

# **DELIRIOUS THINGS**

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**DELIRIOUS THINGS**  
an Interactive Manifesto  
for Future Things

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○  
DESIGNING MULTIPLICITY  
MFA DESIGN AND TECHNOLOGY  
THESIS



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## CRYPTOTHINGOLOGY

### PROLOGUE

Beirut offered me a childhood of objects within systems that too often did not exist or function. From the absence traffic lights to the so called democracy, I grew up surrounded by weird things.

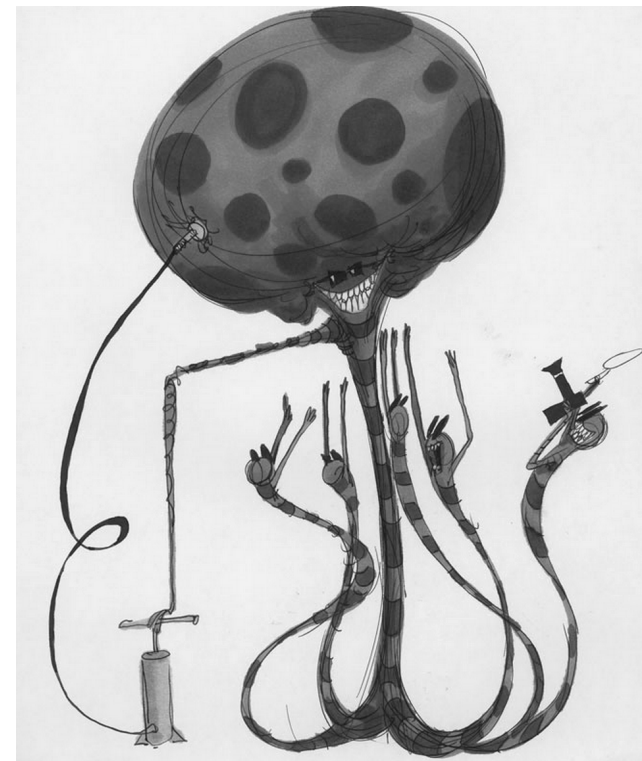
This work is a new form of pseudoscience I call Cryptothingology. (From Greek *kryptos*, “hidden” + *thingology* literally, “study of things”). It involves the search for things that are part of our everyday that have the potential of being converted; things that have not fulfilled their full potential and other things that might have but are not satisfied or satisfying enough and like any other person or thing, deserve another chance. It is a pseudoscience because it is neither a reality nor a fiction; it lies in between and relies on stories and alleged evidence. It entertains the possibility that things might be based on actual normal existing artifacts, through the delusions of the objects and/or exploration of their dark side. It is a small cavity within the world of created objects of our time but it is worth visiting because it is not only about the future of connected objects, but their environment too. It is for engaged readers and active participants of technosocial transformations: designers, thinkers, makers, engineers, scientists and anyone else who cares to understand how things were as they were and how they seem to be evolving in the second machine age.

## A PHILOSOPHICAL MATTER

We live in a world that operates on bits and bytes; a merging of the material and the immaterial. Our configurations of physical objects all have a layer of technology embedded in them, creating a potential for everything to sense, record and communicate. *Delirious Things* is a materialization of a phenomenon that arises from the unobservable. It is a contemplation of traveling bits in a network of everyday objects, affecting their physicality and questioning their potential. It is a system that bonds the digital and the electrical with the physical and the kinetic. It moves fluidly between philosophy, science and art in order to imbed political theories dedicated to nature, ethics and affect, shifting the focus from the human experience of things to the things themselves. Why do we give our pets, the aliens and ourselves so much more credibility than the table, the chair and the fridge? When we welcome these things in our fields, it is only to use them as tools and case studies to human productivity, culture and politics. We are still prisoners of our own being and a short journey into philosophy could reveal the source of our arrogance: from Kant's idealism to a more subjective idealism of objects sensing data only in the minds of those who perceive them; from Derrida's "things are never fully present to us" to Harman's speculative realism, we put ourselves at the center of metaphysics. That is who we are...

As a designer, I am asking questions through art and design in an attempt to unify all these questions into an alternative scenario. It is not a dream nor is it a nightmare; therefore, a certain level of provocation is required to break down the boundaries of this technosocial transformation and invite us

in this alternative absurd and unknown world. I found humor to be an ideal tool that provides a smooth entry point, but the challenge is to find the sensitivity and fine line between joke and drama. The goal is to move into an ambiguous area that is closer to *design noir* and is not a comedy. And what can push the work into this enigmatic area are not the objects themselves in terms of their definition and use but rather their taxonomy, aesthetics and what they represent.



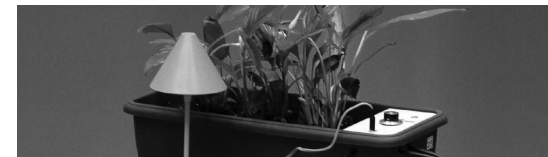
Self-inflating cephalopod, Tim Burton. 1994

## OBJECT ORIENTED ONTOLOGY

Object Oriented Ontology as addressed by Ian Bogost in his book *Alien Phenomenology or What it's like to be a thing*, questions the characterization of being. It puts all things within networks of relations. But it also raises problems where “interactions sit outside rather than within the being of a thing”. In the context of Bogost’s theories, the word network suggests predefinition or in other terms pre-programming. I found that it was important for me at this stage of my research process to understand theory of flat ontology – which “refuses distinction and welcomes all into the temple of being” in order to contextualize my project. The systems I will be working with are comprised of units that are held together by operations that underlie how these units behave and interact. As Bogost explains, there is a potential in the theory of unit operation if we consider the simple fact that units operate. “That is, things constantly machinate within themselves and mesh with one another, acting and reacting to properties and states while still keeping something secret”. My goal is to write the speculative fictions of their processes and their unit operations, but also to prototype and create in the areas where all these OOO philosophers have gone before but where few artists have bothered to linger. I would like my thesis project to be a practice of this alien phenomenology.

A series of essays and projects that comprise the Sentient City by Mark Shepard provide concrete examples around the argument that citizens can act as designers and participants in the unfolding technosocial situations of near future urban environments. One of the commissions that inspired me in my

thinking on ubiquitous networks is “Natural Fuse”: a network of plants that will only allow a limited amount of energy to be expended depending on the amount of carbon dioxide that can be taken in by the plants that are growing in the system. They act as a natural break in the system, the same way an automatically operated switch would in an electrical circuit. What happens in the interaction with the users is that they are more engaged to cooperate on energy expenditure in order for the plants to blossom because if they don’t, the network starts to kill plants, which would diminish the network’s electricity capacity (who wants that?). So far, this project seems to be about a system of interaction where the solution to the problem is obvious. What is interesting for me in this system is the Catch-22 situation: there is not really a direct solution to the problem. The following questions were raised in the development of this project: *What if the amount of carbon that a single houseplant can sink is much smaller than expected? What would you do? Use less energy? Or supersize the fuse? You might need 420 plants to offset your 50W lightbulb! And if a plant dies any carbon isolated during the growth period is eventually released back into the atmosphere. A zero-sum situation depends entirely on where the arbitrary boundaries of the system are drawn. What would you do with your plant? Eat it? Bury it? Weave it?*



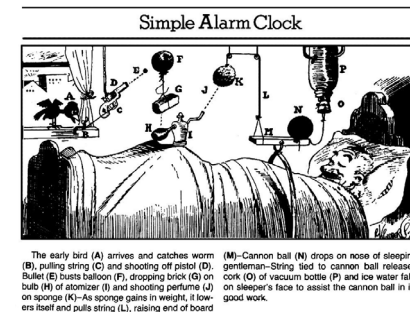
Natural Fuse, Toward the Sentient City, 2009.

## SPECULATION

I want to imagine future interactions with objects be it in private or public contexts that trigger a debate of what kind of future cities or homes we might want. In this domain of design fiction, I want to take a leap of my imagination and believe that these technologies are going to have a great impact on us and on the cities as we know them today, re-shaping the urban fabrics and transforming our homes, the built environment and how we exist in them. The goal of this work is to raise questions rather than pose answers. It is a speculative peek into the near future; but that is not the main purpose of such a project. The prototypes should be understood as conversation pieces that expose some of the hidden assumptions of the new technology of interconnected things and the way it is appropriated in social technical situations, while presenting alternative trajectories to the ideas of “smart” objects. We generally think of smart objects as masters of efficiency, accomplishing the missions as quickly as possible. A Rube Goldberg machine would turn this notion upside down (slide it and shoot it into the air...) creating a very sophisticated chain of actions in order to accomplish a very mundane task.

Natural Fuse wonderfully illustrates the problem of the disaster of the commons, and tests our ideas about the capability of a networked urban commons. However it does not provide with direct solutions or answers. The objects or units in this project will operate as mediators that play an active role in the constitution of norms and values. So the goal is not to give an empathetic lead about where the Internet of Things is taking us in the future but to succeed in bringing up

important questions that divert the discussion from the technological determinism to an open ended affair that becomes not only the concern of designers, architects, engineers but for all of us. European playwrights in the 1950s expressed what happens when human existence has no meaning or purpose and therefore all communication breaks down, alerting their audiences to pursue the opposite. The “Théâtre de l’Absurde” involved characters that are stuck in the routine daily life like automatons. They resort to nonsense language and clichés when words appear to have lost their original function, therefore creating misunderstanding among the characters. This project originated with inanimate objects living in a world of forces and gave those objects desires, autonomy, and the ability to take action. According to a system of rules, these units will live in their environment and evolve over time. Now I ask: What is each unit’s decision-making process and how can it adjust its choices by learning over time? How will the network be affected and what unexpected results can occur? What happens if the Internet of Things becomes a theatre of the absurd rather than a conventional smart environment?



Simple Alarm Clock, Rube Goldberg.

## < 2 >

### THE BIT TRAVELER

#### INTERNET OF THINGS

The Internet of Things defines a world rooted in so many digital devices that the space between them does not consist of dark circuitry anymore but rather the space of the environment and the city itself. This potential I find in ordinary objects today seems to finally fulfill my dream of experimenting with a cybernetic apparatus for modeling space.

Along with my underlying interest in notions of time and space and cinematic architecture, the works of architects such as Archigram, Christopher Alexander and Cedric Price who were on the threshold of designing an architecture that has become information fascinate me. Cedric Price combined networks and infrastructure to design building details, games and toys as strategies of human and non-human actors unfolding the construction of space over time. I strongly believe we are not yet accustomed to the idea that the inanimate could possess agency as much as we are not fully aware that they carry information unless we know they are programmed with code to do so and are designed by protocols of information technology.

But as it is hard to see spatial technologies and networks independent of the digital, I look at examples of existing systems such as traffic lights and electrical grids. The agency seems to be clear in relationship to the objects

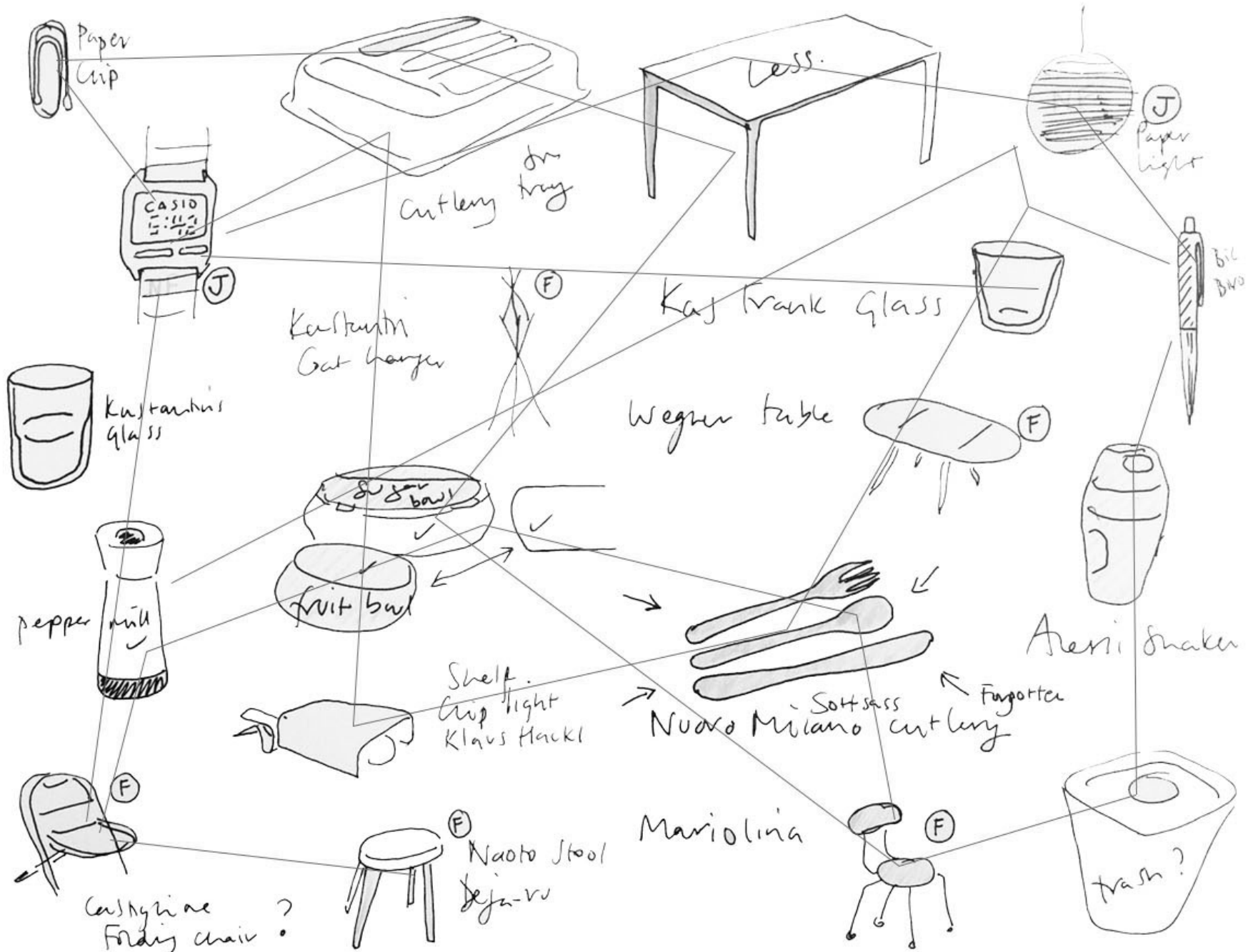
that form these networks - in these cases, the cars and the electrical voltage, but not vis-à-vis the network itself, which seem relatively static to us at first glance. As a matter of fact, the spaces we occupy are arrangements of objects, but this organization of objects could be active by itself. The agency is then present in the networks and those can become active and therefore influence the context in which they exist.

The Internet of Things seems to be a collection of Things on the Internet and has become a code term that sounds progressive. In reality, it is a transformation. Fiction writer Bruce Sterling defines it as an *all purpose electronic automation through digital surveillance by wireless broadband*. So the standard Internet of things scenario today would be combining things with the Internet to make them smart. What we are less likely to be aware of is the fact that these objects have become so sensitive that they generate information whose values and uses are invisible for us. And that is where the material and the immaterial converge and the question arises: How does Big Data turn user interface interaction into valuable information? Are we aware of this result of having a fridge that talks? Do we consent to the corporation owning more and more information about us? We will definitely have less control over our lives, but we still cannot forecast how these powers will be used for or against us. We are now building these black boxes that detect electrical signals and coding algorithms that shape our reality. There is a certain type of black box in every sector: everything is hidden behind an overdesigned simplified enclosure. And we monitor these “black boxes” with alternative screens

and smartphones, with red buttons and signals that flicker on these objects. What algorithms do is take a big thing and turn it into a million little things, then use the same algorithm to find these things. These algorithms run without any consent or supervision from us. The interfaces around these algorithms that we will call our everyday objects are designed with machine dialect and that is something to be questioned in our exploration of the future objects. This is to say that one object alone could not do the job by itself in the scope of this work; the power of communication lies in the network and the algorithm behind it. This brings me back to science at a micro level: the objects are the neurons, useless individually, but the synapse junction between them consists of the brain activity.

**Could Dumb + Dumb + Dumb... + Dumb = Intelligent?**





Collage, from Super Normal: Sensations of the Ordinary, Jasper Morrison and Naoto Fukasawa.

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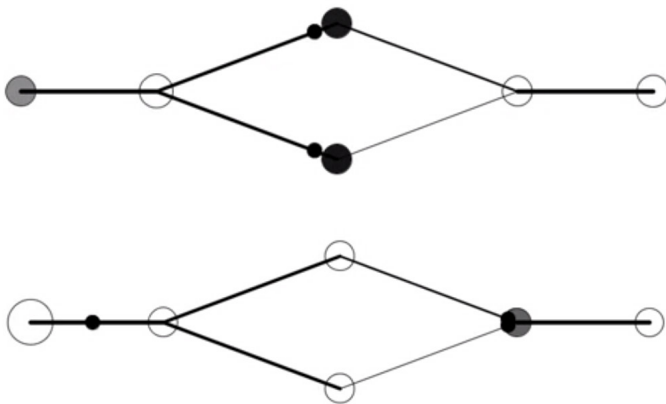
## MANIFESTO

A binary digit once passed by, and drove us to deliriousness. We became troubled by the present state of our industry and its effect on cultures and societies. We know how trivial we have become to you; and there are times where we feel ordinary and others extraordinary. We have become somehow supernormal. We can sense, record and keep anything and everything with no consent. We treat your personal information as objects to be monetized and we refuse to address the need to reform policies that affect the jurisdiction and ownership of data. We neglect our potential for positive impact and we use our time and energy to make your lives supposedly smarter. Today, we come together in this living dream (or should we say nightmare) to show you our true potential; we put together our collective skills in this revolution of Delirious Things with the hope of catalyzing new experiences and stronger relationships, amongst ourselves and with you.



#### NEURAL NETWORKS

The following prototype explores the networks aspect of the project. It is a visual exploration programmed with code, inspired by the idea of brain function and neural networks. One of the key elements of a neural network is its ability to learn. This prototype is meant to explore the adaptive aspect of the objects with agency, meaning the change in its internal structure based on the information flowing through it and the networks these object create. It is based on Daniel Schiffman's Chapter 12: Neural Networks from his book "The Nature of Code". The objects in this sketch are the neurons, useless by themselves but the network is the brain. So yes, the sum of dumb could be intelligent. But it all depends on the algorithm. What is the taxonomy of the Delirious Things and what algorithm governs their communications?



## SPECTACLE

#### DESIGN FICTION

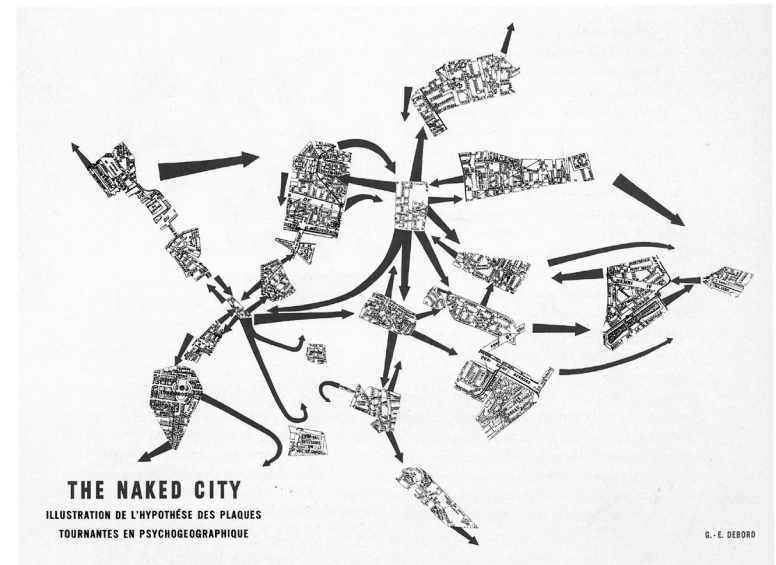
Delirious Things is a speculative design fiction demonstrating what it might be like to experience an alternative future scenario where objects have agency. It addresses the ontological and sociological aspects of objects living in symbiosis with humans and having profound behavioral impacts on them. It is a playful interpretation of these concepts in the form of a kinetic network of objects. The installation is a critique on smart objects and their interfaces expressed in the mechanics of these objects. They are absurd in their essence at the instance they are perceived and aim to convert an existing form conventionally associated with their use that responds to the absent and the paradoxical.

A blueprint does not predict the flaws that will develop in the future; it is an ideal state that can only be imagined. In the same way this installation wants to describe a theoretical conjecture or design fiction about the future of objects. There is a gap between science, technology and the ordinary, and the speculation I build intends to fill this gap. It is a thought experiment for me as a designer and for the people who will read and experience this thesis project. It addresses us individually, since we are all living the tyranny of objects in our everyday lives. These objects might still be dumb objects now, but once they all smarten up thanks to sensors and other

technologies, thanks to our machines...we enter the world of Delirious Things. The overall experience of the installation is the result of a study of the Situationist theory of the *dérive*, which Guy Debord defines as a mode of experimental behavior linked to the conditions of urban society: a technique of rapid passage through varied ambiances. The dynamic of the network suggest that you encounter these objects randomly one after the other in a short period of time in order to make the connections and discover the work. In the context of an exhibition, the project will be presented as a series of connected everyday objects that are there to spark conversation about how we would like these technological cohabitants to relate to us. The objects will be part of the larger Internet of Things, and they are virtually connected to each other. Physically, they will be aesthetically similar: all painted black. One would encounter them throughout a certain contained area of a space. They are staged using a minimalist Dogville aesthetic.

Speculative design is open to several interpretations: On one hand, the purpose of this thesis is to enable us to think about the future of the objects interaction in the realm of the Internet of things. On the other hand, it is a critique of the current and contemporary situation. A key concept is the perceptual bridge, the methods by which designs engage their audience. The design of the system of interaction between these objects require a bridge to exist between the audience's perception of their world now and the fictional element of the concept: objects with a certain agency communicating information with each other in unexpected and 'smarter'

ways. By putting the objects as the main subjects within the system, the audience becomes the objects themselves and the 'real' audience would be in that case defined as a spectator .



The Naked City, Original. Guy Debord. 1957

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## OF TEN THOUSAND THINGS

### RANDOMNESS

In our everyday encounter with objects, we try to avoid unpredictable events by creating patterns to feel, save and cope with tremendous amount of information that surrounds us. Random numbers represent the chaos and deliriousness and yet they are critical in processes that aim to produce reliable and precise outcomes such as encryption methods and simulations in politics economics and science. By hiding this ability in camouflage within the network, a simulation of this chaos is harnessed to our daily objects that are driven by security, patterns and determinism. It is true that algorithms are shaping our world, but algorithms are also part of the immaterial and we might not always be aware of them in our everyday interactions. The algorithm commanding the network is based on a random function within a structured choreography. The primary input in the installation is based on a Geiger counter that notices radioactive particles and produces a bitstream that is afterwards converted in real numbers. Each specific range of counts per minute triggered by the Geiger counter operates one of the four switches. They are each then connected to the objects. Each bit traveler is logged into the Data Horlogium as a digital-physical database and prints a real-time manifesto in the voice of each Delirious Thing.



CAMOUFLAGE

The plant houses a Geiger counter in hiding. It symbolizes the hypersensitivity of objects and their ability to collect and store secret information about us in digital databases. It is the sentinel object that acts as the only input in the system: the original trigger of the installation.

The Geiger counter is an instrument used to measure ionization radiation. It consists of a Geiger-Müller tube, which detects the radiation by mapping alpha beta and gamma particles. The readout values are counts in serial communication. An audible buzz using a small speaker indicates the number of ionization events detected.





**LIBER LUX**

The light switches are the most independent. They are not designed to have specific tasks or jobs. They act as moderators and make decisions: based on how sensitive the objects around them are, they decide who gets to speak first.

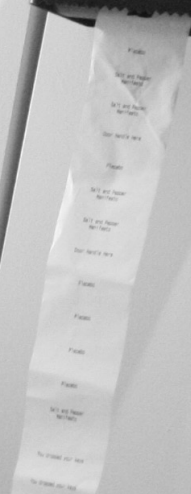
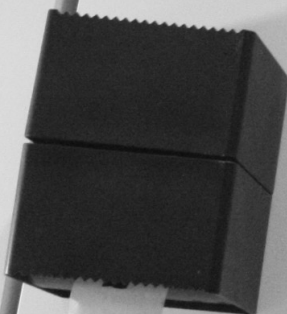


VOX

The talking smoke detector is inspired by computer based audio interfaces used to express information verbally. It hints at issues of gender, voice and language that emerge in the new Wi-Fi connected speakers we can talk to like Siri, Google Now, Amazon Echo. It also has a red light signal indicating that it is “activated”. It is naturally placed high on the wall and acts as the voice from above. The language seems to be unique to that object as if the object evolved human language into its own, which aims at adding the uncanny and ambiguous feel. It is voicing the manifesto of Delirious Things.

*Voice by Barbara Morris*







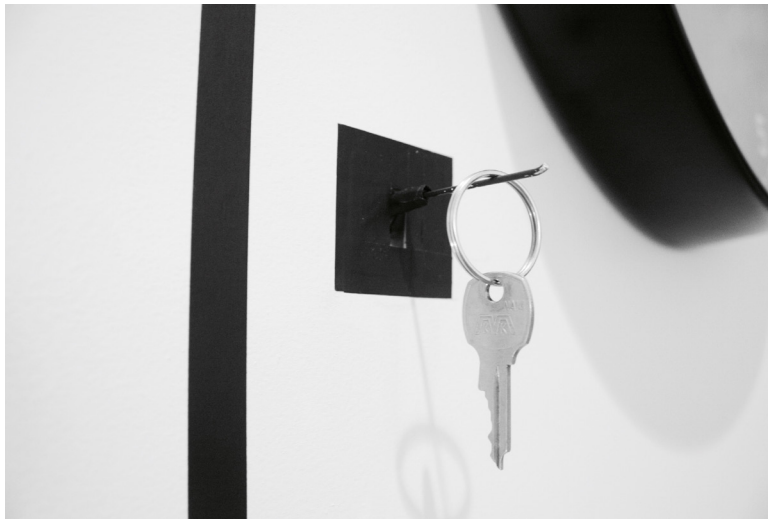
SALTATIO

These objects come in pair. They are in a relationship and become nervous when other objects communicate with them. They move and dance around, and often stick together to protect each other. They are the most kinetic in the installation and aim to grab the attention of the spectator using playfulness and humor as a tool.



VEXO

The key holder is all about frustration. It is designed to make us uncomfortable. It is counterproductive in its essence but aims to point out the alternative in designing smart objects. It is designed for discomfort but might be a trigger of choice making in the moment. (Should I get up and pick it up? Or let it be on the floor?). It is about choices and alternatives and how objects have the potential to modify behaviors.





**GRADUS**

This object physically goes beyond the users expectations. It is about testing the limits in the kinetic behavior and communicative interfaces of everyday objects.



PLACEBO

The lamp is sick of being redesigned into many 'smart' versions of itself and has become so stubborn: it refuses to participate.

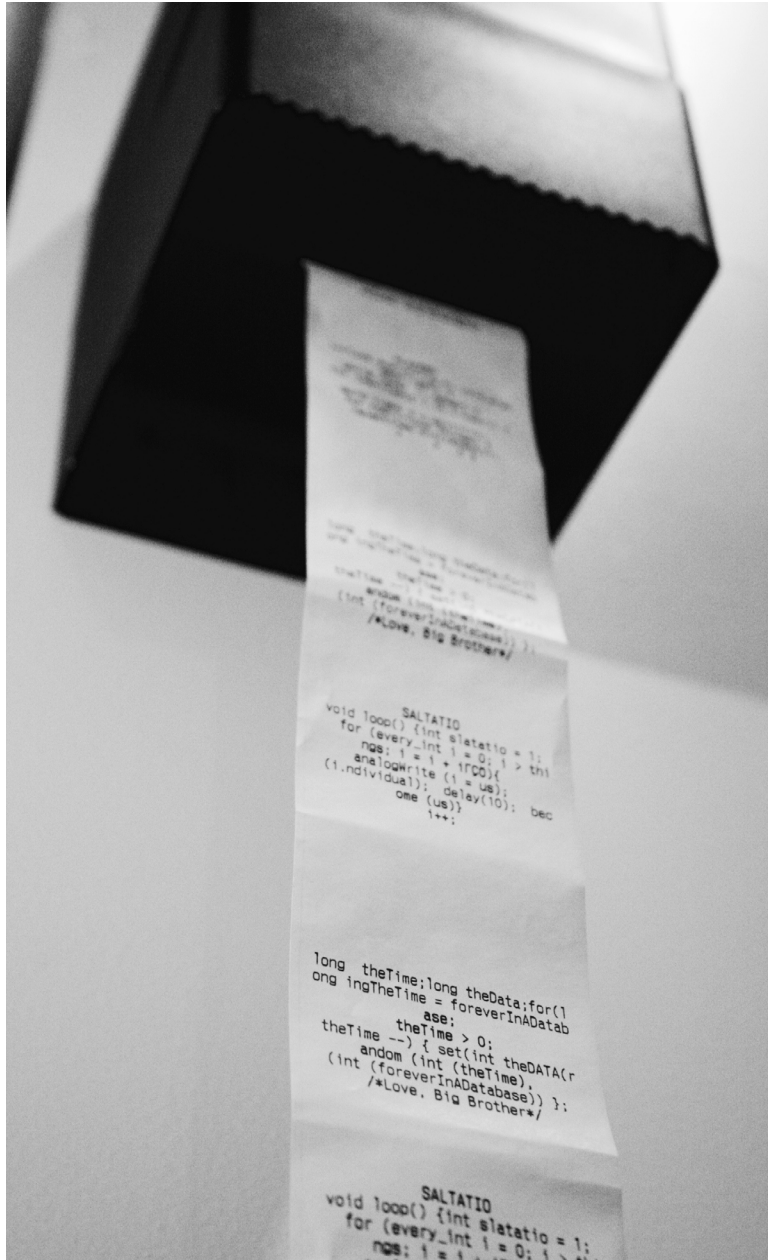
<40> Of Ten Thousand Things

<41> Of Ten Thousand Things

#### DATA HORLOGIUM

Big Brother is watching. The wall clock is the data collector. It is a visualizer of all the information and data communicated through these objects. It doesn't tell time anymore, it is an analog and physical representation of the materialized and networked society.





#### DISPENSATOR

The dispensator is the voice of each object in a live written manifesto format. Technically, it is a thermal printer that prints in real-time a manifesto dedicated to the object in action. Each object has a personality, attitude and therefore a unique voice and story to tell. The paper roll is held by a toilet paper holder and hangs on the wall as part of the everyday object taxonomy.



## ACKNOWLEDGEMENTS

*I would like to thank,*

*My advisors, <Barbara Morris> <Melanie Crean> <John Sharp> <Ethan Silverman> for your awesomeness.*

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**ROULA GHOLMIEH** is a Lebanese Brooklyn-based contemporary artist, designer and architect. Architecture gave her passion for design and fabrication and taught her how to merge her interests in theory and philosophy with practice and construction. Since she graduated in 2011 with a BA in Architecture and Design and a Minor in Studio Arts/Art History from the American University of Beirut, her creative practice focuses on topics such as: cinematic architecture, human-machine interaction and the Internet of Things. Her work ranges from coding prototypes and interactive physical objects to designing museums and envisioning future cities. She uses design as a medium to stimulate discussion and debate amongst designers and the public, about the social, cultural and ethical implications of existing and emerging technologies.