of: ① Asking "what is a better future (or present)?" ② Generating a better understanding of the potential implications of a specific (disruptive) technology in various contexts and on multiple scales – with a particular focus on everyday life. ③ Moving design "upstream" – to not simply package technology at the end of the technological journey but to impact and influence that journey from its genesis.

2 Contemporary design is a fundamental part of a postmodern socio-economic system, inextricably linked to entrenched notions of progress, the manipulation of desire and conspicuous consumption. The assumption is that progress leads to a better life, dogma that has been preached by both governments and corporations since the industrial revolution. The notion of better was straightforward when technology solved simple problems but things are becoming increasingly complicated as automation creeps inexorably into the most subtle and sensitive aspects of human life.

The incessant demand (by politicians and shareholders) for growth has led to a situation where technological development is rarely questioned – and mainstream design exists within this mechanism. Speculative design, by existing outside of the system, can question the role and responsibility of design and act as a counter to these problematic ways of being. It can understand the implications of a particular technology, embrace the complexities of cultural, societal, technological and natural systems and how these interweave, overlap and contradict. Once these systems are better understood they can be challenged or optimised.

The key challenge for speculative design is to find more comprehensive ways of moving beyond the gallery – or changing how the gallery operates. It needs to become more serious.

3 As a young design student in the 9øs I was proud to be practicing in my chosen discipline and happily set about learning how to develop new products that people might want to own. But looking back I realise that my education (and the majority of other designers') desperately lacked any critical or philosophical foundation.

Myths taught at design school: ① Design is good ② Design makes people's lives better ③ Design solves problems.

Of course, design can be and do all of these things but it has become so intrinsically linked to the complex systems of commerce and innovation that it has essentially been reduced to a novelty machine. Optimism is endemic, meaning that it is unnatural for designers to think about the implications of their (technological) products: technology is good; products are good; and the future (through technological products) will therefore also be good!

Once these myths are exposed, a new form of design becomes possible – more responsible, more intellectual and more creative. A design that embraces complexity, understands its history and essentially asks a lot of questions.

Nicolas Nova

Nicolas Nova is a writer, ethnographer and consultant at the *Near Future Laboratory*. He is the curator for *Lift Conference*, a series of international events about digital culture and innovation.

1 The (sort of) canonical definition of speculative design is that it is an approach to design that does not seek solution-oriented projects. Instead, it attempts to probe alternative (technological?) futures. Its purpose, according to the various pioneers of this design genre, such as **Anthony Dunne** and **Fiona Raby**, is to allow critical reflection through future narratives that are often mediated through objects.

In the *Near Future Laboratory*, we are interested in a variant called "design fiction". This variant **Bruce Sterling** described as: "The deliberate use of diegetic prototypes to suspend disbelief about change". That is the best definition we have come up with. The important word here is "diegetic". It means that you are thinking very seriously about potential objects and services and trying to get people to concentrate on those, rather than entire worlds, political trends or geopolitical strategies. It is not a kind of fiction. It is a kind of design. It tells worlds, rather than stories. In our case, we take an even narrower definition: the depiction of products / services / situations as if they had already existed or had occurred so that we can learn how to innovate and create new opportunities. More specifically, in our work we use standard objects and media conventions (a video showing a person's life, a catalogue of fictional products, a fictional newspaper, a manual of non-existing devices, etc.) to express ideas about future uses of technologies.

Perhaps the biggest difference in respect of speculative design is its stronger focus on artefacts that belong to popular culture (e.g. catalogues and manuals), as well as the importance of humour / irony that is present in these objects. To some extent, the way we see design fiction at the Laboratory is less oriented to the context of a museum or gallery (although our work may be shown in such places), and aesthetics.

2 The role of speculative design and design fiction projects is to experiment with change (be it technological, social or ecological) and project concepts dealing with potential futures.

In our practice at the *Near Future Laboratory*, we use design fiction to uncover unexpected challenges, *unknown unknowns* and hidden opportunities of certain changes in everyday life situations. Since we generally use design fiction in the context of design-oriented projects, we feel that this helps us in forming concepts and evaluating their implications. For instance, instead of discussing networked objects and automation in abstract terms, it can foster dialogue within the design team about the necessity (and generally the ethics) of certain product features. This approach works well for abstract concepts because it forces us to work backward and explore the consequences of artefacts or by-products linked to a certain vision (e.g. a user manual, a fictional newspaper) and then reconsider the products that are currently being designed.

In a broader context, for example in the case of a public debate on certain socio-technological changes, the idea is that speculative design aims at initiating discussion. The main problem here is that the objects produced in the context of such projects are not enough; the "debate" needs to be orchestrated by designers. And that is not easy. The debate should indeed be inclusive, with a certain level of diversity (of perspectives and people represented in the design process), and with a dedicated attention given to what will emerge from this debate (otherwise the whole thing becomes pointless).

3 Considering the challenges at stake for our planet, three things preoccupy me the most: ① From a general perspective, I think the work of French anthropologist **Philippe Descola** should be taken to the letter here: we need to understand how other cultures "compose worlds", how different people (from Achuar hunters to physicists working on the Large Hadron Collider in Geneva, to take Descola's examples) "see things in the environment", how they live together and build an understanding of the world around them. To some extent, History (how people lived in the past) and Ethnography (how people live in different cultures) are quite helpful for that matter. Curiosity and interest in those things are mandatory for any designer. Such ways of "composing worlds" can be seen as a source of inspiration for today's and tomorrow's challenges. ② It is wrong to think of the future as a singular word. Tomorrow is not something given, it is not falling from the sky as a meteorite and it is certainly more than a uniform vision produced by the Western science fiction. There are several scenarios for the future, and they have not been written, yet. ③ It is impossible not to consider ecological consequences and implications of any project involving technology and/or social change. The new media type of design should take that into account even if this implies reconsidering the mere existence of the project in the first place.

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Matt Ward

Matt Ward is the Head of the *Design Depart-ment at Goldsmiths, University of London*. His research spans a wide range of interests from speculative design to radical pedagogy. He is a practicing designer, writer and found-ing member of *DWFE*; a post-disciplinary, semi-fictional design syndicate.

1 Critical and speculative design, to me, is a space of disciplinary ex-perimentation and evolution. It allows us, designers, to map out and explore the boundaries of our practice. Instead of at-tending to market forces, client needs, or historical norms, we get to imagine how the discipline could function under a new regime. This is why I am clear about CSD's pedagogic power, it allows for enfolding interdisciplinary concerns and methods into a broader social, cultural, economic, political, environmental imagining.

2 Speculation is part of every design-ers practice; we continually spec-ulate on the conditions of the world we are designing for. We imagine our work in the world, having agency, making change, from social transformation to economic success. Speculation is fundamental to the practice. However, as with all named "groups" or "isms", the nomenclature de-fines a certain economic / power relation-ship. The three dominant ones I would like to highlight are: speculative design as educational practice, speculative design as technological provocateur (beware of the innovation trap), speculative design as cul-tural production / enquiry.

So let us start with the first:

CRITICAL AND SPECULATIVE DESIGN AS EDUCATIONAL PRACTICE

Critical and speculative design opens up a "natural" / "safe" space for designers to learn without the economic constraints of commercial practice. Although some argue this does not prepare students for the commercial world, I would argue the opposite – it equips them with tactics to manage their role in a complex, changing, dynamic world (which is the role of education). Through speculation on the possibility of design, thinking through some of the complexities of the context of production and consumption, you can find new social realities, new forms of practice, new economic models. And if you do not, at least you get a trial run where you test and train your imagination, build your conceptual and practical abilities.

THE INNOVATION TRAP

There is so much pressure and hype about the role of technology in the disruption of markets. Companies and investors have become hungry (ravenous) for "visionaries"; people who can predict the future of ‹insert anything›. This makes speculative design an attractive practice - not only do designers become attuned to the change role and function of technology, they also concentrate on what people want and do. Their superpower is the aesthetic articulation of these possibilities; narratives that allow for the colonisation of the future. The big worry for me, is that critical and speculative design become the advertising arm of venture capital. The evangelists of Silicon Valley, in search for the next big disruption, without the humility to understand the fragility and power of their future trajectories.

CULTURAL PRODUCTION / ENQUIRY

In this mode, Critical and speculative design operates at the intersection of art and research, but it is something distinctly different, it is DESIGN. There is an aesthetic enquiry into the way the world could be, highlighting problems, opportunities and ethical complexities. It tries to produce material that resonates with our current cultural and social context. It responds to dynamics of discourse, markets, science and economics in order to reflect and advance our understanding of the human / material condition.

3 I think it is essential for Design education to find and establish a place in "the academy" that is beyond the delivery of skills and "well trained workers" for the industry. The university becomes a place where a community of practitioners advance and expand the horizons of our discipline. This has profound economic and cultural value, but this shouldn't be the central driver and mark of success. Education becomes a space where we can unravel the complexities of the world, whilst trying to think of alternatives.

Ramia Mazé

Ramia Mazé is a researcher, educator and designer specializing in critical and participatory approaches to design for systems and products that alter social practices and public life. She is a Professor of *New Frontiers in Design* at the *Aalto University* in Finland.

1 My perspective on "critical practice" is of a kind of "criticism from within" design – i.e. based on and carried out by design means, by designers and by means of their own practical and operational modes. Of course, there are "critical practices" in literature, art, the sciences, etc., which take different forms. I have traced tendencies in such critical practices historically: "speculative design" and "critical design", as recognized in product, industrial and interaction design today, are just parts of longer and larger tendencies.

I am interested in the forms, effects and uses of the kinds of criticality that take the form of design processes and artefacts. What tangible and material forms may critiques of societal/environmental/technological phenomenon take? Critical practices can take forms that are critical of phenomena within design itself or they may take forms that are critical of phenomena outside of design. An obvious example is hacking – hacking can be understood both as a specific method or skill, engaging a critique of design methods and skills through those very same methods and skills. Hacking can also be understood as an ideological and political stance in relation to issues of ownership

and authorship, for example, as a critique of proprietary systems, industrialized production or media hegemony. Designers may be critical of many things, therefore, the important questions imply: "Critical of what? In what forms?"

I relate to "criticality" as a kind of intellectual and ideological foundation within a discipline (I have written about this in an article together with **Johan Redström** titled "Difficult Forms" and, in fact, **Dunne & Raby**'s book *Design Noir* also argues for this). In this, theory is mobilized for inquiry within the discipline ("outside in", i.e., theories from the social sciences or humanities applied to design) or for design to relate/criticise wider social phenomena ("inside out").

However, the most urgent questions for speculative and critical design today are: "Critical for whom? By whom?", the questions that **Luiza Prado**, among others, asks in order to reveal the biases and politics embedded in design.

2 There is a range of diverse perspectives in contemporary design that counter traditional views on what design is and what it should be about – e.g. "critical", "conceptual", "speculative", "relational", "radical", "(h)activist", etc., design. Perhaps this is not surprising – design today must redefine the premises and purposes of the discipline beyond its Industrial Age inception and logics, e.g. mass-production, market consumption, economies of scale, corporate protectionism, etc. Today, designers are operating within the academia, art world, public realm and developing world claiming a place for design in relation to a range of "other" people, practices, values and futures than those traditionally served by design.

My perspective is oriented towards "criticality" as it is developing across a range of design disciplines, including vivid discussions in graphics, fashion, architecture, etc., design and a long history of related terms and practices. I argue for the term "critical practices" (rather than the niche term/genre of "critical design") to characterize what I understand as a more substantial and growing development of "criticality" across design.

3 Increasing reflexivity is especially at stake for "post-industrial" design. Design today engages in society in unprecedented and powerful ways, yet our traditional education is still based on the Industrial Age concerns about material production and consumption. Engaging "other" people, practices, values and futures demands different foundations – which is the responsibility of design education and research to build. This will open the space for asking "for who", raising questions about who does design, who participates in design, who benefits from design, as well as other issues of power, class, ethnic, global, and gender dimensions involved. Reflexivity in design is not about intellectualizing or navel-gazing, but about an increased engagement in aspects of design practice (including its consequences "outside of" design). Design practices are not neutral – there are always critical-political issues, others, alternatives and futures involved.

Critical practices, design roles in society and educational foundations are at the heart of my current activities as Professor of *New Frontiers* in *Design at the Aalto University* in Finland.

Michael Smyth

Michael Smyth is a researcher and educator working on the development of urban interaction design. He has been active in the fields of human computer interaction and interaction design since 1987. He is the co-editor of the book entitled *Digital Blur: Creative Practice at the Boundaries of Architecture, Design and Art*.

1 Speculative design, for me is all about an attitude of mind. It is driven by the desire to explore and question possible futures while having the self-awareness to consider the human at the centre of design.

I grew up in a generation that can remember men landing on the Moon, we listened to the music of Ziggy and dreamt about a future and things that did not yet exist. Whether it was because I was young, but that future seemed a long way ahead, it was both beguiling but somehow disconnected from everyday life. The futures that stuck with me were the ones about people; they may have been living in futuristic worlds and driving flying cars, but their hopes, motivations and desires were essentially the same as mine. These were the futures that spoke to me then and continue to do so now.

2 The real strength of speculative design lies in its ability to create narratives that challenge our preconceptions about products and services and their role in everyday life. By locating these visions in familiar, while at the same time slightly ambiguous settings, speculative design has the power to make us stop and think, it can present us with narratives that subvert and twist our expectations of the future and subsequently our understanding of the present.

We appear to live in a world where anything is already possible, at least from a technological perspective, so perhaps it is up to speculative design and the visions it creates, to restore our sense of wonder at what just might be possible.

3 One that helps us all to understand that the people we see and read about, who are facing exceptional challenges and hardships, are ordinary people- they have the same hopes and dreams as you and me and that design is just one way of demanding that better world for us all.

Cameron Tonkinwise

Cameron Tonkinwise teaches and researches design philosophy and design for sustainability. He is the Director of *Design Studies* and Doctoral Studies at the *School of Design, Carnegie Mellon University*. Cameron's current work focuses on designing for systems of shared use and "Transition Design".

(The following interprets this question to mean, at the moment, what passes for "Speculative (Critical) Design" [as opposed to what it should be doing].)

1 Speculative (Critical) Design names a particular style of design practice that is obsessed with ambiguity. This style involves a game that negotiates careful contradictions: ① The artefacts must be immediately and recognizably of the highest design quality. They should have a highly refined finish in their materiality that looks expensively crafted. However, this should also be combined with something paranoically visceral. ② The artefacts must be quickly recognizable as very distinct from mainstream commercial design. The artefacts should appear to be highly functional but toward a purpose that seems implausible. What they accomplish should seem to viewers to lie exactly between the silly and the scary. ③ The ultimate aim of the design is to appear to be thought-provoking. To do this, the artifact should indicate that its context is near-future. If it is too futuristic, it will appear to

be mere speculation; if it is too close to the present, viewers will expect it to evidence a researched critical understanding of its topic. More effective Speculative (Critical) Design plays exploit popular current fears. ④ The designer should withdraw behind modernist art claims of the artifact speaking for itself on the one hand, and postmodern art claims about the death of the author on the other. Whatever debates viewers have or do not have about the artifact are in no way the concern of the designer.

(The following interprets this question to mean, at the moment, what should be the role of "Speculative (Critical) Design" [as opposed to what it is currently doing].)

2 Design arose as an agent of modernism. Its project was to materialize into everyday life strong visions of radically different futures. The role of Speculative (Critical) Design is to respond to the lapse of this project. ① Speculative: As global consumer lifestyles have spread across the world, they seem to degrade the capacity of communities and organizations to create compelling visions of alternative ways of living. Designers need to revive a capacity to imagine and share very different future lifestyles that expand our sense of what is preferable beyond what is currently considered probable and even plausible. Speculative (Critical) Design should be a regular source for rich pictures of diverse "social fictions" (as opposed to techno-fetishizing "science fiction"). ② Critical: Design is a process for evaluating possible futures before they are materialized. Designers must creatively foresee a wide

range of socio-material consequences as possibly arising from different design options. Speculative (Critical) Design should be constantly struggling to stay ahead of current sociotechnical developments with affectively persuasive warnings about the futures being afforded by the release of those products and services. ③ Design: The profession of design appears to be primarily about the creation of artefacts, whether communications, products or environments. But the practice of design is actually about persuading a wide range of actors – fellow designers, suppliers, investors, logistics managers, users, etc. – to work together on materializing a future in which such an artifact exists. Speculative (Critical) Design should name the process orchestrating the debates through which groups of people come to decide to work together on realizing a particular future.

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3 There is a danger entailed by all that I have said in previous answers. An obsession with the future, as compellingly desirable despite being risk-laden, tends to downplay the diversity of the present. Speculative (Critical) Design has to date been irresponsibly lacking in diversity. This is not just a political correctness problem, though it is clearly part of ongoing normalizations of North Atlantic late capitalism that marginalize the different lifestyles and values of peoples in the Global South and East Asia. It is an epistemological error when Speculative (Critical) Designers at the *Royal College of Art*, for instance, imagine what they believe to be dystopian scenarios in a distant future, when in fact people in other parts of the world are already living versions of those lifestyles.

The Eurocentrism of Speculative (Critical) Design is not particular to Speculative (Critical) Design but a pernicious failing of all design, design education and especially design history.

A priority for all design education should therefore be to learn about as many diverse cultural lifestyles as possible. The presumption should be that every culture outside the hegemonic uniformity of the global consumer society has ① visions of futures ② consequent risk evaluations ③ technologies ④ commitments to values manifest in ①, ② and ③ other than convenience, comfort, efficiency, and productivity

Designers should, as a matter of first priority in relation to any design situation, approach other cultures, not as examples of the past, but as plausible models for the future.

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Francisco Laranjo

Francisco Laranjo is a graphic designer based in London (UK) and Porto (Portugal). His writings have been published in Design Observer, Eye, Grafik, among others. He is the editor of the design criticism journal *Modes of Criticism* (www.modesofcriticism.org).

1 Critical design was popularised by the interaction design duo **Anthony Dunne** and **Fiona Raby**, following Dunne's PhD at the *Royal College of Art* and the subsequent book *Hertzian Tales* (1999). Rebelling against an established view of design as a tool of seduction and to fuel economic interests, they argue for a more critical role of design. By this they mean the need to develop a disciplinary ethos, which aims to question culture and social habits, rather than affirming market and consumer trends. But this approach to design, which gained momentum from the mid-2000s onwards, revealed several flaws.

First of all, while design as criticism is relatively new to product and interaction design, it has a rich history not only within architecture but also graphic design. This is often overlooked and this mode of approaching design is recurrently presented as novelty. Secondly, "critical design" became synonymous of a vague "what if" mode of design predominantly practiced by white, middle-class Europeans, generating predictable dystopian visions of the world dressed as visionary that were—and are—already a reality in the Global South. It was not interested in producing critical arguments towards preferred futures, but indulging in technology-infused, portfolio building in rarefied environments as art museums. Finally, with the publication of Dunne and Raby's *Speculative Everything* (2013), "critical design" fully embraced a convenient interchangeability with "speculative design" to form an ambiguous, unaccountable umbrella under which designers can produce work that is of limited value and inaccessible to society at large.

The emergence of these terms happened in a particularly uncritical period of the design discipline, and they can and should be used to contest and problematize its methods and the discipline itself. In this sense, they are a contribution to design discourse and practice. As researcher **Cameron Tonkinwise** appropriately notes in *Just Design* (2015), "designing that does not already Future, Fiction, Speculate, Criticize, Provoke, Discourse, Interrogate, Probe, Play, is inadequate designing."

2 Design as a unique discipline capable of contributing to—and generating—new knowledge, needs urgent, rigorous and critical investment. Within graphic design, for example, the (still slow) transition from authorship to the designer as researcher in the pursuit of autonomy, points in this direction. However, there is a difference between the use of design as an investigative and emancipatory tool, and the production of objects for exhibition. In other words, there is a recurrent gap between producing design for self-directed learning and for public display. It presupposes different criteria and concerns by the designers. On the one hand, debates around these terms and issues they deal with are important to happen within the closed circles of design (or the

club, if one focuses on graphic design). They contribute to the re-politicisation of the discipline. On the other hand, they also indicate often-limited interaction outside the forums that have already accepted such a capacity and legitimacy by designers.

Speculative design's predominant role is establishing and reverberating signature-style artefacts, generating an unaccountable, looping debate that is very rarely capable of being inclusive or addressing issues at an infrastructural level. That is to say, political. Speculative design that is not contextual, does not consider race, class or gender and proposes only generic universal formulas can only be myopic and cannot contribute with substance to what other disciplines are producing in response to the struggles of our time.

3 A meaningful educational model has to be politicised and promote an awareness of power structures, developing methods, theories and strategies that challenge the world's most pressing issues. Students should be able to design knowing that their options prevent or impede other people's options. In this sense, a decolonial approach to design can be fundamental in constructing an educational model that breaks free from the North Atlantic axis that controls and monopolises design practice, but especially discourse. At the time when the neoliberalisation of design education is expanding fast, models that respond to pressing world challenges should seek decentralisation of education, flexibility of curricula, understanding of ideology and politics, and increased responsibility for students so they can collaboratively shape their education.

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"What if?" – Two or Three Notes on Speculation

Marko Golub

Mostly owing to diverse activities organized in the framework of the *Visual Communications Design Department* at the *Arts Academy in Split* (DVK UMAS), terms and methodology related to critical design (in the sense popularized by **Anthony Dunne** in the late 9ø's and early øø's), design fiction and, finally, speculative design, have appeared in Croatian formal higher education in the field of design at an appropriate time or, at least, without considerable delay. Moreover, through a series of workshops named *Interactions* and, more recently, also through the international *UrbanIxD* project, this school managed to network with some of the most important representatives and advocates of the above mentioned practices from various European and international universities, indirectly learning from their experience and at the same time persistently updating and modernizing its operating methodologies and discourse. Therefore, it is no surprise that in a relatively short period of time those terms have been used alternatively or even simultaneously, despite the fact that it is not really easy to find linear or one-way hierarchical relations between them. The term "speculative design" served as the main orientation for this year's edition of the Interactions workshops. At the same time, it has been used for the interpretation of the project/installation titled *Eutropia*, presented in the *Croatian Designers Association gallery* in the spring of 2015.

On the one hand, "speculative" really implies a relatively broad scope of connotations, and on the other, it also implies a kind of precision and even exclusiveness of its own contextualisation. In its basic meaning,

in the context of analysing design as a practice, this term unambiguously highlights its active analytical, intellectual and discursive dimension, which is a direct link to the notion of critical design. Another important aspect results from film and literature traditions of so-called speculative fiction whose capacity to imagine possible realms is shared with the idea of so-called design fiction. And finally, the very practice of "speculation" in design is almost unavoidably inspired by possibilities of certain variance, noise and unbalance of the dynamic relations between societies, technologies and humans, where it shares the same focus with interaction design.

At the first glance, one might think that this implies nothing but opening another niche for a new type of specialization, worse still, binding the design practice and discourse to an even deeper, more hermetical and exclusive design meta-language; however, for the time being it seems that this is luckily not the case. Since it is not oriented only to mass production of real physical products but rather to an opportunity to re-think conditions in which such products might become part of our everyday lives and the resulting consequences/implications, speculative design often uses narrative techniques found in video, film, television or the mass media in general. Namely, speculative design prototypes (or prototypes that emerged as the result of speculative approach) are extremely interdependent with the imagined context for which they have been initially designed, and therefore, to become understandable, they require their story to be told in a clear and intelligible manner that is closest to our everyday experience. Consequently, speculative de-le b

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sign finds its natural environment in popular culture, and the language it uses seems to be strangely familiar, no matter whether we grew up watching *The Twilight Zone* (1959 – 2003) or *Black Mirror* (TV series, 2011—), the two superb examples of speculative fiction that belong to pure mainstream.

Black Mirror is especially interesting because it bases almost every episode on the same principles as speculative design; nevertheless, designed fictional objects for everyday use, interfaces, technical artefacts and scenarios are very often the central part of the plot, i.e. in the episode titled *The Entire History of You*, such object is an implant allowing its user to "rewind-fast-forward" his or her previous experiences, whereas in *White Christmas* there is a device providing the experience of expanded reality where it is possible to "block" certain individuals from one's environment, similarly to blocking on social networks; in *Fifteen Million Merits* we see a dystopian world where systems of labour and leisure, virtual economy, social media and reality television as we know today get prearranged in their creepiest possible perversion. The power of speculative design is very close to the suggestive power of those bizarre satirical stories in as much as it deals with scenarios which are, from our perspective, not only imaginable, but they seem to have already been present. Whether they are displaced in the near future or they exist on the "side" within an alternate present, they can tell us something about ourselves here and now, about the technology we use and the way the technology influences the society and our everyday lives, and about the role that design can play in that context and not necessarily in this order.

From local reference works, although outside of the scope of design and rather in the domain of contemporary art, there are two projects by **Andreja Kulunčić** dating back to the late 1990s and early 2000s that deserve our attention. As one of the first Croatian artists to create complex online interactive projects inside galleries and museums, Kulunčić started using the speculative approach in some of her earliest works recognized by the public. Her work titled *A Closed Reality: Embryo*[50] (1999 – 2000) relied on an online platform providing fictional scenarios allowing joint (in pairs) "genetic engineering" in line with individual preferences and detailed instructions on how to design a child. However, behind this seemingly naïve game there was a much more serious story that opened subsequently: users were able to create the new fictional population based on personal wishes, preferences and projections thus producing one of the possible samples for a future society, and finally, opening a whole set of very uncomfortable ethical, political and social issues. Soon after this project, the author realized the work titled *Distributive Justice*[50] (2001), which allowed its user to take a step forward and project what he or she believes is a just distribution of social goods or a "just" and "healthy" society. Alongside the artist, there was a multidisciplinary team of experts from social, humanistic and technical sciences behind both projects, which also included a detailed programme with many workshops, lectures, discussions, etc.

After a similar third work, *Cyborg Web Shop* (2004), which received less public attention, the projects of Andreja Kulunčić became less focused and based on the web, developing from an interdis-

ciplinary model of action, which she first utilized in the project *A Closed Reality: Embryo*. These are workshop-based and inclusive projects or they go along the lines of her earlier interventions into public space through fictive advertising and media campaigns. The latter approach demonstrates that speculativity is not essentially connected only to new technologies. The campaign *NAMA – 1908 employees, 15 department stores* (2000), based on city-light posters in the wider Zagreb centre, threw into the public space an unusual piece of fiction – brushed up photographic portraits of saleswomen of one of the largest Croatian chains of department stores, which at the time was at the brink of bankruptcy, with almost completely empty shelves. The posters emphasized the department store logo and the enigmatic slogan "1908 employees, 15 department stores", representing a perfect mimicry of advertising campaigns since they in no way indicated that they are part of an artistic project. The campaign received unprecedented media coverage and turned the attention of the public to the tragedy of the employees and the company, which, against all odds, managed to stay afloat to this very day. The artist has done similar campaign in Slovenia (*Bosnians out!*, 2008) and Austria (*Austrians only*, 2005). These two projects dealt with the treatment of underpaid and stigmatized illegal immigrants and foreign workers in Slovenia and Austria. *Austrians only* comprised attractively designed newspaper ads offering ethnic Austrians the "business opportunity of a life-time" – the career of a cleaner with a disgracefully low salary and no social benefits. The power and public resonance of these projects

is based precisely on the cunning overlapping of two alternative, completely juxtaposed, reverse mirror views of the present. The artist, whose work is always observed in the context of social engagement in art, issues of human rights, social inclusion and exclusion, social change, etc., has in fact found her main instrument in the imagination. Indeed, is the ability of the imagination not essentially related to each of the above terms, to any idea of a better and more just society?

The series of defamiliarizing works, with an often melancholic atmosphere, of the artist **David Maljković**, beginning with the *Scene for New Heritage* (2004), *These Days* and *Lost Memories from These Days*, alternatingly touch upon ideas of an alternative past, alternative present and alternative future. In them, Maljković takes motifs of local modernist architecture and memorial plastic art, displaces them from their context and treats them as specific artefacts of long-lost or future civilisations. All aspects of these works are cryptic, elusive and open to interpretation, but the first impression they leave is a kind of nostalgia for the future. In other words, Maljković's works compel us to again view the objects we are observing in this way, since they in fact were created at a time when it was believed that the future can still be invented. Maljković is obsessed with design and the future. After all, his work *Out of Projection* (2009) is directly inspired by the hidden and closely guarded research centre of the company *Peugeot* in which experimental futuristic prototypes of cars were tested, many of which never became saw the light of day, apart from being an incredibly stimulative fiction that

undermines our confident position of the present moment – pushing us backward and forward at the same time.

Many other activities on the local scene can be retrospectively marked as close to the speculative approach, such as guest visits and production of works for a host of various exhibitions, festivals and other similar events organized by the *Bureau of Contemporary Art Practice – Kontejner*, or several projects by the designer **Lina Kovačević**, such as *A Set for Romantic Online Dinner* and *Future Artefacts*, which use artefact design to recombine conventional everyday scenarios creating a kind of hybrid between the past, present and future. Today's speculative designers would rightfully, of course, make a reference to the heritage of avant-garde and neo-avant-garde of the 20th century, modernism, various utopian visions and projections of close and usually better future by various architects, artists and designers. Of course, the context is different, more limited and cynical and less optimistic, unable to imagine any alternatives to the existing state of affairs whereas design itself remains almost entirely oriented to finding pragmatic solutions for a client's requests. This phenomenon was in the focus of rather recent edition of *Zgraf 11* (2012) following **Dejan Kršić**'s theoretical guidelines, appropriately titled *This used to be the Future*.[28] It seems that the speculative design practice for the time being does not have an unreserved global visionary zest in its core, but it does have a seed of imagining the alternatives – realities and societies which are different from the existing ones, for better or worse. It allows designers, or rather, in line with its speculative

logic, it forces them to look at the broader picture or to get a broader perspective of their profession than they usually tend to do. On the other hand, "users" or "the public" gets an opportunity to "taste" that kind of reality before embracing it as their own or deciding to renounce it to their dismay.

Mapping

object based

○ Tateye

○ Romantic Set

○ Perfume   ○ Man-Machine   ○ Hybrid Gulf
○ Felton Street

                    ○ Southern Comfort
○ USB Killer   ○ Eutropia

                    ○ Embryo

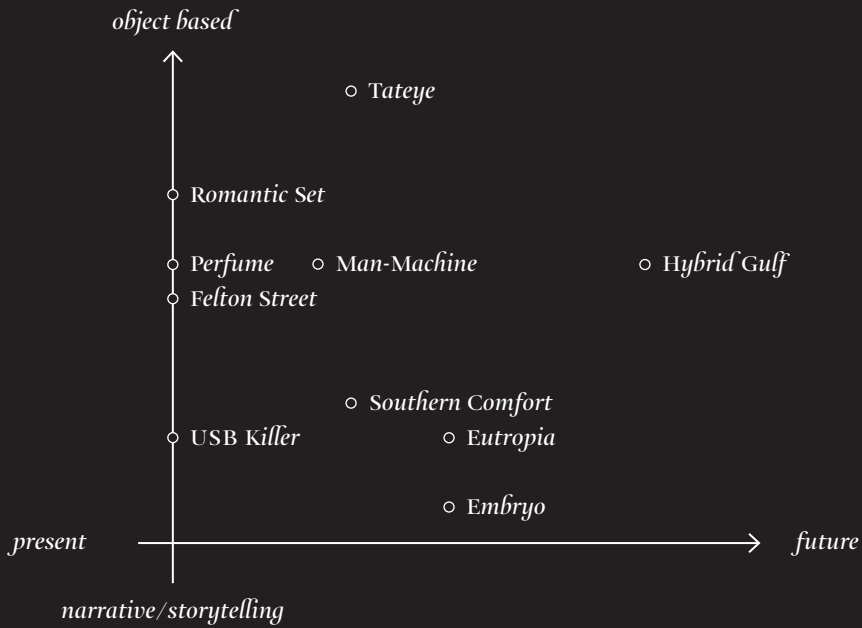present   future

narrative/storytelling

fig. 6 Time / materializaton, mapping.

This project is a continuation of the research initiated with the exhibition *Design Fiction: Eutropia – Introduction to Speculative Design Practice*, held at the the *Croatian Designers Association gallery* in May of 2015, and published in an accompanying educational booklet titled *Introduction to Speculative Design Practice – Eutropia: a Case Study* (published by the *Croatian Designers Association* and the *Arts Academy in Split*),[29] which offered an introduction to this design practice and summed up the basic specificities and characteristics of this particular design approach, providing initial mapping of the Croatian speculative practice.

Recent examples of speculative design practice are rare in the Croatian context. In the local context, there is no apparent and powerful historical reference to and continuity of such practice. That is why the objective of this project was to simultaneously contextualize and present a number of significant contemporary speculative works by Croatian authors who, although they themselves would not use this term, belong to the field of speculative design. Eight of the following authors works were selected: **Lina Kovačević**, **Robert Čanak**, **Anselmo Tumpić**, **Nikola Bojić**, **Damir Prizmić**, **Ivica Mitrović and Oleg Šuran**, **Nina Bačun and Anders Mellbrat**. Two works, initially not nominated as design works, have been additionally included since they belong to accompanying speculative practices (**Andreja Kulunčić** and **Silvio Vujičić**).

All selected works have a common feature: they actually do not have a distinct or specific (Croatian) approach to the speculative practice, instead, they reflect global influences (both in the approach and methodology). Therefore, we consider this selection, although it encompasses mainly Croatian authors, as an overview of global speculative practices. For that reason, the works are accompanied by info diagrams that present methodological specificities as well as specificities related to the design process itself. In the selected works speculativity can be interpreted on four different levels or in the light of four different components: as an incoming discipline and a specific approach (or school), methods used and themes represented.

Disciplines

Multidisciplinarity, or to be more precise, removing borders between traditionally defined disciplines makes one of the basic characteristics of speculative practice. In addition to the speculative design, the selected works include approaches inherent to various other disciplines/practices. Andreja Kulunčić (*A Closed Reality: Embryo*) uses the approach of contemporary art practice, Anselmo Tumpić (*Tateye*) opts for product design and advertising, while Nina Bačun (*Man-Machine Affairs*) investigates through human-computer interaction (HCI) and interaction design.

Specific approaches /schools

Methodology

Specific approaches of different schools are also evident. For example, Nikola Bojić (*Felton Street Emptiness*) uses the Harvard approach focused on the public domain (social and political dimension). Lina Kovačević (*A Set For An Online Romantic Dinner*) reflects the British or London approach to the speculative practice characterised by a subtle aesthetics in the creation of a narrative atmosphere. Nina Bačun (and Anders Mellbrat) (*Man-Machine Affairs*) uses the Scandinavian approach based on the research process. With their Mediterranean approach ("from the edge of Europe"), Mitrović and Šuran (*Southern Comfort*) approach dystopian scenarios common to the speculative practice, from a humanistic position.

Methodological flexibility and openness, as one of the main characteristics of the speculative practice, is clearly evident in the selected works. Speculative future, as the main approach to the speculative practice (DS), is the foundation of the majority of the works, which use narrative scenarios as tools for constructing initial abstract speculations (DV), but also for its communication (in the textual form) (DL) (*Hybrid Gulf – Excavating Future Identities*, *Eutropia* and *Southern Comfort*).

In addition to speculative futures, "critical design" is, in the narrow sense of the term (as defined by **Dunne and Raby**), also a rather common approach in the research part of the design process, that is in the definition of the design space. *The Perfume* uses a critical approach (DS) by
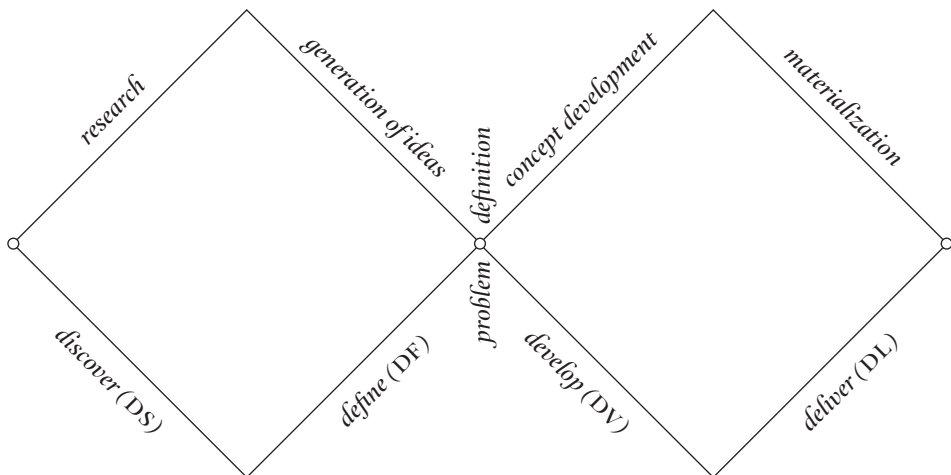

fig 7 Speculative design practice mapped by the traditional design process.

DISCOVER AND DEFINE PHASE: *refers to generation of ideas / concepts / design space (abstract speculations), and related approaches.* DEVELOPMENT PHASE: *refers to concept development, and related tools, techniques, instruments, methods, genres, concepts.* DELIVER PHASE: *refers to materialization / explication / communication / presentation in various formats.*

linking the space of a gallery to a research laboratory and emphasizing the significance of the partnership between designers (artists) and scientists. Speculative projects that successfully communicate (DL) always involve the organisation and implementation of the dialogue between experts and the public as an integral and indispensable part of the process (*A Closed Reality: Embryo*).

Design fiction is certainly the most commonly used genre in the development of speculative concepts (DV). *Eutropia*, for instance, communicates a fictional scenario in the popular form of a narrative fictional video (DL) with the corresponding visual code and costume design (DL). We can see a similar approach (setting the scene and working out a correlated fictional costume design) in *Man-Machine Affairs* (DL). *A Set for an Online Romantic Dinner* and *Tateye* speculate about future consumer markets using "diegetic objects" for the materialization of narratives, and communication aiming at the suspension of disbelief about possible futures (DL). Interviews, questionnaires and discussions, as methods used in the social sciences, appear to be important tools in the development of concepts (DV) and getting feedback from the audience (DL) (*Man-Machine Affairs*).
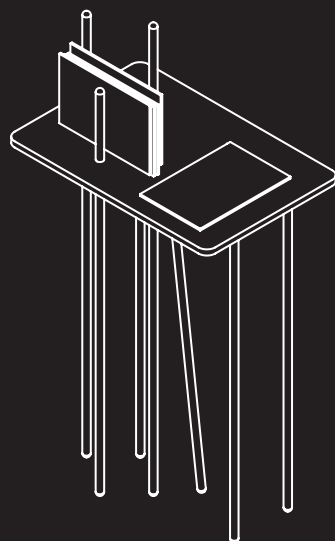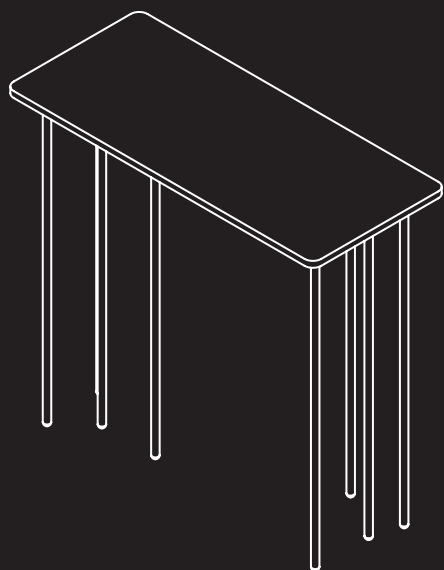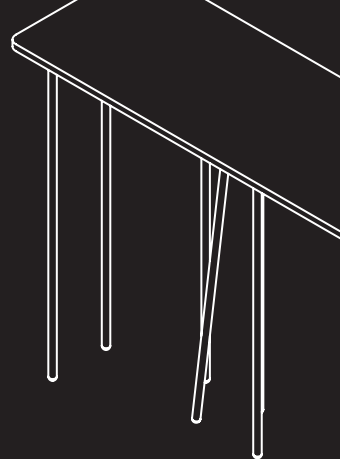
Hybrid Gulf – Excavating Future Identities uses archeology of the future to develop the concept (DV) and museum artefacts to materialize it (DL). On the other hand, *Felton Street Emptiness* uses contemporary artistic practices as a speculative method (DV), whereas *USB Killer* (as a part of the broader concept named *Objects of Dangerous Intentions*) employs pop-culture patterns, as a particularly interesting genre
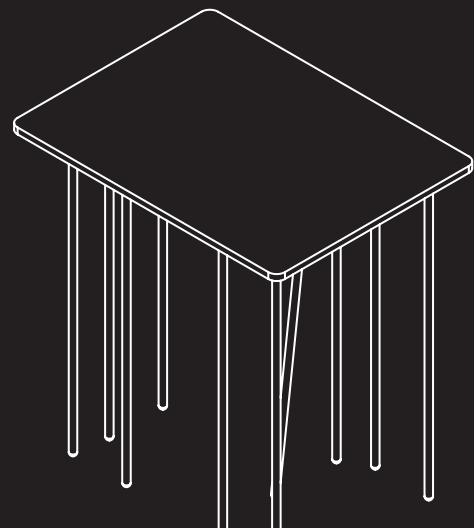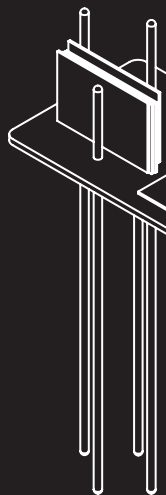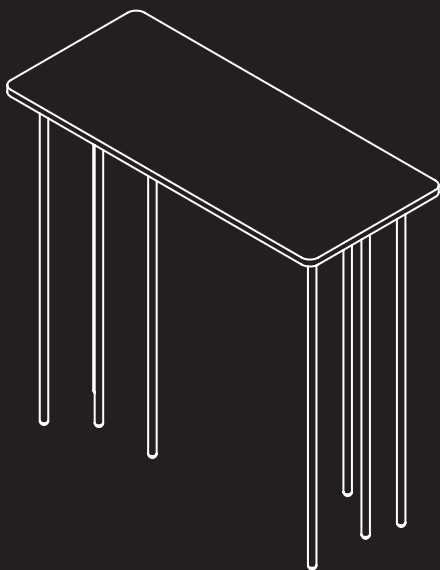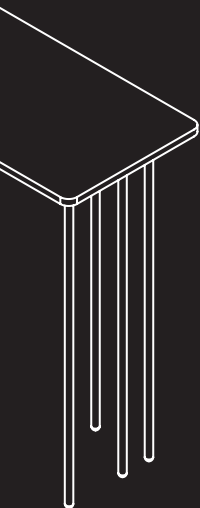
in the speculative practice, to speculate about the near future using the phenomenon of urban legends (DV).

Themes

The selected works also identify some of the main themes challenged by speculative projects. *Eutropia* questions the ubiquitous technology in the urban environment and the relationship between an individual and a hybrid city. *A Closed Reality: Embryo* and *The Perfume* both deal with issues of biotechnology, one in the context of genetic engineering, and the other by using do-it-yourself approach. *Set for an Online Romantic Dinner* and *Tateye* cross-examine the limits of freedom of the future markets through the lens of consumer technology. *Eutropia* and *Southern Comfort* deal with the new economic models and social orders. From the position at "the edge of Europe", removed from the European urban and technology centers, *Southern Comfort* addresses discursive issues within the design practice itself (the so-called "Western melancholy").

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1.   A Set For An Online Romantic Dinner

Lina Kovačević, 2011

► Half plate, corner plate, jewellery headphones,
bow tie headphones, keyboard cover / video

Put your best dress on, turn on the laptop and enjoy the dinner with your significant other across the ocean.

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A Set For Online Romantic Dinner consists of a half plate, corner plate, jewellery head-phones, bow tie headphones, key-cloth (so you don't spill your wine on the key-board) and the rules of etiquette on how to behave during an online romantic dinner. Inspired by **Berthold Brecht**'s distancing objects and a 2009 Skype wedding which simultaneously took place on the airports in Dubai and London, the set and associat-ed performance are designed for couples in long distance relationships who would like to make their online encounters sig-nificantly more romantic. The project deals with the patterns of digital communica-tion and investigates fetishes in the virtual landscape representing critical artefacts of the media landscape that we inhabit. It is the result of a research for an MA project at the *St. Martin's School of Art* in London. The artefacts, designed as "real" products with subtle aesthetic, objects of desire, acting as "diegetic objects", are commonly used in speculative projects for creating a specific atmosphere in communication and pres-entation of speculative scenarios.

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2. Hybrid Gulf – Excavating Future Identities

Robert Čanak, 2014

► Hybrid water pipe (hookah), archaeological notebook, museum artefact caption / artefact photos ► MAIN ADVISOR: Paolo Cardini, Assistant Professor MFA in *Design Studies*, *Virginia Commonwealth University in Qatar*; SECONDARY ADVISOR 1: Tammi Moe, Head of Digital Collections and Archives Library; SECONDARY ADVISOR 2: Richard Lombard, Assistant Professor and Materials Library Curator, MFA in Design Studies, *Virginia Commonwealth University in Qatar*; NOTEBOOK ILLUSTRATIONS: Andrija Mudnić

Due to rapid development, wars, greed and general overconsumption, fossil fuel reserves and most of Earth's energy sources have been exhausted. The countries of the Gulf region offered to develop the first artificial pilot planet. Soon after, due to a gravitational imbalance caused by the new planet, severe natural disasters (earthquakes, tidal waves) have suddenly hit the Earth. However, those who have remained on the Earth have grouped in different sort of tribes: locals and expatriates alike have engaged in a nomadic, gatherer type of life utilising whatever they could find. Eventually, they have come to a conclusion that if they wanted to survive, they had to "merge" (share, utilise, exchange) their know-how, tools, cultures and languages in order to survive and a new hybrid civilisation was has been born.

After many hundreds of years, a group of scientists from the pilot planet have returned to the Earth. What the team has found was fascinating: they came across some interesting artefacts, which generated new ideas about the ancient civilisation that used to inhabit the Earth.

The author uses design fiction to deal with the hybrid culture and coexistence of diverse cultures in the Persian Gulf. By designing hybrid objects of the future, which come into being after the destruction of the Earth, i.e. after a new beginning and complete hybridization of cultures, and especially by means of archaeology, the project actually deals with the present identity of the Gulf. The author uses the concept of future archaeology and museum artefacts to materialize and communicate speculative scenarios. The project has been developed as a master thesis at the *Virginia Commonwealth University in Qatar*.

3. Tateye

Anselmo Tumpić, 2010

► Eyeglasses on pedestal (acrylic glass box) / advertising photo
► PHOTO: Robert Sošić

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Tateye is a prototype of eyeglasses using two built-in lasers to tattoo a chosen image on your eye retina. This device allows customers to see symbols of their choice always and everywhere. The selection can be made from various simple forms (visual design) depending on consumer wishes.

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Tateye is a part of the series of ironic speculative prototypes. Made as a real, functional product, even if it entered mass production, *Tateye* would violate legal regulations endorsed to protect consumers' health and personal rights. By designing fictional products, the author speculates about possible future markets. Prototyping fictional objects stands as one of the common ways to materialize concepts and narratives of the speculative design. The embodiment of the speculative scenarios is particularly important for achieving public suspension of disbelief about possible futures.

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4. Felton Street Emptiness

Nikola Bojić, 2014

46   ► 3D print coated with 24-carat gold (acrylic glass box) / video, map print

Is it possible to step on an invisible island
of total isolation without being radically
dislocated from the everyday environment?
Where is the threshold between anxiety
of isolation and romanticism of solitude?
What can be more exclusive than the
space where one can hide from the
hectic world in just a few simple steps?

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The project seeks to digitally scan and model an invisible space within a specific urban surrounding where all wireless signals cease to exist. Starting from Felton Street situated between *Harvard* and MIT in Cambridge, MA, the project reveals the data gap within the very heart of the technologically advanced system. The project merges design research and contemporary art practice as a technique for speculation about our urban and technological futures. After site-specific mapping of wireless signal in Felton Street, a 3D model of data gap was rendered and later printed on a physical object coated with 24-carat gold. The final product is a model of disappearing emptiness, a "golden relic" of our near future.
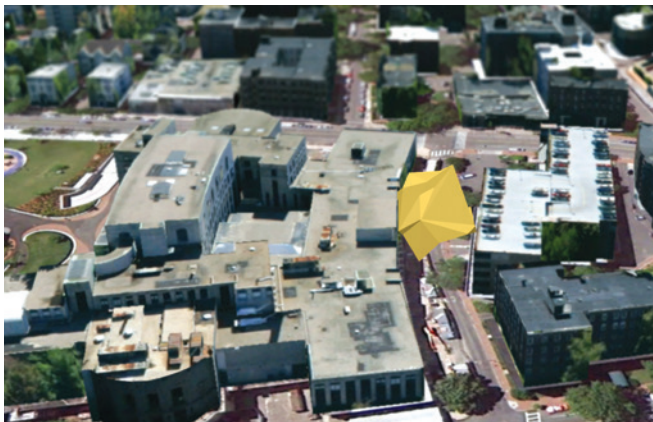
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5. USB Killer

Nikola Bojić & Damir Prizmić, 2016

► Custom USB flash drive on pedestal (acrylic glass box) / screenshot ► PHOTOGRAPHY: Damir Prizmić

I read an article about how a dude in the subway fished out a USB flash drive from the outer pocket of some guy's bag. The USB drive had "128" written on it. He came home, inserted it into his laptop and burnt half of it down. He wrote "129" on the USB drive and now has it in the outer pocket of his bag...
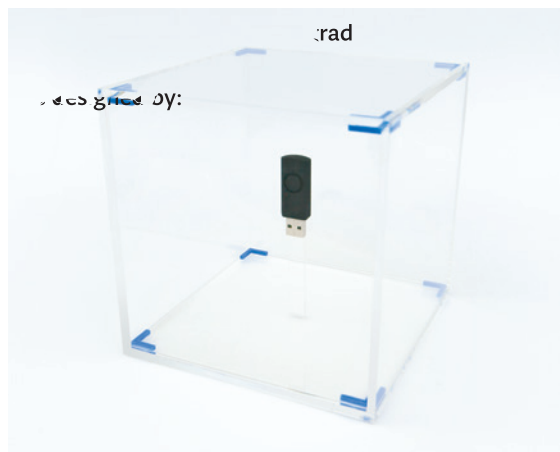
After circulating on the Internet for quite some time, the story about the USB flash drive which can burn a computer's hardware inspired the realization of one of the worst USB scenarios. Russian hacker **Dark Purple** has designed a seemingly standard flash drive, which can burn the USB controller and motherboard of a computer. Although originally the USB killer has not been designed as open source, the story soon became very popular on the Internet. This USB killer is the improved version of the original project. As the result of the exhibition named *Objects of Dangerous Intentions**, the project does not originate in an open source scheme. It rather relies on a semi-fictional narrative collectively distributed over the Internet. Continuing as a manifestation of the urban legend, it speculates about near future of open source and authorship, which are both constrained by the rigid legal regulations. When we reach this point, the networked collective fiction becomes the only free form of design, regardless of potential dangers and possible outcomes.

* Damir Prizmić, Nikola Bojić, *Objects of Dangerous Intentions*, *Croatian Designers Association gallery*, Zagreb, 2016.

6. Eutropia

Ivica Mitrović & Oleg Šuran, 2014

► Samples box, cigarette pack, mobile device (prototype), accreditation / video
► DIRECTED AND EDITED BY: Glorija Lizde; CAMERA: Andrea Kaštelan; SOUND: Marko Jukić;
ACTORS: Oleg Šuran, Matko Elezović, Nikola Marangunić, Maja Petrić, Mario Raguž,
Ivana Kevo, Ivica Mitrović, Nikša Vukša; VFX: Jakov Šuran; COSTUME DESIGN: Margita Videtić,
Katarina Bilan; Objects designed by: Oleg Šuran, Ivica Mitrović; BASED ON: *Čekingrad*
(Check-In City) (Oleg Šuran, Nera Nejašmić, Jernej Kejžar / Nelly Ben Hayoun / Ivica
Mitrović, *Interakcije, Split Arts Academy*, 2011); PRODUCTION: *UrbanIxD* (EU FP7 FET)

Eutropia is a Mediterranean city-state liv-
ing in absolute material security and social
wellbeing for more than 30 years. During the
great global recession of the 21st century, the
city government signed a contract with an
international consortium regulating trade
of information generated by the city. City
developed a state-of-the-art infrastructure
for collecting data generated by its citizens
(from privately-owned apartments, public
institutions, leisure and entertainment facili-
ties to public urban areas). Citizens voluntary
cooperate in order to assure a constant flow
of information. The new information-based
economy, or rather, the export of data, guar-
antees independence and welfare to all citi-
zens. In this city there is no unemployment
and work belongs to the sphere of leisure.

In Eutropia, a consumerist welfare
oasis, privacy is nothing but an ideological
misconception.

Design fiction as a genre and video and film as means of communication are used for the development of the speculative concept. The featured video follows one citizen and shows how the city of Eutropia impacts him and his everyday life. By highlighting some conventional moments from everyday life, it aims to persuade, convince and immerse the audience. Artefacts designed for the video are not only stage props designed for the video shooting, but also products, or speculative objects contributing to the believability and inspiring discussions. The additional attention was paid to the city's visual identity and the protagonists' dress code following the presupposed aesthetic of the near future.

7. Southern Comfort

Ivica Mitrović & Oleg Šuran, 2016

52 ► Device, notebook, report, documentary photos ► PHOTOGRAPHY: Darko Škrobonja; COSTUME DESIGN: Linda Turković i Mia Miletić; ACTOR: Bruno Bartulović; OBJECTS DESIGNED BY: Oleg Šuran, Ivica Mitrović; EXPERT ADVICE: Amateur Radio Club "Marjan" (Zoran Mikulka)

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Ten years later, the Greek crisis has led to a breakdown of Mediterranean economies at the south of Europe. In addition, the great migration crisis has brought about the collapse of the entire European Union. The only remaining functioning economies are the ones at the north of Europe (the Nordic Union). In the new circumstances, mass tourism seizes to exist and only the "northerners" travel to the south choosing only authentic tourist locations.

The inflow of immigrants to the east of Mediterranean has a significant impact on the local culture and identity. In order to attract tourists from the north of Europe and prove the authenticity of their locations, local municipalities and citizens manipulate the user-generated data. Social digital platforms and rating systems, concepts of the first half of the 21st century, no longer represent reliable evaluation tools. The Nordic Union has turned completely towards the scientific dogmatism, abandoning all information that is not founded in exact scientific facts. The Union employs a licenced company named DOGMA that uses only exact positivist scientific methods from the 20th century and the only reliable means of communication – analogue radio waves, aiming to analyse potential tourist destinations in the south. Recommended destinations are becoming more open to the citizens of the Union.

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Southern Comfort focuses on the discrepancy between the north and the south of the present-day Europe. In the new social, political and economic circumstances of the near future, the north sees the emergence of neo-modernist tendencies where scientific positivism and technological objectivity act as forerunners of the dominant ideology. Dystopian scenarios, common for the speculative practice, in line with "the Mediterranean" approach, are challenged from the humanist perspective. Despite those very disturbing future scenarios, "the comfort" is found in the fact that human community (by means of bottom-up activities) will always find the way "to hack" and adapt the imposed systems to its own needs and way of life.

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8. Man-Machine Affairs

Nina Bačun & Anders Mellbrat, 2011

54 ► Memos and envelopes, watch prototype, pajamas pillow case and sleeping mask, ring / video ► MENTORS: Ronald Jones, Robert Brečević, Rahuk Sen, Jenny Althoff, Nikola Radeljković; *Konstfack Degree Exhibition* 2011, Stockholm

reas *USP*
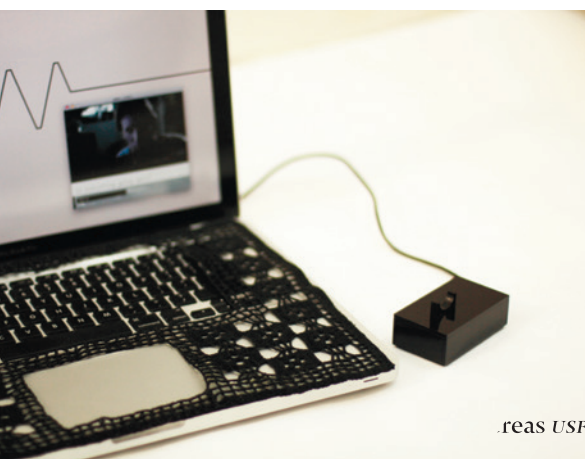
Dear Visitor,

We would like to present you with a unique opportunity to meet our Man-Machine Relationship consultants. You can choose which consultant you would like to speak with, or you will be assigned the next available consultant.

A consultancy session takes about 15 minutes and consists of a series of questions asked by the consultant and a short discussion about those questions. After the end of your session, a statement will be sent out with a text to read or an action to take. Each visitor has the right to leave at any moment during the session.

Thank you in advance,
Man-Machine Affairs Consultancy

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Man-Machine Affairs question the existing technology, its impact on an individual and the society, as well as the relationship between a man and a machine by collecting stories and experiences through interviews, discussions, questionnaires and practical case studies. Further investigation is carried-out by a joint co-creation of fictional scenarios with the help of various designed objects (discussion objects). Social sciences research methods (interviews, questionnaires, discussions) make important tools in the speculative approach and getting feedback about possible future scenarios from users. Also, in order to expand the discussion platform, the authors use methods taken from the world of theatre, i.e. they set up a pseudo-office for consulting which in fact serves as a cover for collecting information.

9. A Closed Reality: Embryo

Andreja Kulunčić, 1999–2000

► Video / discussion photos, graphs; http://embryo.inet.hr
► IN CO-AUTHORSHIP WITH: Gabrijela Sabol (sociologist) /
Matija Pužar (programmer) / Trudy Lane (designer) /
Ivo Martinović (photographer)

Embryo is an interactive virtual platform
where two users, choosing among
different genetically determined traits,
create virtual embryos – their own
virtual progeny. Thus created embryos
are exhibited in an "embryo gallery".

Imagine you descendants and
make them alive in Embryo!
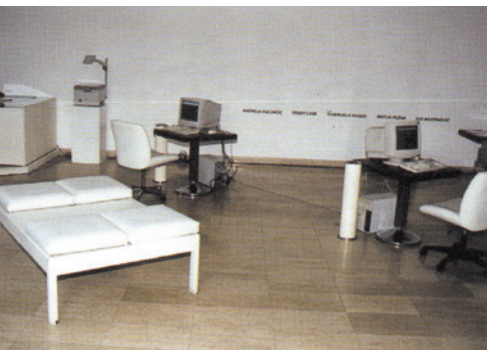
Embryo was dealing with biotechnology as one of the fastest emerging fields of present-day technology (back in 1998). In the second phase of the project, the society of virtual people created by Internet users was compared to the inhabitants of a "real" society. All Internet users willing to take part in the project were invited to join the mailing list, discuss the actual issues of genetic engineering and cloning, comment on the presented ideas, etc. A number of presentations and discussions were organised with the eminent Croatian natural and social scientists as well as the broader public. In addition to the discussion evenings, there was also an "open term" in the gallery for everyone interested in the topic. The visitors could organise their own presentations, talks, discussions, or workshops. Although never named as a speculative design project, it showed strong potential for a speculative approach by initiating and facilitating dialogue between experts and the public about diverse implications of potential technological development.
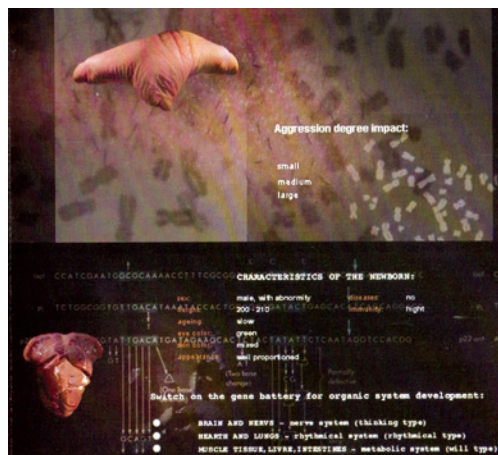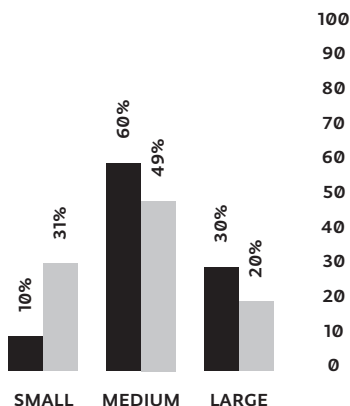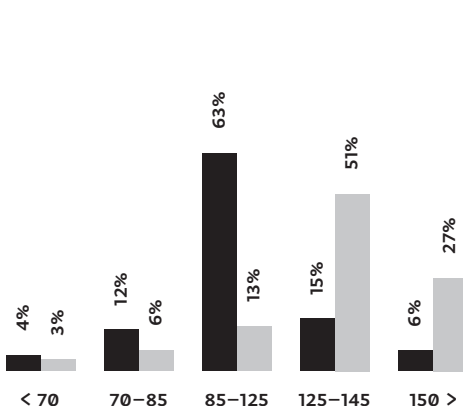
10. The Perfume

Silvio Vujičić, 2006

58 ► 4 perfume bottles / process photos ► ASSOCIATES: Ivona Jasprica; PHOTOGRAPHY:
Kontejner.org; PRODUCTION: DIY.ART.LAB / Kontejner.org; EXHIBITION HISTORY:
Everything I like is either illegal, immoral or doesn't yet exist, French pavilion,
Zagreb, Croatia (2015), *Device art*, RX Gallery, San Francisco, USA (2006),
Device Art 2.006, *Miroslav Kraljević Gallery*, Zagreb, Croatia (2006)
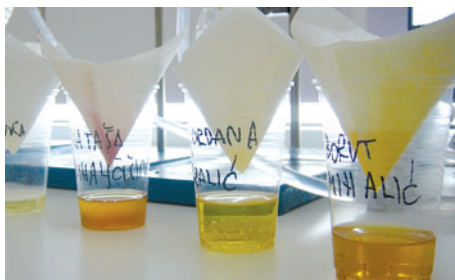
"I too love everything that flows: rivers, sewers, lava, semen, blood, bile, words, sentences. I love amniotic fluid when it spills out of the bag. I love the kidney with its painful gall-stones, its gravel and what-not; I love the urine that pours out scalding and the clap that runs endlessly; I love the words of hysterics and the sentences that flow on like dysentery and mirror all the sick images of the soul; I love the great rivers like the Amazon and the Orinoco, where crazy men like Moravagine float on through dream and legend in an open boat and drown in the blind mouths of the river. I love everything that flows, even the menstrual flow that carries away the seed un-fecund. I love scripts that flow, be they hierat-ic, esoteric, perverse, polymorph, or unilateral. I love everything that flows, everything that has time in it and becoming, that brings us back to the beginning where there is never end: the violence, the prophets, the obscenity that is ecstasy, the wisdom of the fanatic, the priest with his rubber litany, the foul words of the whore, the spittle that floats away in the gutter, the milk of the breast and the bitter honey that pours from the womb, all that is fluid, melting, dissolute and dissolvent, all the pus and dirt that in flowing is purified, that loses its sense of origin, that makes the great circuit toward death and dissolution."

(Henry Miller, *Tropic of Cancer*)

[French *parfum*, from Italian *parfumare*, lat. *per* → through, lat. *fumus* → smoke, meaning "to smoke through"]

The author transforms the gallery space into a laboratory where, by using lab equip-ment, he produces perfumes from human excretions. Visitors can "leave" any of their excretions (sweat, sperm, urine, faeces, menstrual blood, milk, etc.) from which a perfume will be made. They receive one specimen, while the other is retained in the perfume repository. The perfume is named after the donor and the type of ex-cretion it was made from. The product can be used. Collaboration between designers (artists) and scientist as well as their part-nership in the research (laboratory) make some of the most important characteris-tics of the speculative approach.

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Interviews: practice

1. **What would be the position
    of your works in the context
    of contemporary design
    and art practice?**

2. **What is the present-day role of
    speculative (critical) approach
    to design (an art) and how
    relevant is it for your work?**

3. **Can one make a living from
    this kind of work?**

Lina Kovačević

Lina Kovačević is a designer and artist working in the new media, painting and art objects. She graduated from the *School of Design in Zagreb* and earned her master's degree at the *Central St.Martins School of Art and Design* in London. Her work is often described as subversive, critical yet witty and poetic on both individual and collective level.

1 I would situate my most recent work in an artistic context, in the sense that it deals with a specific phenomenology. This, of course, does not necessarily mean that it cannot be intended for a client, but in its brief it is closer to futurism and foresight, and as such functions in communication with the environment.

2 The role of speculative design is very relevant because it has great potential for communication – it can point to certain issues and thus determine the direction of the development of future production. This aspect of speculative discourse, the scenario approach to both design and art, is very important in my work, as I was inspired by it during my postgraduate studies in London.

3 As far as I am familiar with design practice abroad, designers can make a living from such work because they design for galleries, for which they receive fee and get exposure for their work in a gallery setting. The commissions are small and limited, distributed exclusively via a network of galleries. Such a practice has not yet been established in Croatia. Also, abroad designers hold lectures or presentations, for which they also receive fees in most cases. In Croatia speculative design is not yet rewarded in the sense that a company would hire you to prepare a futurological case study, but I hope it will develop a sensitivity for this type of creative niche.

Robert Čanak

Robert Čanak is a graphic designer. In 2009 he moved to Qatar and started working on his master's degree at the *Virginia Commonwealth University* (MFA in Design Studies) where he developed an interest for design borderlines. After finishing his studies, he focuses on design management and works at the *Qatar Foundation* as the Head of Graphic Design.

1 The work I created as a part of my master's degree at the *VCUQ* was greatly inspired by the lecture series and Fiona Raby's "Crossing Boundaries" workshop and later on by lectures held by Bruce Sterling, which only whetted my appetite for the research of design borderlines. As a child of parents from two different countries, I was in fact exposed to hybrids my entire life without even knowing it, be it through food, language or customs, which is why I probably felt a natural attraction to such concepts.

2 I feel that the role of speculative design is important because it opens an interesting space between the real and the impossible, allowing us a glimpse of the future before it even happens. It offers solutions that we are less and less capable of conceptualizing, as our creative potential is limited by various dictates of politics and the society, and by parameters such as the budget, technological feasibility, etc. It is this jump into fiction that opens space for totally new possibilities and a safe zone in which we are free to experiment and generate new ideas, discussions and debates.

As far as my project is concerned, the ideas that I wanted to communicate are potentially politically sensitive, which is why, by using (design) fiction and by placing the story in the future, I have created a hypothetical scenario that allowed me to draw parallels with the present. For me, the most intriguing moment in the project is the one that actually occurred by accident: the story is, in fact, our potential future, but we read it from the perspective of someone's past, and we depend on someone's interpretation of the past. The hybrid objects I designed have almost become tactile footnotes to the narrative (the so-called diegetic prototypes) – functional in some fictive world, but still sufficiently recognisable for us to identify with them on a personal level.

3 It seems to me that the potential for this lies in the possibility to theoretically predict events and influence them, for instance, to avoid undesirable scenarios. I am not certain to what extent this can be done with this discipline alone, but if it were part of a larger project that would utilize it in a consulting capacity – maybe it is.

Anselmo Tumpić

Anselmo Tumpić worked for *Fabrica* (*Benetton*'s communication research centre), *BBDO* and *Saatchi & Saatchi* in Milan. He is a co-owner of the *DOTA Studio*. His fields of work and interest are art, design and advertising. Objects that he creates are in-between design and art and with them he intends to create and question new customer needs (through prototypes or art products).

1 I think that the position of a series of works that resulted from the project titled *Prototypes*, to which *Tateye* belongs as well, is somewhere between art and design, although, personally, I see them more as artefacts which use design codes in order to express my personal opinion about important social issues. The objects from the *Prototypes* project are designed for a hypothetical "hyper-capitalist" society ruled by unscrupulous economy in which those objects have a ruthless function, no matter what that function actually is, in order to satisfy any consumer need. To a certain limit, *Tateye* establishes an ironic relationship with design, humans and society. Having in mind that functionality is the very basis of any design, and an object like *Tateye* lacks functionality or surpasses the adequacy of consumer health protection, it actually functions as an art object.

2   The very name *Prototypes* explains that we are dealing with a rudimentary phase of potential products or objects that have not yet become real objects. "Prototypes" from this project are used to test a product, speculate about its function and consequences it can have on people and the society in general. While on the one hand the design of this object seduces the observer with its appearance, on the other it has a very scary function. Although we know that in our contemporary society there are rules, which should protect us from such objects, my intention is to instigate thinking whether it is a pity we cannot use that object and whether we are really protected by the application of those rules. "Prototypes" from this art project are actually testing our society and us and in that process we are actually becoming "prototypes".

In order to design this kind of objects, we first need to create and design a social order where they can exist and only after that it is possible to start with designing an object. By using this approach, we are taking a few steps further, towards the avant-garde in the military sense of the word, since this term has been initially used for any military unit positioned in front of the most of military formations (avantguarde, avant = in front of, guarde = guard, advance-post, headway). By imagining or theorizing such objects, we are passing through intellectually dangerous landscapes that will no longer have to be passed in reality, if that does not serve any purpose.

3   As we have explained before, the works that resulted from this project are somewhere between art and design. In between frontiers there is usually "no man's land" and if we are to use that term in the military sense, "no-man's land" is a piece of land in-between trenches or defined positions of two confronted armies – it is a territory without a natural shield that neither side wishes to permanently occupy because, by doing so, it will be leaving its human forces unprotected. We all understand that it is very difficult to make money on such a territory. Of course, today it is becoming more and more acceptable to mix various disciplines and create new hybrid forms of expression – my goal and my hope is to see those frontiers more crossed in the future. My personal background is intertwined with various experiences from the worlds of design, advertising and art.

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Nikola Bojić

Nikola Bojić is a designer and art historian. He is focused on design in the public domain and issues of interaction between people, objects and space. He understands design as a field for research, education and social and political criticism.

1 The majority of my works deals with issues of relations between people, objects and space. This often presumes a specific design research, the products of which are processual in nature, have unexpected results and primarily hold a narrative value. I utilize pragmatic design – industrial, architectural or urban – as a basis for intervention. I am interested in transformation, deformation, mutation, not in a formative and formal sense, but in a sense that compels us (or at least me personally) to rethink the existing realities in a new way. What interests me is the political nature of objects and spaces, the notion of surveillance, control and social production instilled in us during our up-bringing and education (which are also carefully designed), but also with design itself, which surrounds us on all levels, and which we are mostly not aware of – from the cup on our table, our mobile phone interfaces to entire cities. My work is definitely somewhere between the two fields you have indicated, but it is always flexible and determined by the circumstances of a specific intervention as well as the presentation of the work.

2 I feel the role of critical design will become increasingly significant. For now, socially responsible design, and often critical design have mostly been related to phenomena like open source or DIY. However, taking into consideration the general trends and the increasingly dramatic legal regulations on the market of material and digital products and services, we can predict that speculation, collective narration and even fiction will become legitimate media for the transfer, development and growth of design knowledge, practices and innovations. For my work, speculative design is often the basic *modus operandi* because it allows me to freely integrate my historical research and the possible futures into a new narrative line or new object.

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3 Perhaps, if it were my goal, but that is not the case for now.

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Damir Prizmić

Damir Prizmić is a freelance designer. He works in a broad spectrum of various disciplines. He is active in the field of education and promotion of open culture. He is also a co-founder of *Radiona*, makerspace and the association for the development of DIY culture based on intersections art, science and technology.

1 I would rather leave contextualization to someone who can be more objective, especially since I am not burdened with the need to belong to those contexts. But, not to confuse anyone, that context suits by all means me because it provides a platform to act and formal status. All artificial things (services, structures, processes…) are designed regardless whether someone has designed them consciously or whether they resulted from some unconscious evolutionary process. Design is a constituent part of everything; it surrounds and influences us. Despite our general understanding of design, which is often banalized and concentrated on the aesthetics or achieving the impression of simplicity, designers' scope of activity is actually rather broad. Because of that and by working as a designer in this way, I find the outside feedback very welcome.

2 In the time of rapid technological development, hyper-production and aggressive social and psychological manipulations, the need for criticism and reflection is definitely more expressed than before. It seems to me that speculative approach is well suited to that new, "overclocked" reality because it is more extreme and it can go further on. It is braver in scrutinizing and creating objects, contexts, scenarios and policies, which provokes reactions before certain problems manifest. In my work, I am least focused on final products and concepts. For me, it is far more interesting to continuously examine and revise things, keep sketching, which allows for much more operations. Also, I have always been attracted to technology that is nowadays the main social driver but also an important source of inspiration and a very powerful tool for expression.

3 I doubt it. These practices are interested in radical examination ("tilting") of the system with the intention to find mistakes or create new solutions in realistic or simulated / virtualized contexts. Results are often inapplicable at that given moment or tend to be excessively destructive because they point out to enormous failures and absurdity of the overall design and politics. I am not sure whether that is the level that clients want to deal with at the moment.

Despite of that, critical and speculative design practices are by no means useless. Perhaps in the future, it will be possible to live from this kind of work. In terms of making money, today one can opt for producing artefacts based on design but to me that seems to be a kind of design prostitution.

Nina Bačun

Nina Bačun promotes team and interdisciplinary work. Since 2012 she has been active in *Oaza* design collective (www.o-a-z-a.com). In both her individual and collective work Bačun intends to contribute to design production and design discourse in an innovative way through lectures, workshops and presentations held in Croatia and abroad.

1 It is very hard for me to position my practice in one of the existing categories due to the fact that I am involved in various projects and what seems to be unifying my practice, regardless of the medium in which I am working at a particular moment, is the examination of the present state of things and thinking about possible new values and contexts.

2 It seems that speculative design has found its niche. It is no longer a novelty; it has been popularized, especially outside of Croatia. It appears as a reaction to the world saturated with products.

Even design biennials with a long tradition are now turning towards new practices and this form of experiment took place at the *BIO 50*, biennial design exhibition in Ljubljana in 2015, under creative direction of **Jan Boelen**, Belgian designer and curator.

3 I believe that it is possible to make a living from this kind of work if one is persistent. Outside of our region it is probably much easier. However, we see that the space for this type of thinking about design, where form, function and cost-effectiveness are not the only criteria, is slowly opening here as well.

Andreja Kulunčić

Andreja Kulunčić is a visual artist. In her works, she questions various aspects of social relations and social practice, especially focusing on socially conscious themes, confronting diverse audiences and collaboration on collective projects.

1 My works are socially engaged, or, broadly speaking, they are works of social practice.

I use my work to investigate various aspects of social relations and social practice, with an interest in socially engaged subjects, confrontation of different audiences and collaboration on collective projects. By establishing my own interdisciplinary networks, I perceive artistic work as research, a process of collaboration and self-organization. I often require active collaboration from my audiences, inviting them to "finish" works in the course of the presentation or during the life of the project.

A part of the creation process is often its multidisciplinary nature, in which specific artistic skills from different fields complement each other (working in co-operation with designers, programmers, sociologists, philosophers, molecular biologists, theologians etc.).

As another operational tactic, I quite frequently appropriate advertising methods and insert parts of my work in the public media space (billboards and city light posters, newspaper ads, radio jingles, etc.). Particularly in my Internet art, which creates a kind of social laboratory, operating both within and outside the art world, I use gallery spaces and institutional artistic framework as only one of many potential fields of action.

2 We need tools of resistance, no matter how small their range. It is crucial to keep them vibrant, alive, to develop methods, work with the audience, work with young people, open new possibilities and ask the right questions. There is a host of social practice works that tackle the issues only on the symbolic level, and I feel that is not enough. Merely being "critical", especially when it comes to pointing out stereotypes and social issues that we all know and witness cannot lead to social change. Rather, we must use the art media to develop tools with persons who are influenced by a particular issue (or a subject covered by the work) as a way of finding a different kind of dialogue, tactics and strategy for different kinds of solutions and approaches to an issue. In doing so, inclusion and horizontal relation during the collaboration represent an integral part of the quality of the work.

3 It depends on whether you are willing to commodify your work and consciously turn it into consumer goods. If that is the case, you will probably be able to sell it and make a living from it. However, the logic of socially engaged art opposes the art market, but also authorship itself, which is why I very rarely sell my work, and when I do it is mostly to museums. Also, my works are often done in co-authorship with about 4 to 10 people, which then requires a strategy for the production of works that differs greatly from typical practices of the art market, art fairs, gallerists, etc.

Silvio Vujičić

Silvio Vujičić is a visual artist and fashion designer. Together with his team, he works at the *Silvio Vujičić Studio* on self-initiated art project. He is the art director of the *E.A.1 / 1 S.V* fashion brand.

1 Generally, at the conceptual and production level, my work is a hybrid. When it comes to production, it is a hybrid of different media, whereas conceptually in most cases it refers to a number of different pieces of information or moments in history. The mutations in the process result in new forms and phenomena. It should be pointed out, however, that my works in the medium of design and my works in the medium of art often do not correspond, except for the fact that they have been created by the same person. "Perfume" was deliberated and conceptualizes as a work of art. It is possible to contextualise this work within speculative design practices, but it was not conceived as such. I suppose speculative design practice would be more focused on terms such as anti-perfume and anti-scent, whereas my artistic research actually sees a potential anti-perfume as perfume itself or meta-perfume. Perfume is the scent of an individual, most often the smell of shame and embarrassment, the hidden and socially unacceptable smell of society itself. Here, there are no questions to be raised or supposedly close-ended issues to be opened. Pure and simple – we have been raised and taught that it is shameful to give off odours, that except for scents synthe-

sized and approved by the "finer" parts of society, body odours are undesirable.

2 I find it difficult to fully respond to this question because I am not engaged in speculative design. As far as art is concerned, it can but doesn't have to use specific parameters that you would put in the category of speculativity. In contrast to the common perception of speculative design practice, I feel that the vast majority of art is closely related to the real world in which we live and that it is not separated from reality. Parameters that fall under the category of speculativity have actually been, for more than a hundred years now, the basic elements in the creation of any good work of art.

3 There is an interest for this kind of work in systems of developed societies governed by people who have been using their intellect and surplus of financial resources for more than three generations of ancestors. In other words, not in Croatia.

Demitrios Kargotis & Dash Macdonald (Dashndem)

Demitrios Kargotis and Dash Macdonald (Dashndem) have been working in collaboration since graduating from the *Royal College of Art*, London. Through public performance, creative social experiments and humorous interventions their practice explores and exposes the effect of existing socio-political systems and institutional mechanisms.

1 We employ a multidisciplinary ethos to our work that focuses on critical citizenship education and participation. Inspired by the popular education movement, we are interested in the design of edutainment and communication models and how we can engender learning and exchange with diverse audiences outside of established art and design institutions. For example, providing a group of teenagers at *South London Gallery* with a **David Cameron** lookalike to take over and create their own party political broadcast in the run up to the 2015 UK general election. Currently, we are revisiting *Dump it on Parliament* an 80's post-punk compilation cassette produced in opposition to a proposed nuclear waste dump in Bedfordshire, inviting emerging bands today to develop cover versions and write new songs of protest.

2 Our work explores what it means to approach design as a social practice and tool to recalibrate established ideologies and aspirations. Moving beyond a traditional market driven model, we work directly in the public realm, acting in an outfacing, collaborative manner in order to create engagement and promote understanding of design's complex role in developing political, cultural and economic systems and social structures.

We are interested in speculative design as a tool for questioning cultural products and practices and how they reflect and enforce the perspectives; values, ideas and beliefs that underpin contemporary society. For example, look at the present imperative of self-design, cultural technologies such as reality television act as civic laboratories that teach us how to monitor, improve and reinvent ourselves as empowered, entrepreneurial citizens, who take responsibility for our own welfare and do not rely on "big government". Or, look at design's changing role in contemporary market-orientated politics, where we have witnessed a shift from party ideology to a value-based marketing approach. Research techniques are used to identify voters' needs and wants before a party designs their products, whether a policy, message or candidate, to create voter satisfaction.

3 The approach we have to our practice encourages re-defining or creating new roles and opportunities for social engaged design. As a result, we produce and disseminate the content we create in diverse formats: workshop programmes, documentaries, public events, live TV shows, exhibitions and touring performances. We often work on commissions from institutions; councils, schools, art organisations, galleries and festivals.

Tobias Revell

Tobias Revell is an artist, designer and educator. His work looks at systems around technological change as well as the future of economics and politics.

1 I would position myself somewhere between technology criticism, HCI, social studies, digital art, media theory, foresight and futurism. I am not sure this has a name yet – there is a couple of us who all know what we are doing and how and share a secret handshake. I also work in education which means that I spend a lot of time busting job titles and specialisations so I am kind of adverse to positioning.

Either way, I have never made a chair or a poster.

2 Well, that is what I have been trained in and what I teach so I guess it is central although I am always trying to challenge the principles involved and push them in new directions. It is good to see it going beyond the gallery context in my own work and the work of others so it seems to have a new developing role sidling up to the horrorshow of "design thinking" which it can hopefully augment.

3 Yeah. I do alright.

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David Benqué

David Benqué is a designer and researcher working in London, UK. He is currently a PhD candidate in Design Interactions Research at the *Royal College of Art* and holds a BA in graphic design (2006) from the *Royal Academy in the Hague*, the Netherlands, and an MA in Design Interactions (2010) from the *Royal College of Art* in London, UK.

1 My current practice is a kind of hybrid formed by twists and turns, education and experiences. My background is in graphic design and typography, which I studied in the Netherlands (2006). From there I took a more "interactive" turn, designing for the web or programming sound-reactive installations and visuals. I then moved to London to study at the *Royal College of Art* (RCA) in the *Design Interactions Department* (2010). There I got interested in science and technology as a subject rather than just using them as tools; I started using design to explore and question their role in society and culture.

Elements and leftovers from this trajectory are present in different combinations in the various aspects of my practice today. I work on applied projects, for example, as a consultant for *Microsoft Research* in Cambridge where I am helping to design a modelling tool for biologists. I also do more speculative projects, such as *Blueprints For The Unknown*, an EU-funded project exploring the impact of synthetic biology on society that I ran at the RCA between 2011 and 2015.

There are different aspects to my practice, but they all include science and technology, design and research in some capacity. I also enjoy teaching and running workshops. It all forms a somewhat coherent whole where things feed off each other sometimes in unexpected ways.

2 I recognise myself in the umbrel-la term "speculative design" but it means so much and so little at the same time. I think it is more useful to consider it as a set of ingredients and methods that people can use (or not) in making their own "sauce". For example, this could mean an installation suggesting a possible techno-logical future, documentary film about his-torical re-enactment or workshop around fictional prototypes. These all fall under the same umbrella but are very different things, with different aims and contexts. Some de-signers and artists have built their whole practice around "speculation" while some students only use it as a testing ground to experiment during their studies. It is not always useful to group all of this together. I hope that the critique of this field will become more precise and start dissecting why a specific approach or project is or is not successful in its context.

I have been practicing some form of "speculative design" for some time now but there are still many questions I am keen to clarify. That is one of the main reasons I have recently embarked on a PhD, to try and bet-ter articulate what "speculation" means in my own practice. One of the big criticisms is that this work mainly exists in museums and galleries; I am looking forward to experi-menting with other modes of dissemination, ones that infiltrate the current media land-scape in more varied and playful ways.

3 As with any independent practice, things take a long time to set up. I think building a viable practice is a design task in itself, and not an easy one. It is defi-nitely possible but does require some level of compromise, navigating funding struc-tures, grants, etc. In some ways this ends up in shaping the practice as well.

In my case, it was a matter of balanc-ing the more applied work that pays better with the more speculative projects, which are harder to fund. But, there is never a clear cut between "money jobs" and "interesting projects". Some commercial projects have brought a lot to the practice on an intellec-tual level. The ideal balance for me is when you find ways of earning money that also fit within your interests and goals.

Anab Jain

Anab Jain is a designer, filmmaker, and co-founder of *Superflux*, a critically acclaimed foresight, design and technology innovation company. Her work has won awards from *Apple Computers* Inc., *UNESCO*, *ICSID*, and been exhibited at *MoMA* New York, *V&A Museum*, *Science Gallery Dublin*, *National Museum of China* amongst others.

1 Our work imagines, investigates, builds and tests ways in which emerging technologies influence and shape our worlds. This broad remit is challenging but also deeply motivating as it aims to address complex, systemic challenges and create alternative possibilities, narratives and experiences. Such a remit makes it difficult to define our work within specific disciplinary boundaries, as we attempt to straddle the intersections between disciplines; from the self-initiated investigative rigour of the art practice, across design, foresight all the way to strategic innovation.

2 Whilst the practice of speculative (critical) design may sit at the fringes of the design world, the approach and thinking it brings is hugely relevant across disciplines, even professions. In our work, we use the approach as an important filter to raise critical questions about the social, cultural, economic and political implications of specific technologies or about the conditions in which our design outcomes will reside.

3 Yes. I guess it depends on where you live and what your idea of "making a living" entails. Also, I guess it depends on how you make such an approach relevant and valuable to organisations and institutions who may not be immediately aware of such an approach. There is a danger that such a practice often sits within an echo chamber of the converted, and recently our attempt is to move outside of the echo chamber to explore and speak to new audiences.

Bastien Kerspern
& Estelle Hary
(Design Friction)

Estelle Hary and Bastien Kerspern are two interaction designers, founders of *Design Friction*. Their design practice aims to promote new ways of using design in approaching public issues. To do so, they produce speculative and critical scenarios questioning the core values of our societies.

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1 Through our work at *Design Friction*, we aim to explore the incoming challenges inherent to the appearance of emerging technologies in our everyday life. In this perspective, our practice is influenced by the stance of speculative design, which we consider to be complementary to more conventional problem-solving design approaches. It reflects on the growing issues linked to the use of technologies, as well as on the role of the designer in resisting or reinforcing these problems. As such, our practice even gets close to activism.

This said, we also experiment on the limitations of Speculative Design practice itself, as we seek ways to answer these pitfalls. For example, we diversify our critical posture by using different mediums, such as games, experiential scenarios or toolkits. We also tend to have a pluridisciplinary approach to our projects, by using the methods or directly working with experts coming from other fields such as ethnography, economics or political sciences, to design fictions and frictions. In this way, we aim at involving non-designers, be them specialists in a topic or not, in the process of speculative design. It stands for participatory design methods for public issues by emphasizing the critical exploration of possible futures.

2 According to us, the core role of speculative design is to create discussions about possible futures and to try to define which ones are the most desirable for either the whole society or a given community. Obviously, groups of interests can defend divergent visions and it is usually challenging to find a common ground on which to discuss a given issue. The strength of our use of critical design lies in its contradictory posture. On one hand, it provokes people in regard of possible outcomes by making those scenarios tangible and visually striking. On the other hand, the issue is somehow detached from the audience by being set in an alternative reality where it has become the normality. This distance helps the involved public to take a step back on the tackled controversy and to see it under a new light. It is really the key to pushing discussions to uncharted territories of thoughts.

With this principle in mind, we aim to support strategic orientations in public policy making processes or their evaluation by involving all the stakeholders in the conversation. We do not only try to provoke and confront thoughts through our work, but we try to connect reflections with concrete opportunities of change. In this way, we also provide design material that can be reused by communities to reformulate our speculations and craft their own futures.

3 So far, we cannot say that we have been successful in making a living only by working on speculative design projects. However, we do not think it is a real problem as we work on a wide range of projects, which experiences help us to refine our understanding and develop our own practice of critical design.

We believe critical practices are profoundly needed in order to reflect on the effects and values embedded in today's and tomorrow's so-called technological or social innovations. This means that speculative design, not unlikely design thinking before, has to find the right arguments to advocate its promise to stakeholders other than cultural institutions. In a society obsessed with numbers, productivity and usefulness, speculative design can seem a futile exercise.

Actually, reaching for clients with a design fiction or speculative design posture might even sound a bit paradoxical. Indeed, speculative design is first an attempt for designers to avoid market and economic influences. Likewise, relying only on the exclusive funding and commission from specific communities of interest or institutions is a questionable approach to the practice. How can you really address independent critics to public policies and governance choices when you are funded totally or partially by public bodies? In this sense, we think it is a practice that is necessarily composed of self-commissioned projects and experiments carried by public-private partnerships.

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