

Minor Grip: on the Constitution of Morality, Agency and Affectivity with Technology

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Abstract

The purpose of this thesis is to establish a conversation between Bruno Latour and the work of contemporary philosophers and critical theorists in order to develop their respective approaches to articulate a critical theory about technology. To analyse these different perspectives, the thesis follows a conceptual framework based on what Bruno Latour calls the “principle of symmetry” between human and non-humans actants that take part in the constitution of what we call society. Through focusing on different “thing theories,” the thesis works to recuperate some of these concepts and practices to enrich my own conceptual toolbox. Each chapter focuses on a particular case study – the revolving door, the Automated Public Toilet, barbed wire and the smartphone – that gives me the ground where I put at test these different perspectives to see if they can be good theoretical allies to give more space in critical theory for what Latour calls its “missing masses.”

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Introduction

This thesis reconsiders the relationship between technology and everyday life in contemporary critical theory. Drawing on the work of Bruno Latour and other thinkers who develop a theory oriented towards networks and technological artefacts, I build up a conceptual toolbox that helps us to recognise the potential of these “factishes” – hybrid entities that are both the materiality of facts and the aura of fetishes – to participate in the constitution of any kind of society. I examine these “missing masses” which, because they go unnoticed, have been often misrepresented, ignored and even condemned in the traditional discourses of (post-) modern sociology and philosophy. Each of the four chapters focuses on a technological apparatus – the revolving door, the automated public toilet (APT), barbed wire and the smartphone – grounding and giving body to the theoretical discussion. The thesis argues against the anthropocentric reductionism fuelled by the myth of the *homo faber*, which conveys a vision of the mankind as the master of nature and the technician that shapes the world, and the illusions of ontological dualism. In its place, the thesis claims that human action is not achieved by virtue of a presumed autonomous consciousness or by the privilege of an exclusive technical knowledge, but by a gesture – a “grip” or an “effort,” as Merleau-Ponty and Spinoza would put it – that is both constitutive and constituted by the multitude of non-human things and beings that participate, as do their human counterparts, in the (dis)enchantment of the world.

An Encounter with some Thing(s)

At first sight, the choice of the different technologies that form the case studies of this thesis can surprise the reader, who might feel herself to be in the presence of a kind of cabinet of curiosities. I am not displeased by this thought: quite the contrary, in fact. The original idea of this thesis took shape progressively after a series of similarly unexpected – but in my case, more literary and conceptual – encounters. The first one – and actually it was a re-encounter – is with one of the most fascinating creatures of modern literature: the Odradek. It appears in 1919 in Franz Kafka's short-story "The Cares of a Family Man" and since then has been the source of a strange attraction – a mixed feeling of anxiety and affection – for generations of readers.

The story starts with some speculations about the origins of the peculiar name of this strange thing that looks like "a flat star-shaped spool of thread" that holds a special place in Kafka's bestiary.¹ As the family man in the story says:

Many a time when you go out of the door and he happens just to be leaning directly beneath you against the banisters you feel inclined to speak to him. Of course, you put no difficult questions to him, you treat him--he is so diminutive that you cannot help it--rather like a child. "Well, what's your name?" you ask him. "Odradek," he says. "And where do you live?" "No fixed abode," he says and laughs; but it is only the kind of laughter that has no lungs behind it. It sounds rather like the rustling of fallen leaves. And that is usually the end of the

¹ For good references to Kafka's special relation with animals and their representation in his fiction and letters, see Lucht 3-4; Helms 82.

conversation. Even these answers are not always forthcoming; often he stays mute for a long time, as wooden as his appearance (Kafka 428).

This lack of cooperation and its persistent presence seems to be a source of anxiety for the *pater familias* who passes from questioning the origins of the Odradek to question his own position in space and time. The story ends up with the narrator asking himself: “Am I to suppose, then, that he will always be rolling down the stairs, with ends of thread trailing after him, right before the feet of my children, and my children's children?” (ibid: 429).

I have chosen to make a reference to this story in the introduction of this thesis because the encounter of the family man with the creature – and more particularly the epistemological-ontological worries that result from it – illustrates in a nutshell the preoccupation of many contemporary thinkers towards modern technology, and the (bio) political implications of its proliferation. Indeed, faced with the presence of the Odradek, the narrator offers a succession of interrogations that can be seen as *ersetzen*, as literary substitutes, of the assumptions of a philosophical tradition that states the impossibility a world without human consciousness.

This thesis is concerned with these ontological questions about technologies – and *things* in general. I argue here that these assumptions, by putting human existence at the top of its ontological axis, have marginalized other forms of existence, or as Walter Benjamin writes: “Odradek is the form which things assume in oblivion” (1969: 133). The path to changing these metaphysical prejudices against non-humans is certainly not an easy one, since the wires that give the Odradek its shape are far from the neat line of Ariadne's thread. It demands an effort of imagination that challenges the long established tradition in modern western philosophy that has settled in the shade of the certainties of Cartesian dualism. This

very same dualism has marked the minds of generations of thinkers with the idea of the primacy of the human individual consciousness, and its action upon the world.

Odradek contrasts, linguistically and ontologically, with the individualism of the Cartesian tradition: the creature pushes the human narrator to rethink the persistence of these things that might survive humans, and even haunt and affect the next generations. What might the Odradek do to his children, and the children of his children? This is what is worrying the family man. It seems that one of the central questions here – if not the main one – is about the *morality* of non-humans: a question that goes back to the aborted promises of Prometheanism that comes all the way from the philosophy of Enlightenment humanism and the myth of the *homo faber* that represents mankind as “the master of nature” by creating the tools to divide and conquer its goods for the benefits of humanity (Latour 1994: 152-153, Seris 125).

Two centuries later, this immutable faith in scientific progress has been massively shaken. The Enlightenment project was supposed to be served by some immutable pillars – abundant nature, scientific knowledge, etc. – but the tragic events of the last hundred years have yielded a serious crisis of reason, as Benjamin’s famous *Angelus Novus* bears witness:

His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. This storm irresistibly propels him into the future to which his back is turned,

while the pile of debris before him grows skyward. This storm is what we call progress (1969: 256-257).

According to all indications, the machines were the designed accomplices of this wicked progress. Technology was central to the two World Wars, and has growing presence within some of the major societal changes shaping the post-war era. First Taylorism, then Fordism and the aesthetic and sensorial shocks of the “age of mechanical reproduction” and “mass culture” solidified its centrality to modernity (Simmel 1997; Benjamin 2009; Adorno 1999). It becomes not only the instrument of alienation of the masses, but also a serious threat to the most sacred notions – art, education, culture – that were supposed to emancipate the individual. The machines were considered as the obstacles to authenticity (Heidegger 1977, 1993). As Isabelle Stengers points out, this fright about technical inventions, and their proliferation, is mainly due to the modernist use of the confusing concept of *technoscience*, whereas there should be a distinction between techniques – understood as practices – and science – understood as a (modern) ideology:

[T]o treat technique as distinct is crucial if we are to resist the effects of fascination associated with discourse about the inexorable technoscientific redefinition of the world. (...) In *The Invention of Modern Science* and throughout *Cosmopolitics*, I took the risk of accepting the difference between the so-called modern sciences and other knowledge practices. But I did so on condition of presenting this difference, of making it present, in a way that differs significantly from the way it is ordinarily introduced. It is much more difficult, however, to talk about the “invention of modern techniques.” Attempts have been made to define what a modern technique might be, that is, to politically define the “technician” in the community in the same way the “scientist” was

defined at the moment the modern sciences were invented. (...) In other words, the category of "technique" remains de facto available for mainstream use, regardless of the question of modern and nonmodern (2011a: 340-341).

Of course, anthropology has helped to highlight the central role of the techniques and artefacts in the evolution of human culture and socialisation. As I show in the two first chapters, the works of eminent figures like Marcel Mauss and André Leroi-Gourhan, introduced a third actor regarded as insignificant for a long time – technics – between the mind and the world, which implies an impact of the tool on the body, a fundamental factor in the composition of the figure of the technician, and its ability to socialise (Mauss 1973; Leroi-Gourhan 1993). However, I affirm that despite this reevaluation of the relationship between technics and the body, the artefact is still represented as an extension of the body, and lacks what some theorists would call the recognition of its own “modes of existence” (Souriau 2009).

It is precisely the investigation and recognition of the plurality of ontologies – a notion that should not be limited to humans – that is needed today, in order to respond to the worries of many intellectuals who blame technological apparatuses for participating in the standardization of human existence. Technology is still depicted by some thinkers as an alleged deviation, a perversion of the authentic rationality that was promoted by Enlightenment humanism. The philosopher, from Adorno to Agamben, is (re)presented as the critical judge of this immoral technical rationality. There is even a risk that this nostalgia being understood as a founding principle of their thought, as a profession of faith that presents philosophy as the last defense against the political, social and philosophical crisis caused by technological things.

Minor Grip: the Components of the Social

It is not a matter of denying or reducing the seriousness of this crisis, especially in a time when information and communication technologies (ICTs) have such an impact on the ways humans work, communicate and simply live in contemporary societies. But in order to understand better the social role – either for good or ill – of these technological devices in the composition of the networks that compose our everyday reality, it is important to find new ways of thinking between things and critical theory.

This thesis intends to unbox the crisis described above by developing a dialogue between theoretical movements which would consequently relocate humans among the other *things* and *beings*, and place theory at the level of Kafka who, as Benjamin says, “divests the human gesture of its traditional supports and then has a subject for reflection without end” (1969: 122). It is this process of “divest[ing] the human gesture of its tradition supports” (ibid.) that I intend to investigate through the case studies that I present in the following chapters. But before doing that, it is important in this introduction to offer the theoretical framework of this thesis, and expose the intellectual gestures I have borrowed from theorists and philosophers to compose my own conceptual toolbox that will hopefully contribute to a better account of the potential of the technological Odradeks that humans encounter in their everyday life – and consequently, unlike in Kafka’s story, get from them something more than the tautological answer of their name.

In my inquiry, the work of sociologist Bruno Latour proves to be an excellent theoretical ally to think *with*. His constructivist approach provides an innovative reading of the important role non-human entities – or as Latour would say, their agency – play in the

formation of societal networks. Latour established himself as a major reference in cultural theories and in science and technology studies (STS) that are interested in the proliferation of what he calls the “missing masses” of our society:

Here they are, the hidden and despised social masses who make up our morality. The knock at the door of sociology, requesting a place in the accounts of society as stubbornly as the human masses did in the nineteenth century. What our ancestors, the founders of sociology, did a century ago to house the human masses in the fabric of social theory, we should do now to find a place in a new social theory for the nonhuman masses that beg us for understanding (Latour 2008: 153)

This notion of the *participation of the missing masses in the fabric of social theory* and their role in the assemblage of what is called “morality” has left a long-standing impression on my mind. It is not only the trigger that made me start this thesis, but can be seen as one of the most fundamental axioms that encompasses all the theoretical notions that I refer to in order to compose the theoretical framework of this thesis.

Indeed, Latourian sociology not only offered me a rich conceptual field to think through the relations between humans and non-humans, but also an effective method to understand better the genealogy of the crisis of representation that some theorists, who like Kafka’s family man, are confronted with something that does not fit into their ontological paradigm.

In his seminal book, *We Have Never Been Modern*, Latour comes back to this crisis of representation by pointing at the “Great Divide” that took place in the constitution of modernity in the middle of the seventeenth century when it was decided that:

[T]he representation of nonhumans belongs to science, but science is not allowed to appeal to politics; the representation of citizens belongs to politics, but politics is not allowed to have any relation to the nonhumans produced and mobilized by science and technology. Hobbes and Boyle quarrel in order to define the two resources that we continue to use unthinkingly, and the intensity of their double battle is highly indicative of the novelty of what they are inventing (1993: 28).

According to him, this moment sealed for the moderns the division of non-humans and humans into different ontological categories to be studied in their respective scientific or humanistic fields; an “act of purification” that initiated critical thinking, and its current crisis (ibid: 46). As Isabelle Stengers points out, it is their “distrust of hybrids” that has misled modernist thinkers and reduced them to “impotence” when they are confronted to the proliferation of new forms of beings and things (2000: 124-125). Latour gives a diagnosis of this impotence in *Aramis or the Love of Technology*,² after offering a “detailed analysis of a technology sufficiently magnificent and spiritual to convince [the human scientists] that machines by which they are surrounded are cultural objects worthy of their attention and respect” and assuring that “sociology is not the science of human beings alone – that it can welcome crowds of nonhumans with open arms, just as it welcomed the working masses in the nineteenth century” (viii).

At this stage, it is important to notice that, as Latour, my understanding and therefore my use in this thesis of the words “society” and “social” – which usually replaced by the word

² The book is the account – or *scientifiction*, to use Latour’s term – of a *fictional* narrator, a young engineer, who tells, on the mode of an investigation, the *true* story of the aborted project of an automated train system called Aramis that was supposed to take place in Paris between 1984 and 1987.

“association” in ANT – is a constructivist one. Therefore, the notions can be attributed to *any* type of collectives – and not only human ones:

[T]his means that everything is a society and that all things are societies. And it is quite remarkable that science, by a logical sequence of its earlier movements, tends to strangely generalize the notion of society. It speaks of cellular societies, why not of atomic societies? Not to mention societies of stars, solar systems. All of the sciences seem fated to become branches of sociology (Tarde, quoted in Latour 2002a: 120).

Similarly, the terms “sociology” and “social sciences” should be read here in a non-conventional way: they should not intend to studying or explaining of a supposedly fixed, pre-existing entity called the public or society. As Isabelle Stengers writes in *La vierge et le neutrino* referring to the work of philosopher John Dewey:

It would [be] a conceptual mistake, because the ambitious task to explain the social implies, at the same time, the staging of a situation that would be imagined as “asocial” from which it is about understanding the emergence of associations. Yet, taking the asocial as a starting point is a bad fiction (*mauvaise fiction*): association is the mode of existence of all that exist, ourselves and everything that we have to deal with (126, my translation).

It might also be useful to point out that I do not propose in this thesis an exhaustive reading of Latour’s works, but rather use the concepts I find in his resourceful conceptual toolbox to enrich and assemble mine. Rather than a blind fidelity to Latour, I adopt what archeologist Bjørnar Olsen calls “a bricoleur attitude, searching around for usable bits and pieces that may be reassembled with other appropriate spare parts” (2013: 13). This

bricoleur attitude gives me a certain methodological freedom to experiment in order to find points of contact between thinkers that might according to some partisan readers hold incompatible metaphysical positions. Out of principle, I believe that to consider their respective thoughts as mutually exclusive is to simplify the complex dynamics of their investigations and to ignore quite simply the history of twenty-century continental theory.

Therefore, alongside Bruno Latour, the reader should not be surprised to see through the thesis recurrent references to the works of Maurice Merleau-Ponty and Gilles Deleuze, who act more as *compagnons de route*, but whose influence cannot be hidden here since they gave me the idea of the title: “Minor Grip.” Minor Grip is a conceptual contraction or *metamorphosis* – since it is as much the form as the content that changes here – of Merleau-Ponty’s “maximal grip” and Deleuze “minor literature.” As a modest claim, I want this concept to act as an indicator to the reader, a reminder of the direction this thesis is taking; and less immodestly, I want it to be a useful tool to constitute an alternative narrative to the pervasive moral diktats towards some mundane technological devices.

In “Cezanne’s Doubt,” phenomenologist Maurice Merleau-Ponty writes about his fascination with the French painter Paul Cezanne’s incessant attempts to “reveal on his canvas the mysterious knot where our perception arises between “the spontaneous organization of the things we perceive and the human organization of ideas and sciences” (Merleau-Ponty 1964a: 13). He immediately links the artist’s gesture with his own effort, as a philosopher, to understand this pre-conceptual bond between the embodied consciousness and the world in what he calls the “intentional arc” in *Phenomenology of Perception*:

Let us therefore say rather, borrowing a term from other works, that the life of consciousness—cognitive life, the life of desire or perceptual life—is subtended by an ‘intentional arc’ which projects round about us our past, our future, our human setting, our physical, ideological and moral situation, or rather which results in our being situated in all these respects. It is this intentional arc which brings about the unity of the senses, of intelligence, of sensibility and motility (2002: 157).

This intentional arc is not given as representations, like in Descartes’ philosophy, but is established through the acquisition of skills:³ the more the artist practices his art, the better he can establish this arc with the world. In the case of Cezanne, it would be painting again and again Mont Sainte-Victoire in order to become an expert artist *of* his subject, to be the closest possible to it. The ultimate level of this “expertise” is reached when there is no need to think about the purpose of the subject anymore: “[a] movement is learned when the body has understood it, that is, when it has incorporated it into its ‘world’, and to move one’s body is to aim at things through it; it is to allow oneself to respond to their call, which is made upon it independently of any representation” (ibid: 160-161). This effort to reach this fundamental connection through the acquisition of skills, based on perception and manipulation, is what Hubert Dreyfus translates as “maximal grip:” a notion rarely discussed in theory that says that when we are doing something, “we tend to grasp it in such

³ I am revealing no great secret by saying that Merleau-Ponty’s works on body and perception offers valuable insights to investigate and question the traditional ontological model of dualism between the object and the subject, between matter and mind, between nature and social. Generally, phenomenology played a major role to “divest,” as Walter Benjamin would say, the human gesture from its tradition supports – which have from Plato to Descartes, and later Darwin, always been centered on the mind, memory and their organ, the brain – to highlight the central role of the body, and more particularly the hand and the eye. As Catherine Malabou states, by “[making] several claims about the body: that it is not the case that the body is the tomb of the soul, as Plato claimed; that it is not the case that the body is a neutral extension caught in the movement which animates it, as Descartes showed; and that the body is much more than the place of sensibility, as Kant defined it. In fact, the senses always grasp things as they are for the consciousness that perceives them” (14).

a way as to get the best grip on it (2001: 58). It is a nature effort, without thinking, that pushes us towards this optimal experience since, as Merleau-Ponty states: “[t]his maximum sharpness of perception and action points clearly to a perceptual ground, a basis of my life, a general setting in which my body can co-exist with the world” (2002: 292). He illustrates this with the visitor’s natural tendency towards finding the “optimal distance” with his body to get the “maximum visibility” of painting:

“This privileged perception ensures the unity of the perceptual process and draws into it all other appearances. For each object, as for each picture in an art gallery, there is an optimum distance from which it requires to be seen, a direction viewed from which it vouchsafes most of itself: at a shorter or greater distance we have merely a perception blurred through excess or deficiency. We therefore tend towards the maximum of visibility, and seek a better focus as with a microscope” (ibid: 352).

However, I argue that despite the possibilities this concept offers to the body of having an equal value to the mind, putting an emphasis on its active role in the process of perception with his notion of “flesh” (chair) – which is the fundamental constituent of both the body and the world – Merleau-Ponty’s carnal concept of “maximal grip” lacks something. Said differently, this concept of “maximal grip” is a shortcut to explain humans’ sensory relationship with (in) an empirical reality, and as a result it is *missing many of the little things that take part in the constitution of the meaning of humans’ perception and their reality*, which cannot be answered solely by a philosophy of embodiment – and I should add: even less today, with the proliferation and presence of so many sensory technologies. Indeed, this concept still remains too impregnated by the idea of “the primacy of individual perception and its philosophical consequences”:

The perceived world is the always presupposed foundation of all rationality, all value and all existence. This thesis does not destroy either rationality or the absolute. It only tries to bring them down to earth. (...) Perception is thus paradoxical. The perceived thing itself is paradoxical; it exists only in so far as someone can perceive it. It cannot even for an instant imagine an object in itself.

(1964b: 13, 16)

Perception is paradoxical indeed, but not primarily because of the thing itself, but due to the fact that the process of perception in Merleau-Ponty's thought is still based on an idea of the embodied consciousness as the source and receptor of this sensorial bridge between itself and the world. Consequently, the things themselves are reduced to being part of this conceived world by the perceiving (human) being. Said differently, despite his intention to offer a non-oppositional theory of perception, there are some *thing(s)* missing in his account of the intentional arc.

By taking up this concept of “maximal grip” and slowing the pace to include the participation of other elements – in this case mostly technological artefacts – I do not want to find a new path to the phenomenological approach,⁴ but rather try to clear out of it as far as possible its anthropocentric layers that present the process of perception emptied of its material components, of its multitude of non-human mediators.

This does not mean that everything is the same, that a human is not different from an animal or a stone. It highlights rather that there is a shared substance, a shared “flesh” as Merleau-

⁴ Whereas some theorists intend in a post-phenomenological perspective with his concept of “plasticity” to define what comes after the flesh (Sparrow 2014), the point I am making is the simple one that draws attention to what comes as a support of this “flesh,” that are fundamental components of this grip Merleau-Ponty is referring to. Instead of going beyond his primacy of perception, what interests me is to find some of the components of perception, the lines they leave to rethink the fundamental activity of these associations of lines and things that Latour calls the process of “reassembling the social” (Latour 2005b).

Ponty would say, that brings a similarity in the human mode of perception of things. This is nicely captured in Kafka's story in the anthropomorphic features – "legs," "colours," "spool for thread," ... – the family man *sees* in Odradek: all those familiar features that gives the creature "some sort of intelligible shape" which binds the two beings, the subject and the object, not only in language and text, but also body and flesh. The similarity is not permanent to the point of talking about identity; rather it is "sometimes wandering sometimes reassembled" according to the conditions of the encounter, the chiasm, the "magical relation":

[T]his magical relation, this pact between them and me according to which I lend them my body in order that they inscribe upon it and give me their resemblance, this fold, this central cavity of the visible which is my vision, these two mirror arrangements of the seeing and the visible, the touching and the touched" (Merleau-Ponty 1964b: 146).

Therefore, to come back to Merleau-Ponty's example of the visitor's effort to find the optimum distance to watch a painting, the maximal grip between these two entities depends also on the participation of a multitude of other potential agents – from the light in the room to the glasses on the visitor's nose, for instance. Or in the case of Cezanne, the repetitive gesture of the painter on the canvas trying to find a textile bond with his subject depends also on the qualities of a multitude of little things – like the paintbrush or the watercolours – that are composing the maximal grip between the painter and the mountain. With (in) the "maximal grip" of humans one should also take into account what I call the *minor grip* of what humans loosely call objects: those little things that "afford" support, to use James Gibson's term, to this touching/touched relation with the environment (Gibson 2015). As I show in the second chapter, the theory of affordances helps me to build up a correlative

perspective that demands an intellectual shift from a moralist position that defines “objects” according to a discriminatory categorization based on their intrinsic qualities. As Gibson writes:

An affordance is an invariant combination of variables, and one might guess that it is easier to perceive such an invariant unit than it is to perceive all the variables separately. It is never necessary to distinguish all the features of an object and, in fact, it would be impossible to do so. Perception is economical. (...)The theory of affordances rescues us from the philosophical muddle of assuming fixed classes of objects, each defined by its common features and then given a name (126).

Just like Latour’s use of the word “missing,” my use of the qualifying adjective *minor* is not an act of semantic or ontological reducibility of the technological devices – and other non-humans – but rather a recognition of both their potential actancy in human perception and their participation in the composition of the social (Latour 2005b). Therefore, one could say that the qualification of “minor” here applies more to the limits of classic theoretical consensus regarding the reductive representation of non-humans, usually called “objects,” that need to be made ontologically more respectable. Rather than a totally obscure object or a submissive tool, the artefacts should be considered as potential *factishes* – which should not be mistaken with fetishes – as Latour would say, because if its hybrid status of constituted and constituting entity which capacity is revealed by the exhibition. If the exhibition fulfils its defamiliarising role, then “we [the visitors] enter a world that we have never left, except in dreams – the dreams of reason – a world where arguments and actions are everywhere *facilitated, permitted, and afforded* by factishes” (Latour 1999a: 24, emphasis in the original).

But again, neither is the purpose here to unveil an authentic power, good or ill, hidden in something. It is enough for me to recognize its potential to participate and resist to the relations of power, and demonstrate what Matthew Fuller and Andrew Goffey call in *Evil Media* its grayness which “is a quality that is easily overlooked, and that is what gives it its great attraction, an unremarkableness that can be of inestimable value in background operations” (12). It is this ambivalent quality that is at the heart of the “minor” condition of a thing, an active mediator that is beautifully problematised in the works of Deleuze and Guattari, that present (desiring) machines not as the final result of a progressive techno-scientific humanist project, nor as essentially evil instruments of discipline, but as a complex network of (bio) political forces called “assemblage” (Deleuze, Guattari 1983, 1986).

Assemblage (*agencement*) is a concept that is recurrent in this thesis. It is the best way Deleuze has found – a term also used by Latour – to frame in words the powerful idea that “[r]elations are external to their terms” and that “[t]his exteriority or relations are in the middle, and exist as such. This exteriority of relations is not a principle, it is a vital protest against principles” (Deleuze, Parnet 55). Which principles? The same principles that are shared by the family man, shaken at the sight of Odradek; the same principles that, from Cartesian dualism and Kantian moralism to Heideggerian authenticity, have been haunting generations of philosophers in their way of thinking about aesthetics, politics and everyday life. Consequently, I agree with Deleuze that a “geography of relations is particularly important to the extent that philosophy, the history of philosophy, is encumbered with the problem of being, IS;” but I do not intend in this thesis to go as far as to claim that “[o]ne must go further: one must make the encounter with relations penetrate and corrupt everything, undermine being, make it topple over. Substitute the AND for IS” (ibid: 56-57).

Again, in order to avoid any misunderstanding, there is no question here of lowering the action capacity of humans, but only to recognize the complexity of the assemblages – mechanical or discursive – made by the delegation of actions to non-animated entities. The same delegation that has been often perceived in theory as a poor substitute or as a threat because of its resemblance to anthropocentric attributes like for instance “speech,” consciousness” or “intentionality.”

Consequently, my use of the concept of “minor grip” implies trying to find new formulations for new gestures, just like Kafka’s story is a good example of “minor literature [that] doesn't come from a minor language; it is rather that which a minority constructs within a major language” (Deleuze, Guattari 1986: 16). The intention here is not to go against a major language called “theory;” rather, my ambition limits itself to demonstrating that existence is made of the association of different actants – many of them non-humans – that participate in the affordance of this very existence. My argument is that IS is made *with* ANDs. What follows is an attempt to reactivate the discussion about the participation of a series of four technological devices in the fabric of society, and how they are represented in theory.

On the Constitution of the Thesis

In order to reactivate the discussion about the potential of technological devices to be understood as social actants, my strategy is to compose a conceptual tool box. Therefore, this section will map out how the cases studies and the theoretical perspectives I have borrowed from other theorists help me gradually to build up this theoretical toolbox, which

will hopefully be useful to the reader in understanding better the affordance of selected technological artefacts, and of many others, in the composition of everyday life.

More specifically, my method follows a preoccupation to explore theoretical concepts through cases studies of specific technological artefacts – the revolving door, the APT, barbed wire and the smartphone – in order to highlight their participatory potential in the composition of the political collectives we call *society*. The reflexive gesture in the thesis is grounded in the material experience of things. This sort of “performative” interaction could be considered by some as critical (auto-) ethnography. This might be particularly perceived in the case study of chapter three, on my experience as photographer and curator of a photographic exhibition on barbed wire. One can also find some traces of reflexive auto-ethnographic method in the second chapter, with the series of pictures I took of the ATP in the Broad Marsh Bus Station in Nottingham; and also in the fourth chapter, where I document my theorisation with pictures taken from the iPhone that I have started to use as part of my research on the thesis. However, despite this sense of immersion in the setting, and some traces of field work, I deny the label of “ethnography,” which is a field that has its own codes and basic methodological requisites that I do not apply here (O’Reilly 2012). I share with ethnographers an empirical interest in materials, which in my case is mostly based on observation and inductive reasoning to generate theoretical alternatives about where artefacts could be considered active participants in the constitution of the social (and social theory). It the same attention to the constitution of empirical facts that one can find in the works of Latour, who insists also on the primacy of immanent experience both against a philosophical tradition based on immutable transcendent idealist categories and the

primary empiricism of the positivists.⁵ He refers to this concern as “the second empiricism [that] doesn’t look at all like the first: its science, its politics, its esthetics, its morality are all different from the past. It is still real and objective, but it is livelier, more talkative, active, pluralistic, and more mediated than the other” (Latour 2005b: 115).

Therefore, I have tried to apply in the writing of this thesis what I have found attractive in Latour’s method: the generosity of an abundant conceptual toolbox, and the flexibility and openness of the suggestions that distinguish themselves from other sociological and philosophical approaches by their versatility towards its objects of study.⁶ As many students who have used a Latourian approach in their own work, this tendency to “indiscipline” also relieved me of my worries when I had to face the strange heterogeneity of my case studies (Flipo 133). Latour denies himself nothing, studying the most varied case studies that he encounters through his experiences and his desire: whether it be in the composition of books or the curation of exhibitions, the emphasis is primarily put on the diversity of the “modes of existence” and expression of the human and non-human actants that he studies. Although he sticks to some key structuring ideas, he does not have an overhanging conception of

⁵ Latour himself acknowledges the influence of ethnographers and ethnomethodology, which he defines as a movement that “take[s] seriously the innocuous assumption that people construct society. Social order, the ethnomethodologists argue is not a given, but the result of an ongoing practice through which, actors, in the course of their interaction, elaborate ad hoc rules to coordinate activities. The actors are helped of course by precedents, but those precedents are not in themselves sufficient to cause behavior, and they are translated, adjusted, reconfirmed, invented (in part) to make do in view of shifting and un unexpected circumstances. We collectively elaborate an emerging and historical event which was not planned by any participant and which is not explainable by what happened before the event or what happens elsewhere. All depends on the local and practical interactions in which we are presently engaging” (Latour 1994: 50). About this empiricist filiation between Latour, ANT and ethnographic methods, Grant Kien writes: “[ANT] not only allows some important ontological implications to be elaborated, but also moves from a modernist obsession with causality to a concern with effects reflected in the latest advances in ethnographic methods” (33).

⁶ Latour compares his own method in the introduction of *Reassembling the Social* to a travel guide: “[i]f earnest scholars do not find it dignifying to compare an introduction of a science to a travel guide, be they kindly reminded that ‘where to travel’ and ‘what is worth seeing there’ is nothing but a way of saying in plain English what is usually said under the pompous Greek name of ‘method’ or, even worse, ‘methodology’. The advantage of a travel book approach over a ‘discourse on method’ is that it cannot be confused with the territory on which it simply overlays. A guide can be put to use as well as forgotten, placed in a backpack, stained with grease and coffee, scribbled all over, its pages torn apart to light a fire under a barbecue. In brief, it offers suggestions rather than imposing itself on the reader” (2005b: 17).

sociology: if possible, the theory should not flatten the practice; they should instead meet. This is how I understand his work and I apply it here.

The structure of each of the four chapters is articulated into three or four sections. The first section usually offers a brief account of the evolution of a particular case study, and its representation in the works of modern and contemporary critical thinkers. The following sections open up the discussion to the possibility of an alternative narrative, a revision of the way technical devices are represented by (post-) modernist thinkers that usually offer a very harsh a priori moral judgment on technological things.

Usually, when philosophers and social theorists write about technology, they stick to the tradition of “the critical mind [which] is one that shows the *hands* of humans at work everywhere so as to slaughter the sanctity of religion, the belief in fetishes, the worship of transcendent, heaven-sent icons, the strength of ideologies” (Latour 2002c: 18, emphasis in original). Therefore, at the time of choosing the first case study to introduce this thesis, it made sense to choose a technological device that would lead to a discussion on both the morality and the (de-) manualisation of humans and non-humans.

In the first chapter, remembering Latour’s famous article in which he takes the example of the door-closer at La Villette “to challenge some of the assumptions sociologists often hold about the social context of machines” (2008: 153), I propose a Latourian reading of a similar technology that I use every day on the university campus: the revolving door. More specifically, in the first section, I discuss the moral potential of this specific technology by referring to the study of a group of MIT students who completed an investigation of the usage of revolving doors in order to find an effective way to change the behaviour of people in order to make their university campus a more eco-friendly place (Cullum et al. 2006).

This simple factual illustration of the revolving doors' participation in the improvement of the ecological behaviour on a university campus should suffice to demonstrate that morality needs more than simple humans' good will: it needs also the contribution of the "minor" participation of things.

However, I show in the second section that, as is often the case, an empirical evidence is usually not enough to convince critical thinkers who are used, since the 1950s, to describe technological devices mostly in terms of "commodity fetishes" at the service of capitalism (Honneth 18-19). More specifically, I offer a brief analysis of this iconoclastic perspective within the works of Theodor Adorno and Jean Baudrillard on technology. I claim that these two theorists are good examples of the radical technophobia in (post-) modern theory that suspects any technology of being an alienating obstacle to individual and collective emancipation.

The third section of the first chapter initiates a gesture that tries to find a path for critical theory, between a traditional humanism – still obsessed by the figure of an authentic and powerful mankind – and a more controversial (post-) humanistic discourse – tinted with a sort of messianic fascination for catastrophes – into a more open posture towards the different modes of the constitution of reality and existence. I highlight that adopting this posture demands a de facto reevaluation upstream of the position of humans regarding other forms of existence. It demands a "symmetrical attitude" that according to Latour "simply means not to impose a priori some spurious asymmetry among human intentional action and a material world of causal relations" (2005b: 76).

In the second chapter, I argue that because of the proliferation and automation of many devices, the classic representation of technology as an extension of the body is really put to

test. Especially when this proliferation of new forms of machines – still presented as instruments of control of humans over matter (and other humans) – inevitably implies a “regression of the hand” (Leroi-Gourhan 1993: 317). In the first section, I offer a genealogy of this crisis of representation in theory by using the example of Automated Public Toilets (APTs) to ground the discussion on modernity, hygiene and technology into an everyday life context. I highlight that the growing automation of devices, like APTs, triggers a lot of suspicion among theorists. Far from constituting an advantage, the growing “demanualisation,” to use Leroi-Gourhan’s terminology, of humans in favour of automated machines is therefore presented as source of an even bigger enslavement of individuals. In the case of APTs, it is the fear of a sanitary surveillance that worries many social theorists; a phenomenon that can be directly linked with what some (neo-) Foucauldian theorists call “technological paternalism” (Spiekermann, Pallas 10).

But despite some real cases of surveillance, the fear of APTs has its origins in the way they are perceived. I argue that the political and moral judgment is based on an aesthetic experience of the relation between themselves and the thing. Consequently, in the second section, I draw on the Latourian notion of the “black box” to highlight that the social (human) hand beyond technology is always present, but it is occulted, made invisible by design (Latour 1994, 1999). This discussion of the sensory experience of things leads inevitably to a reevaluation of the classic representation of relationships between technics and the body where the artefact is considered as an extension of the body. A representation of technologies that lacks what some theorists would call the recognition of their own “modes of existence” (Souriau 2009).

Talking about *existence* leads one inevitably to the question of technological agency or intentionality. Therefore, the last section of this chapter is dedicated to the on-going

passionate theoretical discussion about the possibility for non-human entities to have a form of existence. I draw on the work of Graham Harman, one of the leading figures of the current known as Object-Oriented Ontology, who tries to find some valuable insights in the works of Martin Heidegger on technology to help constitute what he and his colleagues call “Speculative Realism” (Harman 2010). I explain why I side with Latour in this debate by saying that despite his very interesting insights, Harman’s approach does not surpass the nostalgic notion of authenticity in Heideggerian philosophy. On the contrary, Harman pushes it even further and applies it to “objects” that he divides into two categories, creating consequently another dualism between sensual objects and “authentic” real objects (2010, 2011). I argue that the Heideggerian theory of object and technology – notably through his two notions of *present-at-hand* and *ready-to-hand* – is still too reductionist to do justice to the plasticity of the relation between humans and non-humans. With Heidegger, the relationship with the thing is always functional: either it is held in the mastering hand or it breaks, but it certainly does not gain any ontological dignity. This vision is not compatible with my concept of “minor grip,” which is more inclined to the “affordance” point of view developed by James Gibson, which offers a better option than the mystifying “intentionality” of phenomenologists to bypass the traditional dualism and to explain how technological agents can be constituents of the fabric of the social (Sanders 135).

Chapter three develops this argument further and draws more extensively on the “modern constitution” of a discourse that systematically presents technology as an instrument of oppression of human individuals and collective. Here I use barbed wire as a case study: a technological device that has often been represented as one of the most effective instrument of control and domination for the last 150 years. In the first section, I present a brief genealogy of barbed wire, from its invention in the Great Plains region of the United States

in the 1870s to its use current use in public and private spaces in modern cities. The aim is to understand how such a simple artefact has become, throughout its uses and representations, the iconic instrument of division of space and people for so many regimes throughout history. I particularly highlight the works of historians, like Oliver Razac (2003), that give a very good example by linking barbed wire with a regime of panopticism. Razac's Foucauldian analysis is a valid enterprise and it brings new perspectives for understanding the evolution of human histories and its turpitudes. There is no intention here to put in doubt the importance of Michel Foucault's works on governmentality and biopolitics in growing interest in technological devices and the emergence of new perspectives towards how lines of power under capitalism get into the most intimate spaces of subjects quotidian. However, it is also worth acknowledging that under the pen of some recent thinkers, this perspective tends to overemphasize the notion of the alienation of "sacred" body as the ultimate evidence of the absolute oppression of a capitalist system that has transformed modern cities into extensions of thanatopolitical space of concentration camps (Agamben 1998, 2000, 2009).

Linking barbed wire to panoptic surveillance is undoubtedly useful to understand the relations of power in extreme contexts of sovereign power – concentration camps, dictatorial regimes, protests and even the current fencing of European borders as an answer to the refugee crisis. In other words, from the historicist perspectives artefacts – in this case, barbed wire – are seen primarily as a means, a tool at the service of bigger linguistic or politico-economic structure, but denied any kind of potential agency. The technological devices are studied as source materials, as parts that will come to support or refute a theoretical and ideological narrative produced by (human) subjects for other subjects. As

Noortje Marres and Javier Lezaun point out, they do not have a participatory potential and are considered “sub-discursive” elements in the constitution of the social:

[i]n the neo-Foucauldian idiom, political subjects and spaces are configured through the deployment of objects, devices, environments and infrastructures, but this is a process that typically occurs informally and unobtrusively. Material elements operate in a ‘sub-discursive’ manner: their relevance to political processes remains unacknowledged or at least under-articulated in public discourse” (494).

What I highlight here is that this textualism does little to help us understand the ambivalent potential of materials: the preconceived narrative acts like a lead weight that reduces the artefacts to docile masses that “speak” only what is asked to be heard. The historicist perspectives do not explain the rich complexity of the interactions with the barbed wire in everyday life contexts, which needs a scale of gradations and cannot be so easily divided in a dual paradigm of in and out.

One could say that in the case of these historical accounts, the possibility of a positive potential of the barbed wire is occulted by the text. Therefore, in the second section, I use the photographic material taken from the exhibition *Barbed World: a Photographic Exhibition*, which I set up with two co-exhibitors at the University of Nottingham in March 2016, to offer an example of another narrative about barbed wire. The mediation of the series of pictures clears out the possibility of what Ian Bogost calls an “ontography” of barbed wire, since the “[l]ist of objects without explications can do the philosophical work of drawing our attention towards them with greater attentiveness” (45). I show the potential of such exhibition to demonstrate how barbed wire is such an effective agent. It is effective

not only thanks to its common “fabric” capacity to take part in the designed infrastructure and textual-symbolic dimension of political regimes, but also to its active constitutive role, which cannot be predicted by contemporary social theorists – who are usually obsessed by symbols and signs. Sometimes, things are so enmeshed in the lines of our everyday, being simultaneously “the most obvious and the best hidden” (Lefebvre 1987: 8).

In the third section, I discuss how the “constitution” of the photographic exhibition not only challenges the tradition of history books about barbed wire, but also allows to open the discussion about a larger ontological frame that goes beyond texts and narratives. I argue that the exhibition allows for an aesthetic experience that is better translated in terms of “carpentry” (Bogost 2012) or “textility” (Ingold 2000, 2015). The last section explores the political potential of this alternative way of considering the constitution that could be extended to a large – monistic – world vision close to Deleuze and Guattari’s “ecosophical” perspective that represents all entities, both humans and non-humans, as composed and composing “of an *expression machine* capable of disorganizing its own forms” (Deleuze, Guattari 1975: 28, original emphasis). Notions such as “assemblage,” “network” and “meshwork” leads one to believe that everything is first and most of all about relations. But at this point one is entitled to question what motivates this relation fabric? What are the forces that are forming and are deformed by what comes to be known by ANT theorists as “messy networks” (Bijker, Law 1992: 12)?

In order to answer this question, in the last chapter I choose the smartphone as a case study to claim that, like religious icons in the past, this technology plays an important role in stabilizing and destabilizing (bio) political forces. In the first two sections, I highlight that inscription theories’s approach might fall short when they are confronted by more complex ICTs. Next to ANT (Akrich 1992; Latour 1993, 2002b, 2005b; Law 2009), the theorists of

domestication have been one of the most influential branch of media studies that helped to make a convincing critique of the persistent idea of technological determinism. By studying how ICTs are inscribed in everyday life and delegating some role to the user, they helped to reveal the mechanisms of domestication, which is made of different forms of encounter with the object that is progressively inscribed in the quotidian to the point of being converted to become part of the user's identity (Silverstone, Haddon 1996; Haddon 2003, 2011). This approach is also useful to highlight the power of the user who through a series of decisions might challenge the original design of the device, clearing it out from any eventual alienating label that technological determinists would have assigned to it.

However, in the third section, I argue that despite its contribution to the study of non-human agents, domestication theory limits itself to a symbolic and textual approach at the risk of losing sight of the consequences of the neoliberal condition that transform the worker and the consumer into "human capital" (Lazzarato 91; Cooley 2004: 135; A. Ross 2013: 27). As a consequence, a theory of inscription that would be satisfied with only describing how things act and connect – as "scripted object" (Akrich 1992) – without looking at what great lines of forces motivate these assemblages would make it vulnerable to many criticisms.

This does not mean that these approaches are invalid, but I claim that both ANT and domestication theory are not political enough address a wider exploration of how some technological devices can be "issufied" with wider political and moral purpose (Marres 2014). I argue that these theories would need some philosophical allies to offer a more constructive and less hopeless account of ICTs than those that define the modern conditions of existence as terms of "catastrophe" and an "eclipse of politics" (Agamben 2009).

Therefore, in the two last sections, I suggest linking Latour *with* Spinoza (and Deleuze).⁷ I choose to use the Spinozian concepts of “multitude” and “imitation of affects” to demonstrate that complex ICTs like the smartphone are effective agents not only because they are “writing machines” (Ferraris 2014), but also, and primarily, affective assemblages or “desiring machines” (Deleuze, Guattari 1983) that interact with the regime of passions of individuals and collectives, with a potential reversibility. Those machines can participate in the creation of a social fabric that supports emancipation or on the contrary sadness, isolation and destruction. The importance here is to keep in mind this paradoxical ambivalence of machines, which is always related to determined conditions. In other words, before jumping too quickly to moralistic conclusions about the alienation of humans by machines, before holding the iconoclast hammer of criticism, it might be wise to rethink the mechanical constitution of human social existence.

I argue in the last section that complex technologies, like the smartphone, have a high potential to form new forms of socialization – and de facto deform already established networks. Exactly in the same way that Kafka presents the Odradek as a disruptive agent of the quietness of the bourgeois household, and its moral principles; in the same way that Deleuze and Guattari present Kafka’s “minor literature” as a narrative machine able to

⁷ I uphold that applying a Spino-Deleuzian (political) theory of affect helps to name the lines and forces that is composing and decomposing the networks that Latour, ANT and domestication theorists are referring to without falling into the moralist modernism that presents affects and desires as deficiency. As Spinoza would say: affects and desires cannot be quantified by a mathematical idealist method, but they can be canalised rationally in order to make them a qualitative positive contribution to the individual and collective *conatus* (the tendency, the striving of everything to be rather than not to be). Therefore, desire is not a secondary element that can be avoided, but the very productive phenomenon of social life: “[i]f desire produces, its product is real. If desire is productive, it can be productive only in the real world and can produce only reality. Desire is the set of passive syntheses that engineer partial objects, flows, and bodies, and that function as units of production. The real is the end product, the result of the passive syntheses of desire as autoproduction of the unconscious. Desire does not lack anything; it does not lack its object” (Deleuze, Guattari 1983: 26).

destabilise, to “deterritorialise” conventional academic Literature;⁸ one can see the smartphone as an assemblage that, by its sophisticated content and expression, is able to revolutionise the existing modes of communication and socialization. The smartphone can then be represented as an apparatus that affords, for good or ill, new lines of power in the long-established social, linguistic and ontological paradigms on which what Latour calls the “constitution of modernity” and its ossified avatars – like the myth of the *homo faber* – were built on.

But already, talking about affects, desires, passions and (political) multitudes urges the bricoleur that I am to explore more, to encounter more things and beings – artefacts, books, people... – to enrich his conceptual tool-box. My concept of “minor grip” can only be working in progress and demands already to be updated *with* other contributions and propositions in order to play its role in this thesis and beyond, as a discursive assemblage that tries to give a greater space to the missing masses of critical theory.

⁸ Referring to this concept of “minor literature,” Réda Bensmaïa writes in the introduction to *Kafka: Toward a Minor Literature*: “[b]y proposing the concept of ‘minor literature’ – a concept that opens so many new avenues of research in Europe and the United States – Deleuze and Guattari give the modern reader a means by which to enter into Kafka’s work without being weighted down by the old categories of genres, types, modes, and style (in the ‘linguistic’ sense of the term, as Barthes would say). (...) For Deleuze and Guattari, if Kafka still occupies the place granted him in the history of letters, it has little or nothing to do with the fact that he renewed its ‘themes’ or transformed its style. Instead, they see him as important because he figured out a mode of writing that allows us to account for the different ‘machines’ that condition our actual relation to the world, to the body, to desire, and to the economy of life and death” (14-16).

Chapter 1

On the Mechanical *Ritornello* of Morality

“Don’t Start From the Good Old Things but the Bad New Ones”

When it comes to the question of morality and technology we would do well to remember the enigmatic maxim that Walter Benjamin wrote down in his diary on the 25th August 1934, supposedly after a conversation with Bertolt Brecht on Kafka: “don't start from the good old things but the bad new ones” (1998: 121). It is still a good catchphrase to start a discussion about “not only merely the technique, but the kinds of perception and understanding that inform it” (Mitchell xi). Indeed, the sentence is not only about the fact that things change over time, but also about the necessary action of the critical thinker to express a moral judgement on the state of affairs. Like in Benjamin’s *Angelus Novus*, there is great sense of despair, but also a trace of humanistic hope in this critical injunction that orders us to continue the task of denouncing and unmasking the “bad new” things.

This task is nothing less than what Latour calls, in *We Have Never Been Modern*, call *critique* or *criticism* – the same “work of purification” initiated by Hobbes and Boyle in their “constitution of modernity,” and that continued with Immanuel Kant and beyond:

It is with Kantianism that our Constitution receives its truly canonical formulation. (...) This Kantian formulation is still visible today every time the human mind is credited with the capacity to impose forms arbitrarily on amorphous but real matter. To be sure, the Sun King around which objects

revolve will be overturned in favour of many other pretenders - society, epistemes, mental structures, cultural categories, intersubjectivity, language; but these palace revolutions will not alter the focal point, which I have called, for that reason, Subject/Society (56-57)

Latour explains that this was all fine until the moment this position became unsuitable to theorise the exponential proliferation of technology, and their progressive indispensability to fulfil our everyday life. This crisis of representation is very well illustrated by Brecht's maxim and Kafka's story that urge to an attention towards those "bad new things," those Odradeks that are filling our everyday life. Like Kafka's story, Brecht's maxim highlights that we cannot avoid the (social) action of the (bad) new things that are by their unavoidable presence asking for our attention.

Latour offers in his works a good variety of examples to illustrate this call for recognition: from the seat belt to the Berliner key, by way of the road bump and the gun. But it is his case study of the door-closer that I have found the most fascinating. In "Where are the missing masses, sociology of a few mundane artefacts application," the French sociologist uses a very effective strategy to "challenge some of the assumptions sociologists often hold about the social context of machines" (2008: 153). First he refers to the initial design of the door-closer, as a device that takes part in the constitution of the door: a simple but essential invention that permits people to enter and leave a building without destroying and rebuilding the walls every time. This reference to the door highlights the *social* and *moral* role it played in the history of humanity. The message is quite simple: without this "miracle technology" anything or anyone would enter or get out of the building. He then asks us to list down all the work people would have to do without a door and defines this transfer from

humans to the device “this transformation of a major effort into a minor one by the words *displacement* or *translation* or *delegation* or *shifting*” (ibid 154, emphasis in original).

Of course, this delegation can, and does go, the other way round: from the non-human (door-closer) to humans (users) by changing their behaviour:⁹

We have all experienced having a door with a powerful spring mechanism slam in our faces. (...) The interesting thing with such impolite doors is this: if they slam shut so violently, it means that you, the visitor, have to be very quick in passing through and that you should not be at someone else’s heels, otherwise your nose will get shorter and bloody. An unskilled nonhuman groom thus presupposes a skilled human user. It is always a trade-off. We have been able to delegate to nonhumans not only force as we have known it for centuries but also values, duties, and ethics. It is because of this morality that we, humans, behave so ethically, no matter how weak and wicked we feel we are. The sum of morality does not only remain stable but increases enormously with the population of nonhumans (ibid 157).

This is a very effective and simple way of demonstrating the moral role of non-humans. But Latour mostly highlights the prescription of “bad” behaviour. So, I decided to find a similar case study that would highlight the delegation of “good” behaviour from doors to humans, which would permit me to illustrate their mechanical contribution – their *minor grip* – to

⁹ Bruno Latour after Madeleine Akrich calls the delegation from humans to non-humans (machines) *inscription*; and from non-humans to humans *prescription*: “[d]esigners thus define actors with specific tastes, competences, motives, aspirations, political prejudices, and the rest, and they assume that morality, technology, science, and economy will evolve in particular ways. A large part of the work of innovators is that of ‘inscribing’ this vision of (or precision about) the work in the technical content of the new object. I will call the end product of this work a ‘script’ or ‘scenario.’ The technical realization of the innovator’s beliefs about the relationships between an object and its surrounding actors is thus an attempt to predetermine the settings that users are asked to imagine for a particular piece of technology and the pre-inscriptions (notices, contracts, advices, etc.) that accompany it” (1992: 208).

the constitution of what is considered usually as a moral action. In short, I wanted to find a simple example of a “good new” thing.

I did not have to search very long before coming across the study of a group of MIT students who completed an investigation of the usage of revolving doors on its university campus (Cullum et al. 2006). The intention of this group of young scientists was to find an effective way to change the behaviour of people who tend to ignore the signs asking them to use the revolving doors. In the introduction, they remind the reader that revolving doors were originally designed by Theophilus Van Kannel – who was awarded the patent for a “Storm-Door Structure” in 1881 – to be:

[N]oiseless, with “numerous advantages over a hinged-door structure” because it prevented the “entrance of wind, snow, rain, or dust.” Further, since a revolving door moved only in one direction, streams of people could pass through a building with “reduced possibility of collision” (qtd. in Cullum et al. 2006: 3).

They asserted that today the initial purpose has not changed much, except that most modern revolving doors have four transparent doors instead of the original three radiation wings design, and are surrounded by curved walls. According to them, this disposition “ideally prevents wind from going into the building through the door, thereby helping to minimize the energy needed to heat and cool the building” (ibid: 4). They then organised a survey to find out why people do not use them. They found out that sixty-four percent of the students prefer to use swing doors over revolving doors on campus: the main reasons for not using the revolving doors were that they are stressful or dangerous, or the swing doors are easier to use, or quicker to open. The survey also showed that a majority of students was open to

changing their habits. The research group then outlined three different approaches to favour the use of revolving doors. The first approach intended to change the physical features of the building entrances – these architectural/physical changes went from the “automation of revolving doors” to the “increase the force required to open swing doors” (ibid: 7). The second approach focused on “the education of door users about the consequences of their decisions” (ibid:8). By position a revolving doorman that incited users to use the revolving door, establish a pledge driver or even distribute flyers; they wanted to raise awareness among the students. The third and final measure concerned the promotion of “the use of revolving doors through signage” (ibid.). They finally opted for the last option, which seemed the less drastic and expensive one, and decide to use a different strategy that the already existing use of signs on the campus, which turns out to be ineffective. Their new “Marketing Approach” – this is what they called it – used a method of persuasion that could include installation of larger signs, the replacement of old ones with new signage or the adjustment of the message on them (ibid: 9). Using catchphrases, new graphics and branding techniques, they tried to improve the signage design they create two signs.

After placing the first sign next to the majority of doors, and the second one in certain places, they have carried out two studies to evaluate the effectiveness of their approach. The first involved monitoring revolving door use at ten different entrances across the MIT campus. The second one concentrated on the implementation of the signs associated with their “Marketing Approach” on the two entrances of a specific building.¹⁰ The signs placed in three different locations at both entrances, where the study monitored only users that

¹⁰ They wrote: “E25 (Whitaker College) was selected as the site on which to conduct the experiments. The building was chosen due to its high level of pedestrian traffic on weekdays, which occurs due to its proximity to the Kendall/MIT MBTA station, and due to the route it provides into the inner MIT campus, particularly its access to the Infinite Corridor” (Cullum et al. 2006: 11-12).

entered the building using the revolving door on consecutive days, “with a different signage size used on each day. Signs were made progressively more obvious each day” (ibid: 12).

The result of both studies – extracted from forty-seven combined hours of observations – showed that the student habits of using doors were not fixed, and the project indicated effective changes in the user habits to favour revolving door use, and they continued to use it even after the signage was removed. How? Here is the interesting part of the story. They examined the effect of the message on revolving door use, and admitted that the message on the signs did not change behaviour. It was, rather, the size and the distance between the sign and the people that mattered:

The results of the signage study suggest that engaging people at the level of habit is important for modifying door use behavior. Signage is effective only if it is large enough for users to notice at a distance. The longer that distance, the more effective it is. (...)Telling users this is a choice that helps save energy / the environment makes the door selection seem burdensome - and few actively choose it. Large signage with a simple message, such as “Go through the revolving door!” guides users towards the door without making the user wonder why. One door user noted he found himself walking towards the revolving door when there was simply an arrow on the swing door pointing to the revolver, even though the sign was unrelated to revolving door use (ibid:18).

So the form matters as much than the content, materials matter as much as words, to make people use the revolving doors. This is not all. Apart from size and distance, a number of recommendations were raised to minimise heat loss: among them, door maintenance,

placing the doors in moderate rather than high traffic areas, and even hiding or locking the swing doors for entrance. After estimating the energy consumption and emission, in which they took into account the weather,¹¹ they realised that “the door use study has the ability to contribute to the ongoing efforts to create an increasingly sustainable environment” (ibid: 25). These steps encompassed the publishing of the findings, transferring the information to student organizations dedicated to sustainable development, getting the MIT Administration and Faculties to be involved in implementing signage on campus. In their conclusion, they came back to their initial aim which was “to understand how habits could be modified into ‘green habits’” (ibid: 27). They once again highlighted the importance of the association of large signs with the use of revolving doors instead of swing doors to save energy, which proves that “habits are reinforced by design” (ibid). This “design” is made of the association of all the human and non-human actors involved in the project.

One could say that this case study shows in an effective way how revolving doors participate in rendering their campus a greener space, in delegating, affording or inscribing more ecological behaviours in the users. It also highlights the participation of an association of different actants that work together. Consequently, the constitution of this moral situation is not only due to one entity, the revolving door, but in the simultaneous action – the *minor grip* – of different non-human actants: the door users, the signs, the message on the sign, the weather, etc. This is certainly a project that fits perfectly into what Latour and his followers call “a sociology of associations” which propose a new sociological perspective that does not believe in a fixed, absolute “social ‘context’ in which non-social activities take place” (Latour 2005b:3-4). In fact, the project could be compared, on a smaller scale, to the

¹¹ They wrote: “the winter time provides the best window of opportunity for implementing habit-enforcing schemes, such as signage posting, with the quickest payback time” (Cullum et al. 2006: 24).

pioneering project of Michel Callon on the reintegration of young scallops in the St Brieuc Bay. Callon, one of the founding fathers of the actor network approach, writes that the project was successful because the researchers did not fall into sociological reductionism: “[f]or once [the sociologists involved in the operation] have taken the scientific and technical aspects of the controversies into account, the sociologists faithfully restore the existing points of view to their places and, in addition, they rightly abstain from taking sides. They acknowledge the existence of a plurality of descriptions of Nature without establishing any priorities or hierarchies between these descriptions” (1986: 197). The project of these students shows a performative view of social phenomenon as a collective constructed through the action, through the association of heterogeneous actants. Said differently, this case study illustrates the “enlistment of seemingly benign and mundane material objects for political maintenance” (Kien 32).

The story could stop here, and we could say that the door-closer is a “good” new thing. But as Latour very wisely highlights in his essay, it also raises the issue of the position of the human who has de facto delegated her effort to the machine, and who is therefore less needed or not needed anymore. Humans are deskilled, and we are back to Kant’s criticism and Brecht’s category of “bad new” things. This is indeed a complex question. I will come back to the question of the demanualisation of humans and the myth of *homo faber* in the next chapter, but for now I would like to focus more on what makes most sociologists, in the manner of Brecht, think that new things, especially those that seem to imitate humans, are mostly “bad.” Why does technology still have such a bad reputation in theory?

Anthropomorphic Monstrosities and Technophobia in Critical Theory

Latour's answer is simple: this ready-made judgement about non-humans among modern theorists is mainly due to their hybrid form, their *anthropomorphism*, "which is for them a sin akin to zoophily but much worse" (2008: 160). It seems the problem for many theorists is less the (empirical) way humans interact with technology, but rather the (ideal) representation they give of them: as an instrument for a higher (capitalist) ideology. As I show through the following chapters, this idea has been the theoretical ground for the most ferocious critics of technologies and their belief in technological determinism (Nye 28).

There is a large scholarship based on this technophobia in modern philosophy and social sciences. Given the limited space allotted in this chapter, the purpose is not here to provide the reader with an extensive review of this literature, but a rather good idea of the theoretical foundation of technophobia in critical theory via a close reading of a small selection among the works of Theodor Adorno and Jean Baudrillard. These authors represent respectively two major moments in the genealogy of technophobia in the tradition of (post-) modernist theory where the technology is presented as an entity that "acts either as a kind of explanatory *deus ex machina* (technological determinism). Or is treated as an expression of social relations (social reductionism)" (Law 1991: 8).

Since we are dealing with doors and morality in this chapter, I have decided to start with the text "Do not knock" where Adorno states loud and clear that:

Technology is making gestures precise and brutal, and with them men. It expels from movements all hesitation, deliberation, civility. It subjected them to the implacable, as it were ahistorical demands of objects (1974:40).

Like many other aphorisms in *Minima Moralia*, this text enfolds the philosopher's larger question on the project of Enlightenment and its modern consequences, especially the American culture industry. This was the nucleus of his passionate debates with Walter Benjamin on the decline of aesthetics and art in modernity. Whereas Benjamin still believes in a chance for redemption and still hopes to find something hidden in the debris in a moment of metaphysical illumination, of immediate perception (2009); it seems that, for Adorno, any attempt to recover the damage of something called experience is fated to failure. Unlike Benjamin, Adorno clearly doubts the emancipatory potential of mass culture media: he asserts that Benjamin overestimates the emancipatory potential of cinematic distraction – and *lato sensu*, the potential of any technical reproduction of art – which can more likely lead to a decline and pauperization of communicable experience. He writes in a letter to Benjamin:

The laughter of cinema audience – I have discussed with Max [Horkheimer] and he has probably related this to you already – is anything but salutary and revolutionary; it is full of those worst bourgeois sadism instead. (...) [A]nd in spite of its startling seductiveness, I cannot find your theory of 'distraction' at all convincing – if only for the simple reason that in a communist society, work would be organized in such a way that human beings would no longer be so exhausted or so stupefied as to require such distraction (1999: 130).

In Adorno's view, the realisation of Western reason was not fulfilled in humankind's emancipation, but engendered domination over humans and nature, through a renewal of ancient myths into new ones. Instead of the promised freedom, it has brought the "barbarity" of the culture industry into the everyday. Adorno offers here a thought model to understand the "damaged life" condition he experienced as a European scholar in exile in the United

States. He is now a free man, but at a high cost. And then, he fires a Parthian shot at technology, presented as the instrument of domination that tames the free individual, who becomes a victim of a system that imposes violent behaviour via mechanical mediators:

Thus the ability is lost, for example, to close a door quietly and discreetly, yet firmly. Those of cars and refrigerators have to be slammed, other have the tendency to snap shut by themselves, imposing on those entering the bad manners of not looking behind them, not shielding the interior of the house which receives them (1974: 40).

Anyone familiar with the work of Adorno will know where this is going. The mechanical mediation is not only the work of a culture industry, but might even foretell something far worse:

And which driver is not tempted, merely by the power of his engine, to wipe out the vermin of the street, pedestrians, children and cyclists? The movements machines demand of their users already have the violent, hard-hitting, unrelenting jerkiness of Fascist maltreatment (ibid: 40).

The correlation between our modern inabilities to close a door accordingly, driving fast and Fascism, might look excessive to contemporary readers. But again, one has to put it back into the historical context. The question for Adorno, in the wake of the Second World War, is to collect the pieces that would help him to still believe in culture and humanistic values, which were helpless to resist the Nazi barbarism. In another text, he predicts that American liberalism is capable of similar atrocities: “the invention of the atomic bomb, which can obliterate hundreds of thousands of people literally in one blow, belongs to the same historical context as the genocide” (1998: 192). He draws an analogy between the powerful

American (war and culture) industry and the physical brutality and hypnotic fascination for the fascist regimes. This parasitizing of the individual energy and concentration by the objects is the main cause of the crisis of modernity. He closes “Do not knock” by writing:

Not least to blame for the withering of experience is the fact that things, under the law of pure functionality, assume a form that limits contact with them to mere operation, and tolerates no surplus, either the freedom of conduct or in autonomy of things, which would survive as the core of experience, because it is not consumed by the moment of action (1974: 40).

It seems that things are deviated from their initial programmed purpose of serving humans to be free, to become the tools of pure functionality, imposing alienating and barbaric rhythms to the human embodied consciousness.

This short passage is in my opinion of one of the best textual archives of what “technophobia” means for modernist thinkers like Adorno, who draws his understanding of technology mainly from his reading of Karl Marx and Georg Lukács, and in particular their concept *reification*.¹² This concept, also called *commodity fetishism*, retakes a central stage in the sociological discussion where it is used to signify “a type of human behaviour that

¹² The main idea of the concept of reification, which was famously reused by Georg Lukács in *History and Class Consciousness* (1932), is that under capitalism, illusions prevent this march towards the realisation of a totality, towards emancipation. Capitalistic industry has turned labour into a commodity, and later the culture industry completed this alienating process by invading all the aspects of everyday life. As a result, the authentic intersubjective relations are parasitized by artefacts. From that perspective, *reification* defines, as Lukács writes, the fact that “that a relation between people has taken on the character of a thing” (in Honneth 2007: 21). The concept finds a direct filiation to another Marxian critical concept designated as the phenomenon of *commodity fetishism* that cuts the workers from their production. This is exactly the ontological problem Adorno sees with the emergence of the post-World War II Capitalism: a distortion in modern social practices that explain the failure of the proletariat to reach material spiritual emancipation in the massive expansion of commodity exchange. Eventually, reification of the society exceeds the mere economic context, to invade all the domains of social life, to become a habit, a “second nature” for the individual, an “organic part of his personality” (Lukács, in Honneth 1997: 27). On this notion of “second nature” and a more exhaustive explanation of the notion of reification in Lukács’s work, see Honneth 2007: 21-28.

violates moral or ethical principles by not treating other subjects in accordance with their characteristics as human beings, but instead as numb and lifeless objects – as ‘things’ or ‘commodities’” (Honneth 19). Against this “thingification” of the human body, Lukács as an orthodox Marxist, encourages political engagement through the reaffirmation of the revolutionary consciousness of the proletariat class; whereas Adorno, inspired by Marx’s early writing, is much more interested to develop the image of the “artist as a worker” and “the role of music as social progress” (Buck-Morss 1977: 28-42). Consequently, he proclaims that the only way to avoid the reification of the subject, the contamination and determination by things, is to keep the latter “under the law of pure functionality” (1974:40). Avoiding reification can only be achieved at the high price of keeping technologies at a distance from human interactions – the fewer, the better. It is by avoiding those wicked devices that humanity can get back to a project of emancipation, cleared of the “instrumental reason” imposed by the cultural industry of capitalism (Adorno, Horkheimer 1997). To a certain extent, one can say that Adorno’s writings are full of Kantian idealism that wants things to be reduced to their functional purpose, and urges the human individual to get back to her inner voice, to the natural temptations and “to take shelter from the world and to observe nature as a spectacle” (Latour, Hache 317). Technology would then be an epiphenomenon at the service of the representational process of the human mind. But, in spite of his affinities with Horkheimer, Adorno still believes in philosophy and its capacity to explain and recover from the cultural crisis. He evaluates the decay of the bourgeois economic and cultural crisis, which has carried away the hope that reason could always have the upper hand over barbarism, and pushes the destruction of the idealist philosophy in order to find a new logic in the dialectical process.

As Susan Buck-Morss writes: “[Adorno] made negativity the hallmark of his dialectical thought precisely because he believed Hegel had been wrong: reason and reality did not coincide” (1977: 63). With his “logic of disintegration,” he evaluates the decay of the bourgeois economic and cultural crisis, which has carried away the hope that reason could always have the upper hand over barbarism; whereas Horkheimer is convinced of the death of bourgeois philosophy, and turns definitively to social sciences to reduce the gap between theory and society, between the intellectuals and the condition of the proletariat.¹³ Consequently, considering Adorno as a conservative Kantian would not do justice to him, who spares no effort to save what remains of the ruins of the Enlightenment project of emancipation after Auschwitz; even if this means to refer to a “negative dialectic” that does not offer any synthesis:

What we may call the thing itself is not positively and immediately at hand. He who wants to know it must think more, not less, than the point of reference of the synthesis of diversity, which is the same, at bottom, as not to think at all. And yet the thing itself is by no means a thought product. It is non-identity through identity (1990: 189).

There is also a feeling that the effort to know that, from now on, the road towards emancipation demands more than a dialectical effort of the mind: it becomes a force *per se* in the form of a non-identity. This is one of the early traces of the movement in theory from a modernist way of thinking towards what Latour calls “[t]he pre-postmoderns [who], for

¹³ On this matter, Buck-Morss states: “Horkheimer believed as firmly as Adorno that bourgeois philosophy was in a state of decay, but he seems to have concluded that if metaphysics was no longer possible, then the philosopher had to look to the aid of the social sciences in order to find truth. Although those sciences, in turn, needed a critical, speculative awareness, philosophy as a separate discipline was eliminated – liquidated from without as it were. For Horkheimer, the problem of ‘the object’ tended to dissolve into (Marxian) sociology, the problem of ‘the subject’ into (Freudian) psychology and Critical Theory attempted to explain their interrelationship” (1977: 66).

their part, truly believe that speaking subjects are incommensurable with natural objects and with technological efficacy, or that speaking subjects ought to become so if they are not incommensurable enough already” (1993: 59). It is worth noticing that if Latour keeps modernist thinkers in high esteem, he has a very poor opinion about the next generation of thinkers:

With the postmoderns, the abandonment of the modern project is consummated. I have not found words ugly enough to designate this intellectual movement – or rather, this intellectual immobility through which humans and nonhumans are left to drift. I call it “hyper-incommensurability.” (...) “You have nothing to expect from us,” Baudrillard and Lyotard delight in saying. No; indeed. But it is no more in their power to end history than it is not to be naive. They are simply stuck in the impasse of all avant-gardes that have no more troops behind them. Let them sleep till the end of the millennium, as Baudrillard advocates, and let us move on to other things. Or rather, let us retrace our steps. Let us stop moving on (ibid: 61-62).

Latour thinks that there is nothing to be expected from the post-moderns, but I believe that reading them can help us understand better the crisis of representation of technology in theory. Despite what Latour might say about him, I think that Baudrillard’s early writings are a valuable contribution for anyone who investigates the relationship between technology and culture in contemporary everyday life. His later writings will radicalize into more pessimistic and controversial perspectives, which will raise a lot of criticism against the limitations and the provocative aspects of his work.¹⁴ Indeed, I assert that what Latour refers

¹⁴ On this subject, Mark Gottdiner sees a clear shift between his early writings and the later ones: “I find a critical disjuncture between the early effort to study the relationship between semiotics and the commodification of

to as “hyper-incommensurability” can explain the lack of interest among theorist for things, and their sudden feeling of surprise and anxiety when they realise that they are surrounded by them.

Like Adorno, Baudrillard considers technology a key component in changing daily life; but tries to complete what would be a Marxian analysis of the role of technology with a semiological theory. But whereas Adorno still believes in the salvation potential of an aesthetic experience, for the French sociologist, the fascination for the simulacrum of the “object-signs,” which circulates endlessly, is the signal of the inevitable decline of Western civilization.¹⁵ If with the thinkers of the generation of Adorno, one can talk about technophobia and suspicion towards devices, with Baudrillard and the post-moderns there is nothing more to be done than observing and acknowledging from the ivory tower of theory that we are doomed.

This shift covers of course at least twenty years, but a few passages from Jean Baudrillard’s *The System of Objects* can help us to illustrate its progression from modernist technophobia towards post-modernist technophobia. It is one of his early books where he offers a study of the role of objects and technology in structuring the consumer society of late 1960s France. Through the chapters, he describes a transformation of quotidian technologies progressively going from a phase of mere functionality towards a powerful technical system that can take control of the unconscious. With the new accelerated production techniques and consumer capitalism, Baudrillard argues that modern theories, like for instance Marxist

everyday life, and the latter effort which abandons that project and replaces it with an impressionistic, idealized, and jargon-laden discourse that has come to be known as ‘postmodern’ cultural criticism.” (1994: 25).

¹⁵ As Mark Gottdiener suggests, “Baudrillard is less concerned with power of ideology to control everyday life, and more interested in the general effect of cultural change under the sign of modernity (later postmodernity) which he sees as an inexorable and pervasive shift to the commodification of all cultural objects” (1994: 29).

economic reductionism, are obsolete to grasp the organisation of mass culture; therefore, we must consider replacing old modes of thinking by new perspectives, based on semiological theories: the transition from the material to the sign is necessary to understand contemporary society.

In the first part of *The System of Objects*, he focuses on the commodification that affects the household interior, comparing traditional objects with modern “functional objects.” Through the example of the household, Baudrillard suggests that the commodification of daily life, has reached its paroxysm in modernity (and later amplified in postmodernity), where everything collapses into sign values. For him, the house has become a battleground between tradition and modernity; where the modern objects are winning the battle against the traditional ones, because they give us more freedom. Yet it is only a partial liberation from the sentimentality of tradition, since it implies “liberation from the function of the object only, not from the object itself” (1996: 18).

Baudrillard announces, in another passage that, in the new situation of high technology and mass consumption, technological objects have not only penetrated the space of our everyday life but also have taken control of an even more intimate space: the body. While traditional objects were shaped by the gesture and the effort of man – alias *homo faber* - modern objects become progressively more autonomous and expose the obsolescence of the human hand:

The uselessness of habitual gestures and the breakdown of everyday routines founded on movements of the body have a profound psychological impact. Indeed, a genuine revolution has taken place on the everyday plane: objects have now become more complex than human behaviour relative to them. Objects are more and more highly differentiated – our gestures less and less so (ibid: 56).

In these passages of *The System of Objects* on gesture, Baudrillard exposes in a nutshell his conception of the role of technology in the second half of the 20th century. This would be so influential to his later investigation on cyberspace and media, where he states in an extremely provocative tone that the narratives of emancipation, whatever their philosophical or political backgrounds, are totally pointless in post-industrial consumer society. In the essay “The evil Demon of Images,” for instance, he illustrates his theory of cinema and television as the “sites of the disappearance of meaning and representation, sites in which we are caught quite apart from any judgment of reality, thus sites of fatal strategy of denegation of the real and of the reality principle” (2000: 450). In the same text, another good example is what he writes about a television series called *Holocaust*:

The Jews are recycled not through the crematory ovens or the gas chambers but through the sound track and images, through the cathode tube and the micro-chip. Forgetting, annihilation thereby achieves at last an aesthetic dimension – nostalgia gives them their final finish. Henceforth, ‘everyone knows’, everyone has trembled before the extermination – a sure sign that ‘it’ will never happen again. But in effect what is this exorcised so cheaply, at the cost of few tears, will never recur because it is presently happening in the very form through which it is denounced, through the very medium of this supposed exorcism: television. The same process of forgetting, of liquidation, of extermination, the same annihilation of memories and of history, the same inverse, implosive radiation, the same absorption without trace, the same black hole as Auschwitz (2000: 448).

This is the Baudrillard known to most contemporary critical theorists. But the most engaging part in *The System of Objects* is certainly the middle section, where Baudrillard

writes about automatism, “robots and gadgets.” He argues there that automatism becomes not only a necessity for the consumer – due to the grand narratives of Enlightenment, which represents itself as a mark of progression – but also a danger:

Automatism is simply personalization dreamt in terms of the object. It is the most finished, the most sublime form of the inessential - of that marginal differentiation which subtends man's personalized relationship to his objects. Automatism per se is simply a technical deviation, but it opens the door to a whole world of functional delusion, to the entire range of manufactured objects in which a role is played by irrational complexity, obsessive detail, eccentric technicity or gratuitous formalism. In this poly-, para-, hyper- and meta-functional sphere, the object, at its farthest remove from objective determinants, is completely taken over by the imaginary. We have seen that automatism always embodies an irrational projection of consciousness; in this ‘schizofunctional’ world, however, nothing leaves a trace except obsessions pure and simple (1996: 112-113).

Baudrillard underlines that the automatized system of objects is so powerful that human input is not needed anymore; he or she becomes obsolete, bodily and mentally. This condition might lead to serious consequences for individual emancipation and development if this automation of the objects spread to the whole social context. Furthermore, Baudrillard explains that in the modern age, objects have become so complex, due to automatism and the increasing need of consuming them, that they have lost their real function to become useful in an abstract sense, in their “hyper-” and “meta- functionality”. He uses the term “gizmo” (*machin*) to illustrate the intermediate stage that leads to the automatized device that proliferates and that is dangerous for both human and traditional objects:

A gizmo does have an operational value, but whereas the function of a machine is explicit in its name, a gizmo, in the context of the functional paradigm, is always an indeterminate term with, in addition, the pejorative connotation of “the thing without a “name” or “the thing I cannot name” (*there is something immoral about an object whose exact purpose one does not know*)” (ibid: 114, my emphasis).

This is more than enough to understand what we are dealing with. Once men have crossed the Rubicon of technological automation, they have created something that cannot be tamed anymore: all the power of production and transformation is passing progressively from humans to metafunctional robots, via gizmos. The linear evolution of technology in this book makes it still very modernist, but the figure of the gizmo and the fear of automation are already pre-postmodern elements. Baudrillard is trying to find an innovative way to think about this transformation of technology. With concepts such as the “gizmo,” he is trying to find a new lexical field to talk about *things* and their progressive autonomy, but at the same time he cannot get rid of the modernist mould. The tension in this last passage is very similar to the tension one can find in Kafka’s story. Like the family man, the theorist is worried about the thing, because it does not have a name. After the a priori assertion that “there is something immoral about an object whose exact purpose one does not know” (ibid), the modern theorist seems to have no other option than to follow the path of Kant, by continuing the work of purification between subjects and objects, but at a good distance from the sound and fury of automated machines and gizmos, “because only in such stillness can we hear within us the voice of morality — a voice that bears no relation to the voice of nature” (Latour, Hache 317).

This position allows room only for an epistemological or linguistic perspective that reduces non-humans agents to negative categories.¹⁶ This would not be a problem if this quest for new lexical fields was not producing only negative neologisms for those unclassified things, if the post-modern imaginary about technology was not so similar to the anthropocentrism of modernist philosophers. Their depreciation of technology is symptomatic of the way they still picture humanity as an exception that is way above all the other beings and things. It is always about monsters, diseases and catastrophes: “[t]here is a cancer of the object: the proliferation of astructural elements that underpins the object’s triumphalism is a kind of cancer” (Baudrillard 1996: 124).

I will show in the next chapters, that this pattern of the “cancer of the object,” inherit from Heidegger, crosses two generations of philosophers, all the way from Baudrillard and Foucault to Agamben. But for now, I would like to come back to an alternative way of understanding morality.

Towards a co-Constitutive Theory of Morality

A strategy is to play the game of the (post-) modernists and talk about the problem where they *see* it. Therefore, let’s follow Brecht’s advice and start with the bad new things rather than the good old ones. But rather than focusing on a substantive *thing*, the twist here is to focus on the adjective *bad*. It seems obvious that from the texts we have read it is

¹⁶ A figure that is comparable to Frankenstein or the Golem, to use a figure dear to Kafka. I am referring here to the famous mythical creature in the Jewish tradition. It is said that Rabbi Judah Loew, a historical figure who lived in the 16th century Prague, created after God’s instructions this humanoid figure to protect the Jews of the ghetto from the pogroms. Eventually, the rabbi has to destroy it because it becomes too destructive or no longer necessary, and bury it in the attic of his synagogue. For a more extensive insight on the story of the Golem, see Baer 2012: 17-37. For introduction of Kafka’s interest in the figure of the Golem, see Bruce 2007: 106-107.

anthropomorphism and the automation of some new artefacts that are worrying for critical thinkers.

In order to address this problem, within this strategy, some thinkers choose to treat directly the literary form: to extract or replace the annoying bad part by something new. A good example can be found in Axel Honneth's *Reification: A new Look at an Old Idea* (2007) where the author proposes a "new look" at old ideas – like "reification" – and updates them or replace them by new conceptual tools – like "recognition" – that would be more appropriate to analyse the contemporary intersubjectivity. It is then possible "to justify the hypothesis that a recognitional stance enjoys a genetic and categorical priority over all other attitudes towards the self and the world" (36). This is an interesting tactic: updating and replacing some of the old conceptual tools in Grandpa Marx's toolkit. It might fit better the object of study, but again it does not "care" about it. I would say that in its effort to make the individual more collective, this tactical move goes too fast from one concept to another and does not give voice to the things, which remain the "missing masses" in theory.

Another tactical option is to slow the pace. This alternative, inspired by the anthropologists and ethnographers, demands that we develop a holistic approach to the experience of things: to observe them and touch them at the same time that we deal with conceptual tools. It requires taking some time to understand that what social scientists usually call "society" is not an ossified reference outside the human subject, or even a collective of humans. Consequently, social theorists, like those of Actor-Network Theory, who have chosen this alternative tactic apply themselves to reintegrate those "missing masses" back into theory, through what they call "material semiotics" (Law 2009: 142). This transfer from matter to text – and vice versa – is also called *translation*, a notion borrowed from Michel Serres (Latour 2010: 26). The aim of this transfer is to overcome both "[t]he myth of the Neutral

Tool under complete human control and the myth of the Autonomous Destiny that no human can master” (Latour 1994: 32). But to avoid any misunderstanding, Latour immediately adds that:

Translation does not mean a shift from one vocabulary to another, from one French word to one English word, for instance, as if the two languages existed independently. Like Michel Serres, I use *translation* to mean displacement, drift, invention, mediation, the creation of a link that did not exist before and that to some degree modifies two elements or agents (ibid)

This leads him to say that the classical understanding of morality is a misleading theoretical fabrication that leads one to think that it is a characteristic that is held by entities. Contra the dualist illusions, Latour and his colleagues assert that: [t]o conceive humanity and technology as polar is to wish away humanity: we are sociotechnical animals, and each human interaction is sociotechnical” (Latour 1994: 64). Therefore, when he has to address the modernist’s worry about automated and anthropomorphic machines, he gives them tit for tat and says in his essay about the door closer, that this sort of technology is “already anthropomorphic through and through” for three reasons: first, it has been made by humans; second, it substitutes for the actions of people and is a delegate that permanently occupies the position of a human; and third, it shapes human action by prescribing back what sort of people should pass through the door” (2008: 160). This suspicion around anthropomorphism arises not because of the machines per se, but because of the rifted position in Cartesian dualist ontology. Latourian sociology gets on with unbolting these

opposed categories of object and subject in favour of what he calls, after Michel Serres, “hybrids” or “quasi-objects”:¹⁷

Quasi-objects are much more social, much more fabricated, much more collective than the “hard” parts of nature, but they are in no way the arbitrary receptacles of a full-fledged society. On the other hand they are much more real, nonhuman and objective than those shapeless screens on which society - for unknown reasons - needed to be “projected.” By trying the impossible task of providing social explanations for hard scientific facts - after generations of social scientists had tried either to denounce “soft” facts or to use hard sciences uncritically – science studies have forced everyone to rethink anew the role of objects in the construction of collectives, thus challenging philosophy (1993: 55).

Therefore, what is interesting to notice is that according to this alternative ontology, an important political notion such as morality does not only find its significance in language and text, but is materialised in a myriad of ways. One can then say that morality is the result of the combination of forms, including hybrids that cannot not be immediately translated in to language. This is certainly why their method has been considered by many qualitative researchers, and myself, as a preferable theoretical *ally* for the study of material culture, because as Grant Kien says: “ANT provides a practical way to study this process, providing a theoretical structure that can account for the relationship of material and culture” (43).

¹⁷ Latour’s definition is very similar to Serres’s: “a quasi object, which traces or makes visible the relations that constitute the group through which it passes, like the token in a children’s game. A quasi object that nonetheless remains a useful technical object, even a high-tech one, directed toward the physical world. It often happens that the most sophisticated tools play their main role socially but without losing their objective purpose” (Serres, Latour 161). See also Serres 1982: 55.

From this perspective, writing about artefacts becomes a militant act for the recognition of those material allies that Latour calls the missing masses of theory or the “lieutenants of our societies”:

If, in our societies, there are thousands of such lieutenants to which we have delegated competences, it means that what defines our social relations is, for the most part, prescribed back to us by non-humans. Knowledge, morality, craft, force, sociability are not properties of humans but of humans accompanied by their retinue of delegated characters. (...) One of the tasks of sociology is to do for the masses of nonhumans that make up our modern societies what it did so well for the masses of ordinary and despised humans that make up our society (1988a: 310).

The contribution of his method is to destabilise the comforting moralism of modern philosophers, and help to “bypass the chicken/egg paradox of dualist thinking and privileged hierarchies of knowledge” (Kien 29). This means that morality is not therefore a consequence, not a cause. Consequently, unlike the Kantian perspective, morality is not about essence and entities, and should not be considered as an exclusively human affair. It is not about a theoretical judgement based on dualist categories of “good old” or “bad new”; it is about modes of existence, and therefore it is rather about scale and intensity that occur in the interaction between those entities. Of course the “ideal” of morality is conceived by the human mind, but what Latour’s principle of symmetry implies that there is also a “mechanical” part to it.

What is at stake here is to restore the share of things, the mechanical and material part in the composition of morality. One has just to think about our institutions. In our societies,

justice cannot be applied if there is not the networks of those “lieutenants” that afford it: buildings, bills even the barrister’s gown plays their respective role in its constitution. What is needed is a fair redistribution that recognise the contribution of things. Therefore, the conception of morality demands a symmetrical that would recognise the affordance of things like those of humans:

Moral intensity increases in proportion to one’s scruples regarding the distribution of active and passive players, ends and means, things or matters of concern and mere objects, non-humans and humans, the rock and the one who pushes it (Latour, Hache 321).

This principle of symmetry reminds me of what Deleuze and Guattari call a *ritornello* that, once you listen to it,¹⁸ comes back to your mind again and again as a reminder of what we as humans are always making and made of “the stuff of which society is made” (Latour 1986: 278). This *ritornello* is also a discreet refrain that tells about the necessary conditions of human existence, which are not only made of ideas or matter, but by their co-constituency, because the novelty of this refrain is not exactly the same as the social constructivist tune that has become familiar to critical theorists, but a more radical version of it that says “society is not what holds us together, it is what is held together. Social scientists have mistaken the effect for the cause, the passive for the active, what is glued for the glue” (Latour 1986: 276). Therefore, morality (like society) can be seen as the result of

¹⁸ About this concept of *ritornello* (*ritournelle*), Deleuze says: “[c]oncepts aren’t universals but sets of singularities that each extends into the neighborhood of one of the other singularities. Let’s go back to the *ritornello* as an example of a concept: it’s related to territory. You get *ritornellos* in any territory, marking it out; and then others when you’re trying to find your way back to it, afraid at night; and still others to do with leaving: ‘Farewell . . .’ That already differentiates three stances, so to speak. And the *ritornello* thus expresses the tension between a territory and something deeper, the Earth” (Deleuze, Parnet 146). There are numerous references to this concept in Deleuze and Guattari’s works, mostly in *Thousand Plateaus* and *What is Philosophy?*. For an exhaustive explanation of this concept, see Zourabichvili 2003: 75.

a common affordance of humans and non-humans that would facilitate or prevent certain actions or meanings. This is what makes Latourian sociology so attractive and different from other sociologies. It does not adopt a social constructivism, but prefers a general constructivism - or co-constructivism – that does not favour any pole, but focuses on what emerges from the relations, the networks and lines formed by those entities. Finally, to give a better image to the reader, I would say that this principle of symmetry acts for Latour in the same way of the vision of Mont Sainte-Victoire for Cezanne: like the painter with his painting, he repeats it again and again the same idea, the same motif, in order to bring as close as possible to his (theoretical) work. Latour makes ontological symmetry part of the fabric of his text as Cezanne makes the image of the mountain part of the textility of his canvas.

At this point, I realise that I have only gone half of the way with my example of the revolving door. I am still sitting at my desk in front of my computer, showing an illustration of the *minor grip* that a revolving door can, in association with others actants – humans and non-humans – help the students of MIT campus to be more moral and eco-friendly citizens. My case study helps to highlight with a series of steps the crucial role of the revolving door as a mediator in the project of making the campus a better place. As Latour would say, in this scenario, the revolving door then has its “script, its ‘affordance,’ its potential to take hold of passerby and force them to play roles in its story” (1994: 31). As in Latour’s example of the gun, a way to understand this case study would be see it as holding a materialist perspective against moralism. But this position is does not do justice to the things: the materiality of technologies does not mean that they are passive mediator, and therefore, might refuse to participate.

The other half of the story should say that since “techniques are not fetishes, they are unpredictable, not means but mediators, means and ends at the same time; and that is why they bear on the social fabric” (Latour 1994: 53). This means that they have their own modes of existence: they do not always cooperate like in my example. Our interaction with them does not always go in a straight line in the form of means. As actants, they can sometime resist human intentions as humans do resist theirs:

Generalizing the notion of affordance, we could say that the quasi-subjects which we all are become such thanks to the quasi-objects which populate our universe with minor ghostly beings similar to us and whose programmes of action we may or may not adopt. If the robe does not make the monk, wearing a frock makes us slightly more pious (2002b: 252-253).

This is the paradox of those little things: just like little humans “lieutenants.” they get an order (a designed script) from the general (engineer or designer), but there is nothing that can predict that they will always obey that order. When the artefact resists the user’s intention or action it becomes opaque to her hand and mind. This can be inherent to the thing, but in the case of technological devices, this phenomenon is usually based on a human decision, “a process that makes the joint production of actors and artefacts entirely opaque,” that makes it too complex to be understood – *translated* – by the user (Latour 1994: 36). The artefact is then considered as a “black box,” a term borrowed from military tech jargon and cybernetics to describe “an opaque technological device for which only inputs and outputs are known” (Galloway 2011: 239). The point is that we live surrounded by a multitude of those black boxes – the best examples are certainly ICTs like the television, the smartphone or the computer – until they break or work differently, and consequently manifest their opaque presence and provoke a crisis, which gives free reins to a lot of

speculations, justified or not, about surveillance and control. We are back to Kafka and the Odradek. Here is when I went out in search for an example of black boxed technology and came across the case study of the Automated Public Toilet that I explore in the next chapter.

Chapter 2

On the Presence of the Black Box-at-Hand

The Charge against APTs: Technological Paternalism and Surveillance

On a cold a rainy morning in September 2015, I noticed for the first time – after three years of living in Nottingham – the case study for this chapter: the discreet Automated Public Toilet (APT) at the Broadmarsh Bus Station (Image 1). It appeared immediately to me as a perfect example of a black box as described by Alexander Galloway in “Back Box, Black Bloc:” the classic Marxian imagery of the “bad” mysterious commodity fetish ready to be unveiled by the social theorist:¹⁹

[T]he commodity is a black box cipher, but so is value, and so is the relationship between exchange and production, ditto for the class relation, and on and on. Superimpose the cipher and begin to decode. This is the “rational kernel, mystical shell” logic at its most pure: untouched, the phenomena of the world are so many ciphers, so many mystical black boxes waiting to be deciphered to reveal the rationality (of history, of totality) harboured within (2011: 240)

However, Galloway notices that because of the new modes of production, this epistemological account has to be supplemented by a new one because the black box also has an interface, a visibility that “should be granted, but only selectively and under stricture of special grammars of action and expression” (ibid: 241).

¹⁹ Alexander Galloway offers in his essay an extensive etymology of the notion of black box that enters into common language from military tech jargon in the 1940s, see Galloway 2011: 241- 242.



Image 1. Automated public toilet at the Broadmarsh Bus Station, Nottingham. Sept. 2015 (Source: the author).

This factor of visibility cannot be taken lightly, since the whole interest of such a technology is based on this designed ambivalence which explains the growing commercial and political interest in cybernetics and black boxes.²⁰ As Galloway puts it:

It is no longer a question of illuminating the black box by decoding it, but rather that of functionalizing the black box by programming it. (...) On the contrary, these black sites are part and parcel of the new industrial infrastructure. The point instead is to describe the qualitative shift in both the nature of production, and perhaps more importantly, the nature of the consumer, for only by describing this new structural relationship can we begin to speak about the

²⁰ Depending of the country, APTs may be also called APCs (Automated Public Conveniences), and they are used in more than six hundred cities around the world, and their number is increasing, see Braverman 2101b: 78.

structure of critique. In other words, if Marx's 'descend into the hidden abode of production' was an allegory for critique itself, what is the proper allegory for critique today? (ibid: 244)

This is nothing new to the reader, but it is always useful to remind ourselves the empirical source behind great theoretical shifts. As Jacques Rancière reminds us in *The Politics of Aesthetics*, the proliferation of complex technologies capable of copying and reproducing modes of expression puts at risk the foundations of the Marxist theory of fetish commodities that "must be torn out of their trivial appearances, made into phantasmagoric objects in order to be interpreted as the expression of society's contradictions" (2004: 34). From this moment onwards, the movement from what theorists call modernism towards post-modernism was much more than just a linguistic turn:

The teleological model of modernity became untenable at the same time as its divisions between the 'distinctive features' of the different arts, or the separation of a pure domain of art. Postmodernism, in a sense, was simply the name under whose guise certain artists and thinkers realized what modernism had been: a desperate attempt to establish a 'distinctive feature of art' by linking it to a simple teleology of historical evolution and rupture. (...) However, it was precisely the next episode that showed that postmodernism was more than this. The joyful, postmodern artistic license, its exaltation of the carnival of simulacra, all sorts of interbreeding and hybridization, transformed very quickly and came to challenge the freedom or autonomy that the modernist principle conferred – or would have conferred - upon art the mission of accomplishing. There was thus a return from the carnival to the primal scene (ibid: 28).

This double shift from the Enlightenment project towards new intellectual paradigms are already predictable in the works of Adorno and (early) Baudrillard, but reaches its full maturity in the writings of Michel Foucault. Therefore, it is not surprising to find his influence on many scholars who write about ATPs. As Harvey Molotch, writes in “Learning from the Loo:”

The anxieties of basic bodily needs impact the ability to gain an education or livelihood. For many people in the world, when they do find a place to go, it is out in the open or in a ditch that runs with untreated sewage, creating a massive public health problem for those downstream— in some sense, for the majority of people on earth (4).

Besides, since they impose the same control regime over every user, they also participate in the standardization and regulation of the social behaviours across different social group. Consequently, according to him, the APT is a good space to investigate how the authorities deal with the question of the “other,” through the interaction of the technological device and the bodies, which might differ “by gender (and its own variations) but also by age, circumstance, and accidents of fate— imposing various degrees of ability and disability made evident through the public toilet” (7).

As for, Irus Braverman, he asserts in “Governing with clean hands: Automated Public Toilets and Sanitary Surveillance” that even if the official discourse says that the automated public toilets (APTs) intend to make the urban space safer, they are incorporated into a general paradigm of surveillance and discipline:

In the name of limiting the spread of germs and bacteria, a strict regime that attempts to minimize human contact with other humans, either directly or mediated by machines, is enforced (2010a: 3).

It also worth to notice that the importance of control in the public spaces is correlated to the early hygienists' obsession with dirt and cleanliness, which would be incorporated into the consumer society after the Second World War, blurring the line between the public and the private:

APTs are a fusion of private and public – their design being a product of both governmental concerns and private, consumer-driven interests. It is in this light that one should explore the standards and regulations enacted in these spaces (Braverman 7).

Accordingly, it is not surprise that APTs are presented by officials as a way to democratise public space, and to be safely accessible to the majority of citizens. They are also promoted as a significant and efficient way of saving resources (especially water) besides of improving hygiene. However, in addition to these notions of environmental ethics and care for the community, they may also act as medium of control over space; of surveillance and order, by making sure that undesirable individuals – homeless, drug addicts or other abnormal users – do not have access to them:

Hence, while in principle the doors of the APT are open to anyone from the public, they are in fact restricted by design. (...)APTs embody within their design a set of distributive justice principles that determine the precise ways in which they can be used (2010a: 12).

The same article also highlights the black boxing effect of APTs by saying that:

Contrary to common perception, highly automated fixtures do not imply less human involvement but rather a very different location of this involvement: from the multiple and unknown lay users to the few and controlled expert designers (ibid: 14).

This passage shows that the black boxing potential of this type of machines lies in its capacity to hide its programme from the user in favour of the designer only. It is exactly this prescribed ability, to use Latour's term, to occult an information that makes them suspicious in the eyes of social theorists. In the case of APTs, the suspicion is even greater since the device presents a series of input entries – mainly sensors – that might collect data from the users without them knowing where they are going.

This creates what Sarah Spikermann and Frank Pallas call a situation of *technological paternalism* which is not a “matter of obedience as is the case with human interfaces. Instead it is a matter of total compliance. The risk exists that humans may have to subdue to the machine. They may not be able to overrule their intelligent objects any more in many instances” (10).



Image 2. Detail on the front of the automated public toilet at the Broadmarsh Bus Station, Nottingham. Sept. 2015 (Source: the author).

In the case of the APT in Nottingham's Broadmarsh Bus Station, this paternalism can be illustrated by the presence of the different restrictive signs next to the door and the presence of the sensor inside the toilet (images 2 and 3). The association of all these elements prescribes, to use Latourian terminology, a certain behaviour the user. The most stressful one of those is the limit of twenty minutes to use the toilet, which could lead to the most eccentric hypothesis about what might happen if the user inside the APT exceeds this limit. The sensor of course can be analysed as the mechanical gaze of surveillance, but instead of the policemen, "it is the machines that do the dirty work" (Braverman 2010a: 25). Accordingly, the automated toilet can be considered as a type of *new surveillance*, a term used by Gary Marx to refer to "the use of [new] technologies for collecting personal information which transcend the physical, liberty enhancing limitations of the old means are constantly appearing" (9).



Image 3. Sensor – or auto-gaze – inside the automated public toilet at the Broadmarsh Bus Station, Nottingham. Sept. 2015 (Source: the author).

“Sanitary Surveillance,” “Technological Paternalism,” “New Surveillance”: there is no doubt about the Foucauldian filiation of these terms, which would imply that one could easily consider the technology involved in APTs as other mechanisms that aggressively intrude the privacy of the individual and social bodies. Foucault’s question is:

Is it possible to move outside? Is it possible place the modern state in a general technology of power that assured mutations, development, and functioning? Can we talk of something like a “governmentality” that would be to the state what techniques of segregation were to psychiatry, what techniques of discipline were to the penal system, and what biopolitics was to medical institutions? (2007: 120)

To a certain extent, I would say that they are valid attempts to “unbox” a black boxed device like the APT. I do not deny that on *some occasions*, these devices might be “lieutenants” of oppressive legal apparatus (Braverman 2010b: 67). But if I adopt the principle of symmetry, this would be unfair: as in Latour’s example of the gun, “it is neither people nor guns that kill. Responsibility for action must be shared among various actants” (Latour 1994: 34). In the case of black boxes like APTs, the balance of responsibility tilts rather towards the human designers who prescribed the programme in them.

The programme of ATPs is very clear in the way the companies promote their products’ efficiency in the eradication of contamination and vandalism. *Healthmatic*, for instance, a company specialising in the design, supply and management of public toilets and which works actively with Nottingham City Council, asserts that their products are made to resist

high level of violence and anti-social behaviours; the arguments about hygiene and health issues come afterwards (Healthmatic.com).²¹

Despite their genuine attempts to “unbox” the APTs and to see what political forces are behind them, these Foucauldian epistemological approaches do not do justice to the technologies. Rather than trying to translate them – in a symmetric way – in the text, a Foucauldian approach imposes on them a textualism that maintains, as David Nye suggests, the myth of technological determinism:

[Foucault] treated technology as the material expression of an overarching discourse that structured individual consciousness and shaped institutions, notably hospitals, asylums, and prisons. In contrast to Marx, Foucault’s theory did not conceive of an economic or a technical “base” that drove changes in the social “superstructure.” Rather, Foucault saw history as the exfoliation of patterns of ideas and structures (“epistemes”), which were expressed in art, in architecture, in classification systems, in social relations, and in all other aspects of the cultural discourse at a given historical moment. The epistemes did not evolve from one discursive system to the next but rather were separated by ruptures, or breaks in continuity (29-30)

This passage summarises why Foucault can be a good ally to think with (Latour), but also the limits of his approach. Said differently, I would say that unlike modernist Brecht,

²¹ I have chosen to focus on this company because, in an official document about the changes to public toilet provision released in 2010, the executive discussed the project of replacing the public toilets in three different locations in Nottingham. The aim was to provide facilities which would be available 24 hours, every day of the year, following the example of the facility in Broadmarsh Bus Station, which is the only fully automated toilet among the height sites of public toilet across the city. The document underlines that the most outdated toilets were, at that time, unattended and subject to vandalism and antisocial behaviour. The document states that among the twelve candidates, Healthmatic was shortlisted with two other companies, but was eventually chosen for the project since it was the one that gave the most economic and advantageous, and complied with all the requirements of Building Regulations (committee.nottinghamcity.gov.uk).

postmodernist Foucault starts with *bad* old things to understand *bad* new ones. In short, one can appreciate the value of his *genealogical method* that imposes an effort to establish a map of the historical evolution of a specific social phenomenon. In Latourian terms, the historical accounts take part in the constitution of how the phenomenon is formed and represented. However, my argument is that the limit of this method is its *epistemological treatment* of the relation between the body and technology in his theory of biopolitics, which tells a counter story to the myth of the *homo faber* and the project of the Enlightenment. As I show in the following chapters, this might lead many of his followers, like Agamben, to fall into a great pessimism to the measure, as Rancière says, of presenting post-modernist theory as “the grand threnody of the unrepresentable/intractable / irredeemable, denouncing the modern madness of the idea of a self-emancipation of mankind’s humanity and its inevitable and interminable culmination in the death camps” (2004: 29).

Therefore, in the next section, I offer a brief genealogical account of how the APTs – following direct evolution from the medieval bath houses – can be seen by theorists as an instrument of technological paternalism and surveillance, as an actant interwoven and participating in the segregation, discipline and control of (social and individual) bodies for the last hundred and fifty years. The third section gives me the opportunity to talk about the *homo faber* myth that has been and still is the main reference to think about technology (as an extension of the body) in critical theory. This will lead, in the last section, to a discussion about the possibility for technological devices to have intentionality and even existence.

Hygiene, Social Control and the (post-) Modern Body

If Foucault were to study APTs, he would undoubtedly trace them back to the question of hygiene and social order in modern societies. Indeed, hygiene has always been a major social issue through the history of humanity, but it took a dramatic turn in the middle of the 19th century. In *Le propre et le sale*, historian Georges Vigarello explains that with the evolution of bath houses, the image of the human body changed as well. He suggests that the real shift in the representation of the body occurred with the social changes that came with the French Revolution: to differentiate themselves from the aristocrats – both in appearances and morals – the new ruling class decided that both the body and the soul had to be washed. It was more a social and cultural cause that drove the bourgeois class to use both private and public baths. In this new cultural practice, Vigarello detects the first imprint of the hygienist discourse that comes with four major references: the bath, cleanliness, water and skin (1985: 173).

But it is in the 19th century that the hygienists, biologists, physicians and engineers took part in the huge construction work that totally changed cities and the daily life of their citizens. The humanist atmosphere of the siècle des Lumières created a scientific and political movement towards regeneration of mankind into an energetic and active being, to contrast with the wantonness of the ancient regime. Consequently, the image of the body changed, it became a source of energy that interacts in the world, and mostly with air and water. These two elements became important actors in the new staging of urban space, especially in the hygienist struggle against cholera.²² Unlike what happened a few centuries

²² Braverman writes: “In Britain, the nineteenth century spread of cholera made necessary a central intervention in the public’s excretory conduct. The 1835 Municipal Corporations Act laid the foundation for such an intervention, aided by the material development of the modern WC” (2010a: 4).

ago, with plague epidemics, public baths became an instrument of defence against disease (Vigarello 1985: 192). The movement of water circuits changed the shape of the cities: the modern urban space is built on a strange dialectic of visible and invisible infrastructures, which would be materialised by the Hausmannian achievements in Paris in the 1850-1860s. All of these elements – baths, water supplies and later sewers – enter in an assemblage of strategies and practices, which support, and is supported in return, by the modern project of public hygiene (ibid: 199). However, there is a glitch: the enemy is invisible; or rather it is only visible in the laboratory and nowhere else. Water can clean the body, but can be contaminated too. Consequently, towards the end of the 19th century, the accounts of educators and hygienists are tinged by a catastrophism that will mark the 20th century, until today – one has just to think about the recent “pandemic threats” (Ebola, Avian influenza or pandemic of H1N1) that have been massively relayed by the news and almost threw into panic various Western governments. As Vigarello points out, there is a slow drift from cleaning to asepsis (1985: 219). After this, one can easily see the connection between the social and political roles of Pasteur’s laboratory and the bathroom.

Bruno Latour, in *The Pasteurization of France*, refers to the case of Pastorian scientific revolution to demonstrate how the association of humans and non-humans in the remote locus of a laboratory transformed radically the society to come. In a first phase, he puts into perspective the idealistic and classical interpretation of a man – as it happens, Pasteur here – “revolutionizes the society around him by the power of his mind alone” (1988b: 14). By putting an emphasis on the overall movements rather than the action of a unique entity, he underlines the fact that, in order to understand the constitution of the paradigms through which we represent and build our society, we need a redefinition of “society” as something that exists thanks to the work of composition done by the different “actants.” Latour’s

account of the pasteurisation of France stops at the end of the 19th century, but his symmetrical approach helps to update the works of other theorists and cultural historicists who have investigate hygienist discourses and practices that take part in the constitution of the modern Western society of 20th and 21th century, by taking part in the “emancipation of the nonhumans from the double domination of society and science” (ibid: 150).

Pasteur and his laboratory wrap everything off, and make the whole hygienist apparatus much more effective.²³ The enemy is identified, isolated: the microbe. And the public and private baths play the role of a political and social instrument to clean the society. Consequently, the project of the hygienists is total: it aims at cleaning the streets, houses, bodies and souls. The watchword is *order*. This does not mean that the concerns about hygiene are always imposed by an obscure agenda of controlling people, but, as Ruth Barcan points out, “it means that the question of contamination is always far greater than a set of objective biological facts” (2010: 27). This is also part of being modern. The people in the city, especially the lower classes, have to be cleaned, controlled and educated. This intention to control bodies will be the centre of attention for several generations of social thinkers in the 20th century.

A good example of the theorization of this social control can be found in Kristin Ross’s *Fast Cars, Clean Bodies* (1996), where she demonstrates how the institutionalisation of the control of the body has grown in post-war France. Due to the proliferation of objects of the

²³ Bruno Latour, in *The Pasteurization of France*, refers also to the case of Pastorian scientific revolution, but with the intention of demonstrating how the association of humans and non-humans in the remote locus of a laboratory transformed radically the society to come. In a first phase, he puts into perspective the idealistic and classical interpretation of a man – as it happens, Pasteur here – “revolutionizes the society around him by the power of his mind alone” (1988b: 14). Latour’s account of the pasteurisation of France stops at the end of the 19th century, but his symmetrical approach helps to update the works of other theorists and cultural historicists who have investigate hygienist discourses and practices that take part in the constitution of the modern Western society of 20th and 21th century.

quotidian as part of ideological system of the “société de consommation” and the postcolonial context of that period, there is a transfer of power from controlling the political economy to controlling “domesticity,” everyday life as the base of order and cleanliness of the country:

A chain of equivalences is at work here; the prevailing logic runs something like this: If the French woman is clean, then France is dirty and backward. But France can't be dirty and backward, because that is the role played by the colonies. But there are no more colonies (Ross: 78).

This transfer of power and control from top to bottom, from the macrocosm of political institutions to the microcosms of the everyday, fits perfectly the ideological discourses about order and control going from the Pasteur's laboratory to post war “colonization of the everyday” in France (ibid: 77). Once again, at the centre of this struggle for control, the body appears again as an idealised standardised representation. As Braverman states:

By rendering human conduct in the space of the washroom the subject of clinical observation, the “auto-gaze” thus provides the expert with the relevant technical knowledge. In the process, the intimate bodily practices are excluded from those who practice them, objectified, and reduced to taxonomies and numbers (2010b: 73).

This idealised and normalised conception of the body is closely linked with the definition – or redefinition – of “public” by the same decision-makers: while the “normal” user/ model citizen – usually a young and healthy male – is taken as the reference as the model for these devices, the rest of the public – elderly people, women, children, disabled people – is more difficultly “recognised” by the sensors of the flushmeters, faucets or dryers. Despite the fact

that designers try to programme the artefacts to adjust to the reactions of more categories of citizens (see image 4), APTs seem to be more of an inconvenience, and a source of frustration or even hatred, which might bring some users to write this:

Fully automated bathroom, I hate you. I hate all of your advanced features. I hate you so much that I will sometimes hold it in for hours to avoid coming into contact with you. (...) Auto-flush toilets, I despise you. I hate the way you begin flushing as soon as I stand up. I hate the way you won't let me get in a courtesy flush should I be recovering from a night of Indian food. Most of all, I hate the way you flush so violently that you spray little droplets of water of dubious cleanliness all over the stall, forcing me to press myself against the farthest corner, pants still around my ankles, and you, like a rogue Catholic priest, spray holy sewer water on my freshly painted toenails and lovely new Nordstrom open-toed high heels. (...)I hate all parts of you, bathroom. I hate you so much (www.craigslist.org)

This poetic prose might look funny, but it is also symptomatic of the degree of uneasiness, frustration and sometimes anger some people feel when confronted by mysterious automated devices. The user feels that something has been taken from her: the choice of using paper toilet instead of the automatic dryer, the choice of staying a bit longer in the cubicle without being under the control of the electronic eye of the sensor, etc.



Image 4. Button to open placed at the bottom of the wall inside the toilet. This is a good example of the way some designers program the APT to help other categories of people, in this case, people in wheelchairs. Picture was taken inside the automated public toilet at the Broadmarsh Bus Station, Nottingham. Sept. 2015 (Source: the author).

Similarly to Kafka's family man, who feels that he is losing control over his house; one can say like Braverman, that in "the automated bathroom the morality of the human as master of his or her environment is at stake" (2010b:80). Indeed, the quotation does not deal only with the anxiety about the functionality of the device – its efficiency as a technological apparatus that helps to avoid germs and social misconducts, as an eco-friendly, etc. – but also brings up questions about the morality of humanity that is threatened by the machine. We are back to Kant, Adorno and Baudrillard. It was going well so far, but then if one steps out of the historical track, one realise that once again the issue is about the supposed essential immorality of automated machines that would impose a certain discipline, to use the Foucauldian term, on the user. APTs may participate in the marginalisation and

exclusion of certain groups of people, and more deeply influence a certain normalisation of the behaviour of the user through a discipline of the body.

In the case of the Nottingham Broadmarsh APT, the time allocated to each user is limited to 20 minutes. A voice instruction warns a few minutes before the doors open *automatically*. There is only one step then from talking about automation to technological paternalism, which is perfectly illustrated by Braverman, when he writes:

[U]nsurprisingly, various forms of human resistance to these impositions have mushroomed here and there: acts of vandalism directed at automated fixtures, their routine avoidance, or strategies of finagling how they operate. Beyond official laws enacted by parliaments or government officials and applied within a relevant jurisdiction, the things themselves, however much obscured behind a set of technical specifications, also regulate consciousness and behavior (2010b: 85-86).

The technology is not the modernist tool anymore, but becomes an instrument of oppression and regulation. From this perspective, APTs are perceived as active agents of what Foucault calls, in *Discipline and Punishment*, a political apparatus that imposes its power in everyday life practices through “what might be called the instrumental coding of the body” (Foucault 1995: 153). From this perspective, APTs could be considered as a space built to “permit an internal, articulated and detailed control - to render visible those who are inside it; in more general terms, an architecture that would operate to transform individuals” (ibid: 172). A Foucauldian analysis is very useful because it allows us to highlight the association between the human and the non-human, the “body-object articulation” is a power that emerges when an artefact is manipulated:

Over the whole surface of contact between the body and the object it handles, power is introduced, fastening them to one another. It constitutes a body-weapon, body-tool, body-machine complex. One is as far as possible from those forms of subjection that demanded of the body only signs or products, forms of expression or the result of labour. The regulation imposed by power is at the same time the law of construction of the operation. Thus disciplinary power appears to have the function not so much of deduction as of synthesis, not so much of exploitation of the product as of coercive link with the apparatus of production (ibid: 153).

This analysis is valid in asserting that the association forms a new element, which is not anymore a subjective body or an objective artefact. Nonetheless, it also emphasises the negative consequence of this association that appears at the expense of the human body and its natural freedom:

In becoming the target for new mechanisms of power, the body is offered up to new forms of knowledge. It is the body of exercise, rather than of speculative physics; a body manipulated by authority, rather than imbued with animal spirits (ibid: 155).

Pushing forward this perspective, one could say that the automated devices in APTs, especially with their control and regulation of time and their constantly watching infrared gaze, impose what Foucault labels the “micro-penalty” of time and of the body (1995: 178; quoted in Braverman 2010b: 76).

And this is the worst deadly sin for Foucault, who sees the *body* – and its vital energy – as the main protagonist of *history*. As Arianna Sforza points out, body and history are the two main protagonists in Foucault's thought:

The body is not only a privileged object of history: it is its very theoretico-practical framework. (...) The Nietzschean figure of the philosopher-physician is revived by Foucault through a historical-political practice that appeals to the power of the scalpel cutting through the layers of modernity to clear out its beating heart (35-36, my translation).

Here is the incompatible point between Latour's theory and Foucault's philosophy. They both make a valuable critique of Cartesian dualism and the Kantian obsession about the subject, but whereas Latour demands a more symmetrical analysis between the two poles, Foucault flips the ontological axis and goes for an a-subjective body:

The innervated body feeds the desire for utopia. Consequently, the phenomenological becomes insufficient. My body is indeed the zero point of the world, the origin of my relationship to the world, but in its utopian virtuality, it cannot be reduced to any subjective stability. On the contrary, it is what escapes any essential fixation (Sforza 122, my translation).

He invents an alternative narrative whose original focal point is this body that is "unrepresentable /intractable / irredeemable," to re-use Rancière ironic quote (2004: 29). Paradoxically, despite his evident effort to get out of modernist anthropocentrism, Foucault remains in an anthropocentric posture: apart from the body (biopower) and history (archives), his political anatomy does not allow space for any other major protagonists. John Law summarises well the situation when he writes:

Indeed, in the last decade, perhaps under the influence of Foucault and a range of structuralist and post-structuralist writers, sociology has started to take both the body and the text extremely seriously: the text are found wherever we look; representations re-present ubiquity; and bodies are everywhere inscribed. However, matters are rather different for technology; except, perhaps in the area of information technology, machines have been excluded from most of the new enthusiasm (1991: 7).

Said differently, in Foucault's theory the missing masses remain insignificant missing masses or become alien elements, "political puppets, small-scale models of power" that threaten the sublimated body (Foucault 1995: 136; quoted in Sforza 49). It seems that with Foucault, when it comes to machines and artefacts, we did not move much from Adorno's Marxist reductionism of them to fetish commodity and Baudrillard's image of a dominating automaton. Similarly to his predecessors, Foucauldian narrative maintains a complex relation of continuity/rupture – a sort of Copernician revolution – with the *homo faber* story, "where the courageous innovator breaks away from the constraints of social order, to make contact with hard and inhumane but –at least – objective matter." (Latour 1994: 41). I have been referring to this concept many times, and it seems reasonable to give a brief description of this relevant notion for any theory of things.

***Homo Faber* and the Fate of the Hand**

What is surprising about the *homo faber* myth is its longevity through the different phases of Continental philosophy, all the way from Hegel to Heidegger and their followers.²⁴ It is a figure that comes straight from the Enlightenment, giving a very flattering representation of mankind, a special being whose destiny is to achieve its emancipation. Hannah Arendt gives a good illustration, in *The Human Condition*, of this elitist figure that, unlike the labourer (*homo laborans*) who is a victim of his work condition, creates durable things that separate human society and nature, and thus participate in building of an objective common world:

Only we who have erected the objectivity of a world of our own from what nature gives us, who have built it into the environment of nature so that we are protected from her, can look upon nature as something “objective.” Without a world between men and nature, there is eternal movement, but no objectivity (1998: 137).

This objective division is clearly what Latour calls the dual work of purification of modernity, which gives the “traditional definition of technique the imposition of a form of consciously planned onto shapeless matter [and that] should be replaced by a view of technique – a more accurate view as the socialization of nonhumans” (1994: 53). He finds the major trace of this view primarily in the work of anthropologists and archaeologists that show that even the simplest techniques are sociotechnical; even at this primitive level of meaning, forms of organization are inseparable from technical gestures” (ibid: 61).

²⁴ For an exhaustive mapping of the evolution of the notion of *homo faber* in the modern history of philosophy, see Seris 103-147.

The works of Marcel Mauss asserts that humans acquire new techniques through imitation and education, an accumulation of gestures that he calls *habitus*.²⁵ But his major contribution to Latour's sociology of technology has been to consider these bodily *habitus* as primarily "techniques of the body," which basically challenges the traditional concept of technique, as something limited to the use of instruments.²⁶ As he writes: "I call technique an action which is effective and traditional (and you will see that in this it is no different from a magical, religious or symbolic action)" (1973: 75). This is one of the first piece of evidence in anthropological theory of the idea of a symmetry between technique and culture, between artefact and symbol, between matter and idea. Therefore, it makes Mauss look like a heterodox anthropologists among his peers, when he writes:

I made, and went on making for several years, the fundamental mistake of thinking that there is technique only when there is an instrument. (...)The body is man's first and most natural instrument. Or more accurately, not to speak of instruments, man's first and most natural technical object, and at the same time technical means, is his body (ibid).

On the same page, one can find the first feature the *homo faber*, which gives a more materialistic vision of the body: it is not anymore the vessel of the mind as it is for the idealists, but the centre of technical, natural and social life. One could see a convergence between Foucault's conception of the body and Mauss's. But whereas in Foucault's concept of the body is seen as a sacred locus that is both powerful and has to be preserved from the

²⁵ For more detailed account of Marcel Mauss notion of *habitus*, and its influence on Pierre Bourdieu's version of the same notion, see Seris 125; Thevenot 77-77.

²⁶ Latour recognises his filiation with anthropologists in several occasions: "[t]hanks in large part to this collaboration of philosophy and anthropology in science studies, we are beginning to have a plausible view—or a possible narrative—for the invention of the two templates with which the Moderns have attempted to account for their meeting with the 'others:' namely, the joined-at-the-hip twins known as subject-object" (2014: 302).

controlling or disciplining society, Mauss's constructivist version presents the body as a zone of exchange. While the philosopher talks about mainly about *dressage*, the anthropologist talk about *apprentissage* (apprenticeship).

Another key figure is André Leroi-Gourhan who takes over Mauss's early symmetrical views of the relationship between matter and gesture, and traces it back to the origins of humanity. He explains that technology did not appeared suddenly in the 16th or 19th centuries, but has always been there, from prehistory, living human bodies "possess the basic possibilities for technicity" (Leroi-Gourhan 1993: 80). He wants to show in his work that technological objects are far from being ahistorical, but are fundamentally interwoven with the history of humanity; and therefore, did not appear suddenly during a period called modernity. Therefore there is no opposition between culture and technology, since they evolved, respectively with writing and metallurgy, together in the first cities. Leroi-Gourhan does not consider the emergence of machines as a "revolution," but rather as part of the historical and biological evolution of humanity that has started with the first men and women.²⁷ As he writes in *Gesture and Speech*:

Mechanical automation, from the mechanical brontosaurus of the nineteenth century rolling mill to the automatic pilot of today, represents the penultimate possible stage of the process begun by the Australanthrope armed with a chopper (1993: 248).

²⁷ About Leroi-Gourhan, Carrie Noland adds that: "he possessed both a Marxist apprehension of the importance of material conditions in constituting human consciousness (which Stiegler most explicitly recalls) and a phenomenological appreciation of the body's sensual engagement with these conditions (which Derrida ends up acknowledging far more than Stiegler)" (2009: 94).

Consequently, Leroi-Gourhan pushes forward Mauss' perspective on techniques by including machines in the technical gestures of humanity (Seris 170).²⁸ Here, the machine is just considered as a natural evolution all the way from the chopper tool. This follows Leroi-Gourhan's "criteria of humanity" which is based on the simple idea that humans become humans through a series of liberations from genetic/biological constraints. From the point of view of this mechanical perspective, cerebral development comes after the erect posture, and the possession of a short face and a free hand, which "implies a technical activity different from that of apes, and a hand that is free during locomotion, together with a short face and the absence of fangs, commands the use of artificial organs, that is, of implements" (1993: 19). This statement goes against the intellectualist points of view that asserted for a very long time that human evolution was determined by the acquisition of a bigger brain by dismissing the "cerebralist theory" of evolution (Guerin 1999; Noland 2009). Contra Darwin, Leroi-Gouhran argues that rather than intelligence, one should consider "mobility as the significant feature of evolution toward the human state" (1993: 26). Among these series of liberation, he includes "the exteriorization of tools" that is the distinctive feature between humans and animals and the conditions of human collective existence (Leroi-Gourhan 1993: 317; Karsenti 1998: 236). The main idea for Leroi-Gourhan is that "humanity outgrows its bodily envelope, but continues to grow into the artificial, technical and social prostheses that extend, amplify and eventually replace its biophysical capacities" (Ingold 1999: 424). It is worth mentioning that this "exteriorisation"

²⁸ It is worth to say that Leroi-Gourhan is a follower, but also a good critic of Mauss's work. For instance, he does insist on the "critique of technological material" – a clear objective description of the object and its function, like one would do for an animal species – which is incomplete in Mauss' method. He specially insists on the importance of a historical criticism of technologies, since their meaning is shared between their technical use and the social significance they have or had in the past. Leroi-Gouhran insists more on the capacity of technology to emancipate itself from the body, and have its own evolution: it is at the same time closely linked with the evolution of societies, but has the capacity to overstep its mere instrumentality (2012: 436-437).

implies that the tools are an exudation of the body, but are not organs like the claws for instance. Leroi-Gourhan's intention is to give this technical evolution its own path – different from cultural and biological ones, which still depend on human choices and gestures (Guchet 6-7). Leroi-Gourhan offers a worthy contribution on the debate of the tensions between the concepts of body and technology, giving a very good transdisciplinary perspective to the place technology in the evolution of human societies. By situating this liberation of technology at the very beginning of humanity, he goes against the classic sociological perspective which incorporates technology into the capitalist relations of production. The acknowledgement that objects can have other forms than those of tools or commodities, challenges classic humanistic representations of humans and non-humans, subject and objet, culture and technology. So far so good. But here comes the tipping point where Latourian symmetrical sociology and Leroi-Gourhan's anthropology pull apart.

In *Gesture and Speech*, Leroi-Gourhan admits that “[the] idea of ‘humans outstripped by their technology’ is a commonplace and undoubtedly a mistaken one” (1993: 146), but his Marxist/Modernist influences pushes him to envision a problem in what he calls an unavoidable “regression of the hand” and “demanualisation”:

Being useless with one's fingers, “being ham-fisted,” is not a very alarming thing at the level of the species as a whole: A good number of millennia will pass before so old an organ of our neuromotor apparatus actually regresses. But at the individual level the situation is very different. Not having to “think with one's fingers” is equivalent to lacking a part of one's normally, phylogenetically human mind. Thus the problem of regression of the hand already exists today at the individual if not the species level. (...) manual imbalance has already partially destroyed the link that used to exist between language and the aesthetic

image of reality. It is not a matter of pure coincidence, as we shall see, that nonfigurative art is flourishing at the same time as “demanualized” technicity (1993: 255).

Like Foucault, he falls back into the anthropocentric tropism of the *homo faber*. The main reason is because both thinkers envision the body as a sacred space. For Foucault, the body is a locus of production and reception of (bio) power. For Leroi-Gourhan it is the site of techniques where all the exchanges between the individual and the social and nature collective take place. In Latourian terms, this means that the *delegation* – inscription and prescription – of any abilities from humans to artefacts, and vice versa, inevitably implies a deficiency for humans. For Foucault, it is about maintaining the vital power of the body by preserving it from an oppressive *prescription* of society and its instruments of discipline and control. For Leroi-Gourhan it is rather about the consequence for the individual hand of losing its primacy, when too many abilities are inscribed in the artefact, when the tool becomes a (automated) machine. The maintenance of this powerful myth of the *homo faber* among so different intellectual perspectives makes one to admit that it is no wonder that technological devices still have such a bad reputation in critical theory.

As I have demonstrated in the previous chapter, this powerful mythology imposes de facto an apriori moral judgement on non-humans. In these circumstances, the objective of a Latourian approach is not to deny a difference between them and humans, but rather “decentre the heroic subject” (Law 1991: 12). It is this persistence of dualist paradigms in social sciences that pushes Latour to sing again and again his *ritornello* of symmetry. To give more space to technology to defend them, he thinks that humanism should be relocated somewhere else where:

Objects and subjects are made simultaneously, and an increased number of subjects is directly related to the number of object stirred – brewed – into the collective. The adjective *modern* does not describe an increased distance between society and technology or their alienation, but a deepened intimacy, a more intricate mesh, between the two: no *Homo faber* nor even *homo faber fabricatus*, but *homo faber socialis* (1994: 47, emphasis in original).

This displacement of the human subject on the ontological axis makes it a quasi-subject, in Serres term, which de facto also unsettles ossified notions, such as Marx’s “alienation” and Leroi-Gourhan’s “demanualisation.” His point is very clear about this when he talks about industry and the supposed tension between the worker and the demanualised worker:

From tools held in the hand of human workers, the shift historically was to assemblies of machines, where tools relate to one another, creating a massive array of labor and material relations in factories that Marx described as so many circles of hell. The paradox of this stage or relations between humans and nonhumans is that it has been termed “alienation,” deshumanization, as if this were the first time that poor and exploited human weakness was confronted by an all-powerful objective force (Latour 1999a: 206).

This summarises the situation well. He does not say that suffering and injustice do not happen, but only highlight that the semiology used by modernist theorists and sociologists to speak about machines has always a negative ontological connotation: either they are reduced to the insignificant condition of “masses” or magnified as “lieutenants” of a discipline or surveillance society. And of course, due to the dramatic events of the last

century, the last option has been largely privileged. For the modernist thinker, as Arendt reminds us:

The question therefore is not so much whether we are the masters or the slaves of our machines, but whether machines still serve the world and its things, or if, on the contrary, they and the automatic motion of their processes begun to rule and even destroy world and things (Arendt 1998: 151).

This interesting passage helps me to come back to the black box. As mentioned earlier, the fear of the black boxed technology is mainly due to its opacity, which can be understood as a challenge to the mastering hand of the *homo faber*, but also as something that opposes the modern theorist's effort to demystify it: it is not anymore Marx's "mystical shell" that the user and thinker can manipulate and analyse its hidden secrets as they pleased. The black box not only challenges its anthropological category of "extension of the hand," but also becomes, as Galloway asserts, an allegory of the modern crisis of representation in theory (2011: 244). Who knows what this sort of thing is capable of? It has not only escaped the hand, but it can also challenge it and even replace it. Like in the case of the APT, not only can it hide its programme, but it can even express it: it might *control* and *survey* the user, and who knows what else it can do or *be*.

The Question Concerning Technological Intentionality and (modes of) Existence

Hannah Arendt's pessimistic remark on "machines" and "things" is certainly influenced by her reading of Martin Heidegger's theory of technology that bears the idea that in the modern condition, one cannot consider it anymore as a tool or instrument, but as a *thing*. In

his famous essay “The Thing,” Heidegger establishes the etymological account of the world by saying:

To be sure, the Old High German word *thing* means a gathering, and specifically a gathering to deliberate on a matter under discussion, a contested matter. In consequence, the Old German words *thing* and *dinc* become the names for an affair or matter of pertinence. They denote anything that in any way bears upon men, concerns them, and that accordingly is a matter for discourse. The Romans called a matter for discourse *res*. The Greek *eiro* (*rhetos*, *rhetra*, *rhema*) means to speak about something, to deliberate on it. *Res publica* means, not the state, but that which, known to everyone, concerns everybody and is therefore deliberated in public (2001: 172)

This summarises the first of half Arendt’s observation and, as Richard Rorty says, it also looks promising for many philosophers who “treat Heidegger as offering a relationist, contextualist account of things. In this account, things are what they are by virtue of their relation to everything else. This means that they have different features depending on the context in which they are put” (274). Indeed, it clears up an alternative to the reductionism inherited from the anthropocentric *homo faber* myth by envisioning the possibility of being “a matter for discourse” (ibid.). Therefore, one could say that from this perspective, the fact that a black box is capable of expressing and “gathering” information would not be perceived as odd but as part of what they are. This Heideggerian project of semantic substitution of “object” by “thing” would be compatible to the Latourian idea of doing justice for non-humans against the modernist dualism, since they are not anymore the fixed Kantian object – the “thing-in-itself” – which is supposed to stand, stay put, without the possible before: for the human representational act that encounters it (Heidegger 2001: 175).

Taking his famous example of the jug, he says that “it is a thing neither in the sense of Roman *res*, nor in the sense of medieval *ens*, let alone in the modern sense of object. The jug is a thing insofar as it things” (ibid.). One can see all the speculative possibilities this “thingness” can lead to in a conception of an intentionality and even existence of things.

However, Rorty states that for Heidegger this philosophical route is not a possibility anymore: it has become a nostalgia that has forgone leaving the phenomenologist with the complex “question concerning technology.” In the introduction of the eponymous essay, Heidegger comes back to this question and says that nowadays:

Everywhere we remain unfree and chained to technology, whether we passionately affirm it or deny it. But we are delivered obey it in the worst possible way when we regard it as something neutral; for this conception of it, to which today we particularly like to do homage, makes us utterly blind to the essence of technology (1977: 4).

He makes a critique of the humanistic faith in technology as an instrument of progress, which does not apply anymore to modern technology “that is, in contrast to the older handwork technology, something completely different and therefore new” (ibid: 5). Here, the adjective “new” applies when the philosophers does not have access anymore to its essence. Again Heidegger does the etymological work and say that modern technology has changed the ancient essence of revealing *techne* – the work, the skills, the arts of the handicraftsman – for the new one of “Enframing:”

[W]hen we consider the essence of technology, then we experience Enframing as a destining of revealing. In this way we are already sojourning within the open space of destining, a destining that in no way confines us to a stultified

compulsion to push on blindly with technology or, what comes to the same thing, to rebel helplessly against it and curse it as the work of the devil. Quite to the contrary, when we once open ourselves expressly to the essence of technology, we find ourselves unexpectedly taken into a freeing claim (1977: 25-26).

Again, this opens some new perspectives towards a thing theory. However, he almost immediately adds that:

What is dangerous is not technology. There is no danger of technology, but rather there is the mystery of its essence. The essence of technology, as a destining of revealing, is the danger. The transformed meaning of the word “Enframing” will perhaps become somewhat more familiar to us now if we think Enframing in the sense of destining and danger (ibid: 28).

According to Heidegger, this danger has been predicted since Plato when the possibility of grasping the essence of things (and technology) was forgone: “[o]ur modern destiny – technology – appears to Heidegger radically different from *poesis*, the kind of ‘making’ that ancient craftsmen knew how to obtain” (Latour 1994: 30). Technology has become a monster. Therefore, since humans have lost the ability to get the essence of technology correctly, danger happens like a nuclear catastrophe, which is “only the crudest of all crude confirmations of the annihilation of the thing that already transpired long ago” (Heidegger, quoted in Rorty 275).²⁹ Once again, despite a critique of the *homo faber*, one ends up with a model based on technophobia that looks familiar, Heidegger seems to be looking for an

²⁹ Richard Rorty adds: “[p]assages such as these reminds us what a self-infatuated blowhard Heidegger was. (...) All that nuclear annihilation meant to him was one more bit of evidence for his claim to have understood *das Wesen des Dinges* [the essence of the thing] better than Plato and Aristotle” (275).

epistemology that establishes that technology is by essence opaque and dangerous, he is looking for some “kind of cultural memory of the dangers of technology” (Wilson 68).

Despite his pessimism, numerous contemporary thinkers, like Graham Harman, have decided to return to Heidegger as “both the enemy and ally of the ‘philosophy of things’ found in Alfred North Whitehead and more recently in Bruno Latour” (Harman 2005: 268). Harman’s strategy is not really to present his own theory of things – that he calls Object-Oriented Philosophy – as a purely Heideggerian philosophy, but rather a shared way of thinking that leaves him the freedom for the appropriation and transformation of the rich conceptual tools of the German philosopher, who he considers as “the possible ancestral hero of an anti-Kantian revolution on behalf of *things*” (ibid, emphasis in original). Harman draws from Heideggerian tool-analysis the two very interesting concepts of “ready-to-hand” (*zuhanden*) and “present-at-hand” (*vorhanden*). The first concept – ready to hand – is the relation humans have with things, without thinking about them in their everyday. It relates to a practical and manual involvement with them by “taking them for granted, by silently relying on them as we direct our attention elsewhere” (ibid). The hammer is there for hammering, the pen for writing, the knife for cutting, etc. But this withdrawal, this invisibility of the artefacts can be suddenly disrupted; like the example of the broken hammer that “brings our labour to halt and makes us see it for the first time “as” a hammer” (ibid). Consequently to this sudden awareness, the thing becomes present-at-hand, as active elements that take part in the human action.

At this stage, I can only agree with Harman, since he tries to find in Heidegger’s work some conceptual allies – like I do with Merleau-Ponty – against the phenomenologists’ tendency to take a quick way when they have to describe human’s perception to their environment, and not taking into account their continuous participation – their *minor grip* – in the

composition of the human being touching/touched relation with the environment. With this premise, one can perfectly understand why Graham Harman tries to convince Latour to think *with* Heidegger by giving “a fresh look at *Zuhandheit*” (2010: 44). However, as with Foucault, there is always a tipping point that reveals the limits of the compatibility between the philosopher and the theorist.

The following passages can illustrate this Gordian knot. Harman starts by writing: “[w]hat phenomenology misses is the readiness-to-hand of equipment, the brutal subterranean action of entities prior to being seen, broken, theorized about, or revealed” (2005: 269). So far, so good. This follows the same spirit of Latourian project of highlighting the reductionist attitude of traditional philosophy that has neglected the importance of artefacts, reducing them to the category of missing masses of tools and instruments. But then, Harman immediately adds in the next sentence: “Put differently, phenomenology fails to ask about the *being* of objects” (ibid, emphasis in original). This remark might look trivial, but as I will show this question of the *being* – the existence – of objects encompasses the real incompatibility between Latour’s social theory and an object-oriented philosophy. And this limit is irrevocable despite the fact that Harman intends to propose a new reading of Heidegger that would move aside all the technophobic elements in his “question concerning technology,” when he states:

Yet Heidegger draws a more sweeping and more unjustified conclusion, deciding that the problem lies with object themselves; objects now become lepers and outcasts in his philosophy, as he tries to shift attention to human access to objects. (...) This abandonment of objects in favor of the conditions of *human* access to objects is the greatest philosophical catastrophe of the

twentieth century. It cost Heidegger two decades of his prime, and prevented him from becoming an even more original philosopher than he was” (ibid).

This does not prevent Harman trying to save what is useful in the Heideggerian conceptual tool box and to offer a philosophy oriented towards objects. He gives a very summary of his own Object-Oriented philosophy:

How can we best preserve the spirit of Heidegger’s breakthrough? First, we should keep his negative insight that objects are not something represented or physically presented-at-hand and try to develop a better positive concept of the alternative. Second, we should extend the philosophy of things to cover all objects: not just romantic peasant artifacts and Heidegger’s favourite artworks, but also mosquitoes, cellular phones, orchids and cola. This requires that we turn to the competing philosophical tradition of Whitehead, for whom all objects, all ‘actual entities’ are on equal footing. Finally, we need to regain a sense of the life of things amidst each other and not merely their practice of concealing secrets from humans. But all three of these points can be expressed in a single formula: *We must return to metaphysics* (ibid: 271).

I understand and respect his intention to preserve the spirit of Heidegger: we all admire some writers or artists that we grow attached to and want to defend through thick and thin. I would also say that I also go along with his two first points: the heterogeneity of the cases studies of this thesis gives proof that I intend also to highlight the role of non-human agents in the constitution of what are called society, humanity or culture in the broad sense. But the third proposition is a real point of contention because it implies that things might have an actual sense of life, an inner life, an *existence*. The attentive reader can understand why

this concept, as it is presented by Harman, is not compatible with my Latourian conceptual toolbox. If I could answer Harman, I would say that: yes, you are right: some metaphysics can be of some help here but not the one you offer, and I will explain why.

As I have said before, everything should not be totally compatible between theorists to become allies, but I can clearly see issues in the style and content in Harman's intention to reconcile Latour with Heidegger. First, the *style*. I would say that they are not in tune with one another. As Timothy Rayer would say, they do not "share the same way of thinking," as for instance Foucault and Heidegger do: "Foucault thinks with Heidegger to the extent that he recapitulates the basic form of Heidegger's philosophical practice. Obviously, this makes Foucault and Heidegger philosophical compatriots of some sort" (143). No, Latour and Heidegger are clearly not "philosophical compatriots," to use Rayer's formula. They might play their tune on the same symmetrical ontological axis against Kant and Descartes, but the directions of the movements are very different. They might both want to defend things against essentialism and reductionism, but their arrangements are very different. While Latour's *ritornello* emerges from a multitude of co-constitutive correlation of relations, networks, lines and agents; Harman's heterodox Heideggerian tune speculates about entities –only non-humans, admittedly – and the depth of their mysterious existence, of their inner life. While Latour urges theorists to adopt a more empirical and technical approach, Harman pushes them to even more metaphysics and speculation. Latour reminds very clearly in *We Have Never Been Modern* that:

Those who have failed to undertake empirical studies of sciences, technologies, law, politics, economics, religion or fiction have lost the traces of Being that are distributed everywhere among beings. If, scorning empiricism, you opt out of the exact sciences, then the human sciences, then traditional philosophy, then

the sciences of language, and you hunker down in your forest – then you will indeed feel a tragic loss. But what is missing is you yourself, not the world! Heidegger's epigones have converted that glaring weakness into a strength. (...) No one can forget Being, since there has never been a modern world, or, by the same token, metaphysics. We have always remained pre-Socratic, pre-Cartesian, pre-Kantian, pre-Nietzschean. No radical revolution can separate us from these pasts, so there is no need for reactionary counterrevolutions to lead us back to what has never been abandoned (66-67).

Now, the *form*. Whereas Latour uses Serres's neologism "quasi-object" and "hybrids" precisely to bypass the metaphysical rabbit hole of the question of existence, Harman undertakes a revival of Husserl's model of intentional objects in order to reach the "inner volcanic structure of objects:"

My thesis which will sound strange at first, is that everything in the world happens only on the *interior* of objects. Since objects cannot touch one another directly they must be able to interact only within some sort of vicarious medium that contains each of them. The inside of an object can be viewed as a volcano, kaleidoscope, witch's cauldron, steel mill, or alchemist's flask in which one thing is somehow converted into another. (...) Hence, it seems that the field of intentionality is the furnace in which the labors of the world are accomplished. In other words, the solution to the problem of how objects relate is found on the core of objects themselves. (2010: 131,134).

What he calls "vicarious medium" seems to refer to Merleau-Ponty's notion of "flesh" or "chiasm" that defines the "the gap between subject and object by stressing that, in fact, these

two are always already intertwined thanks to the intentional engagement of human beings and the world” (2005: 112). Therefore, he totally rejects any notion of potentiality – or affordance – by saying: “[t]o speak of a quality in terms of its potential is already to speak of it from the outside, to objectify it rather than to clarify its ontological status” (2010:103). My question would be then: if the theorist does not speak from the outside, from the situation of a relation, where can she talk from? It seems that for Harman, the thinker should try to get inside the thing, and talk from *there*.³⁰

It seems that his theory of objects is loaded with what some thinkers call a “symmetrical ontological confusion, which juxtaposes the thing-ification of human actions and definitions to the personification and spiritualization of things” (Pels, Hetherington, Vandenberghe 2002: 4). Everything in his theory creates some sort of “metaphysical black box:” the object is not anymore Marx’s fetish commodity filled with a mysterious message ready to be unveiled by the social theorist, but it is, on the contrary, the philosopher who fills it with hypothetical powers and intentions. He is just adding another layer of speculation on something – namely, critical theory – that does not really lack imagination when it comes to fantasise about technology. With this metaphysical position, there is no need to talk about “parasites,” “quasi-objects,” “hybrids” or “factishes;” there is no space for variation, formation, association, constitution since “every relation must form an object” (Harman 2010: 133, emphasis in original). In other words, there is no need in philosophy for more

³⁰ Harman attacks directly this idea of potentiality on another occasion: “[t]hus, ‘potentiality’ turns out to be a cheap recourse for those who like to say that they knew it all along, knew that things would come to this point, without having to negotiate each of the transformations from start to finish in the way that good storytellers do. Potentiality is to philosophy what ‘Whig history’ is to history. Appealing to a magical potency is no less absurd than if Gibbon had ended his massive work on Roman decline with the phrase: ‘Remus and Romulus should have known that it would come to this’” (2007: 40).

scientific and empiricist enquiries, which are to be replaced by a speculative metaphysics drawn from Heidegger. Patricia Clough summarises the situation saying:

For Latour, every object comes into being in relationship, a relationship that traces the object's affect on other objects. Harman differs, arguing instead that objects are not reducible to their relations. No relation exhausts an object; it endures beyond its relations. Harman is taking a more radical object-orientation than Latour, Gilles Deleuze, or Alfred North Whitehead (Clough 2014: 39).

To Harman's "metaphysical black boxing," Latour would certainly answer: "[t]hings may have cryptic, hidden qualities nestled in the core of their being, but we only come to know the way things are by way of relation" (Foster 9). Unlike Harman's object-oriented philosophy, Latourian theory is based on relations rather than entities, because only relations give the flexibility to think all the different scales of all the social phenomena that have "to be composed, made up, constructed, established, maintained and assembled" (Latour 1999b: 113).

In conclusion, I would say that Latour also talks about "existence" and "technological intention," but in its different *modes*. As Foster says: "Latour's concern is not to explain existence *into* (whatever that might involve). His project is to explain how small pockets of existence are sometimes configured or transformed into new modes of existence" (9, emphasis in original). This means de facto that a Latourian anthropology of things and beings is more than open to metaphysical allies, and there is not only Heidegger out there. As I will show in the following chapters, he is better off with philosophers like Baruch Spinoza, Gilles Deleuze and Etienne Souriau, who prefer to look for unexpected multiple *modes of existence*, rather than an revisited a Heideggerianism that would offer only one

option to reduce all the richness of exterior worlds to be composed and decomposed by things and beings to a unique and authentic inner world of objects.

Chapter 3

On Different Modes of Assembling a Barbed World

From Fields to Camps: a Brief History of Barbed Wire

Imagine you are walking on a lovely spring Sunday afternoon in the countryside. The weather is nice, so you wear very light clothes, exposing your skin to the warming sun rays. All around you are just blooming flowers and green fields and trees as far as your eyes can see. You slow your pace, because you have just noticed a lovely pond beyond a row of oak-trees: this is the perfect spot to rest for a bit, before heading back to the car park of the small pub where you have left your car. You cross the small path that goes near the oak-trees, and you only have to step over the mass of ferns to arrive to the lovely pond. But, suddenly, your left foot is trapped, and as you try to push forward, you feel a sharp thing that goes through your trousers and tears your skin. You trip and try to grab something with your free hands, but they can only soften the unavoidable fall of your whole body on the moist grass. It is only when you turn your face, distorted both by astonishment and pain, towards your right leg where small dots of blood start to appear through the light fabric of your trousers, and your still trapped left foot, that you can now see it: barbed wire. And the first question that emerges in your mind is: *how does this thing get to be here?*

It depends on who you are asking. An historian or archaeologist would certainly answer that it is where is *meant* to be: in the middle of the fields, as it has always been since its invention by Joseph F. Glidden about two hundred years ago to protect animals on the

American Frontier.³¹ But as Olivier Razac states, in *Barbed Wire: A Political History*, this cheap and flexible “thorny fence” was soon to be tested also on humans in a young American nation where it played its first major political role in “the loss of the three fundamental Native American values: open space, nomadism, and egalitarianism” (2003: 29). Allan Krell, in *The Devil’s Rope*, mentions that from an early state barbed wire were effective thanks to their ability to be “naturfact,” that is to say their “deliberate attempt to copy an organic form that functioned effectively as a deterrent to livestock” (15). So the destructive, deceptive and controlling features are the making of the essence of barbed wire, which was often referred to as the “The Devil’s Rope” not only because of its material impact on the division of lands, but also its important treat for the psychic. Rivieli Netz tells us in *Barbed Wire: An Ecology of Modernity* that later during the Boer War in South Africa (1899-1902), when the conflict rapidly moved into guerrilla and contraguerrilla warfare, the British troops, following the maxim divide and rule, put barbed wire and garrisons along the railroad network to protect it from the Boers’ attacks. This mechanism of controlling space would gradually divide the South African territory into small cells that would block the movements of the Boer guerrilla groups, which if not killed, would be taken prisoner and join their families who had been moved to what were already called “concentration camps” (Netz 61-69).

A few years later, the Russo-Japanese War (1904-1905) and later the First World War would prove the effectiveness of the barbed wire trenches, where their association with the

³¹ There has been various stories about the litigation of the invention of the barbed wire at the end of the 19th century, but it seems that there is a sort of consensus among the scholarship to say that Joseph F. Glidden, who would receive the legal support of the United State Supreme Court in 1896, to be considered as the official “winner” in the battle for the title of the barbed wire’s official inventor (Krell 24).

machine-gun demonstrated to be very effective association in defining the modern space of warfare:

Barbed wire acted here – as it always did – as part of a system. In this new context of machine guns and an overall rising violence, the violence implicit in the barbed wire itself was, in turn, multiplied. Together with the machine guns, it formed the perfect obstacle (ibid: 103).

The legitimacy of barbed wire as an instrument of control over motion was completed when it moved from the battle fields to become a standard element of the infrastructure of the prisoner-of-war camps, in association with the standing buildings and armed guards. For instance, in the Gulags, due to the remote areas usually near the Ural Mountains and the shores of the White Sea – where the prisoners were sent, there was no real need of guards since there was nowhere to escape to these inhospitable places. Thus, the two main instruments of state control were barbed wire and tractors. Both would enter into the complex system of agricultural collectivization project shaped by the Soviet decision-makers: “first, remove the richer peasants, and second, arm the poor with the technology that would conquer nature” (Netz 180).

The historians are of one mind when it comes electing the most horrific use of barbed wire: the Nazi death camp. It stays in the modern collective unconscious, at least in Europe, as the most powerful symbol of the horrors in the last hundred years. The concentration and death camps acted as the most extreme materialisation of the Nazi segregation system. There is no need here to remind the Nazi regime’s obsession with the control of a living space (*Lebensraum*), which had be protected against what they considered parasitic ethnic groups. After the Wannsee Conference, in 1941, the Lager would be the nuclei of the Nazi

apparatus for the Final Solution. Like in the American West, in the system of the concentration and death camps, the barbed wire played an important role in the separation between civilization and what the Nazi regime called “parasites,” between humans and “beasts,” between life and death:

[f]or the inmates of the SS camps, barbed wire was not a trivial detail. It was the unique defining feature of their landscape. (...) It should be added that the fences were particularly tall (in Auschwitz, for instance, thirteen feet high): horizons were literally limited so that even the sky would be dominated by an ever-present barbed wire (Netz 209-210).

The history of the barbed wire is full of examples that imply a direct relationship between the control of space and the violence imposed to the bodies, humans or non-humans, on a mass scale.

Tragic history of a “bad” old thing, as Brecht would say. Theoretically, Netz says that “[b]arbed wire has lost the centrality to history that it enjoyed from 1874 to 1954” (234). In an age of globalisation and the internet, the prevention of movement should be totally obsolete. In practice, however, Razac argues that the barbed wire is still present in our modern everyday life, in association with other technologies like video surveillance. Despite the new technologies of control and surveillance, barbed wire still holds its powerful role in the symbolic imaginary of the twentieth century horrors:

A picture of barbed wire alone is enough to evoke the concentration camp’s prisoner and oppression. It has become a graphic symbol for incarceration and political violence. It links three modern disasters: Indian ethnocide, the butchery of the First World War, and Nazi extermination (Razac 2003: 63-64).

Razac understand barbed wire as a technical instrument that participates in the reinforcement of the “relationship between spatial delimitation and surveillance, a connection which has important present-day political consequences” (ibid: 74). And frankly, the recent state of affairs proves him to be right: it is incontestable that barbed wire is still massively used to mark the borders between two countries; and not only in so-called third world countries. We have seen these last years the massive barbed wire fences and refugee camps built in the countries of South Eastern Europe as the EU response to the migrant crisis. It seems that today more than ever, Razac is right when he writes that “[s]ide by side, the camps and barbed wire continue their uninterrupted march through history,” and he quickly adds that “[barbed wire] has, however, disappeared from our daily landscapes, that is, from the urban zones of liberal democracies” (2003: 103-104).

Before going further, it is worth noticing that Netz and Razac’s accounts highlight two important facts about barbed wire. First, through their respective historical retrospectives, they underline how, throughout modern history, barbed wire imposed itself as a standard instrument for terror and control of lands and people. Then, they also have the merit of reminding us that barbed wire, as any technology, is a socio-technological phenomenon, which means that its existence shapes and is shaped by the social and economic relations of the context where it is used. Netz, for instance insists, very clearly on the materiality of any kind of history, about an environmental or ecological history of the barbed wire, considering that “[i]f history is about flesh-and-blood individuals interacting in material space, it also follows that history is not confined to humanity alone” (228). Razac echoes this general remark, but in his own account gives it a radical twist by offering a (neo) Foucauldian understanding of the biopower of the concentration camps that divided between those who live and those who die. Here the situation gets tenser.

In the French version of his book,³² Razac makes a reference to Giorgio Agamben's *Homo Sacer: Sovereign Power and Bare Life*, where the latter offers a (Heideggerian) revision of Foucault's biopolitical theory. Agamben uses the term "thanatopolitics" instead of "biopolitics" to emphasize that generalisation of the state of exception aims at a total imposition of a grey zone without any possibility to escape:

Along with the emergence of biopolitics, we can observe a displacement and gradual expansion beyond the limits of the decision on bare life, in the state of exception, in which sovereignty consisted. If there is a line in every modern state marking the point at which the decision on life becomes a decision on death, and biopolitics can turn into thanatopolitics, this line no longer appears today as a stable border dividing two clearly distinct zones (1998: 122).

His radical reading of Foucault asserts that biopolitical measures are not modern phenomena, but have been there since antiquity, and found their most extreme level in concentrations camps and continue today in modern societies:

There is no return from the camps to classical politics. In the camps, city and house became indistinguishable, and the possibility of differentiating between our biological body and our political body – between what is incommunicable and mute and what is communicable and sayable – was taken from us forever (ibid: 188).

Agamben says roughly that the logic of the exception of the totalitarian regimes still persists in to the logic of sovereignty in the Western democracies. One does not have to analyse

³² Unlike in the English version of his book, Razac makes a clear reference to Foucault work in the French new edition *Histoire politique du barbelé* (2009).

deeply this statement to already understand why this is problematic with what I am trying to do in this thesis. Once again we are back to the Foucauldian technophobic epistemology that privileges only two ideal actants: the body and history, but filled with a dose of Heideggerian pessimism and a residue of Benjaminian messianism.

But let's bear with Razac a little bit more. In a section of the French new version of his book, the French historian sees barbed wire as a major technological step in Agamben's history of the virtualisation of the body and social territories.³³ The barbed wire is presented as a virtualisation of the wall thanks to an economy of materials, but also to its mobility, flexibility and discretion. He argues that all these material qualities make the barbed wire a perfect instrument to set the biopolitical mechanisms of "normalisation" of people's behaviour (Razac 2009: 143-159). It becomes clearly, in association with the camera, the perfect apparatus for a panoptic effect on the citizen that would feel constantly under surveillance. It enters the continuous history of the modern concertation, which obviously never stopped until today, with famous examples in the Palestinian territories, in Guantanamo and most recently the refugee camps in Greece. Razac adds that barbed wire, in European societies, has become one of the most powerful symbols of political oppression, which has reached a certain metaphorical autonomy since it does not need any more a reference to clear situation to arouse a feeling of unbearable political violence just by seeing it (2009:190). The violence is visual, symbolic: it is more subtle than the wall, the guard and the machine gun. It is based on the material discretion and flexibility of the barbed wire that fit perfectly the invisibility of the biopolitical regime. Razac's account supports the Agambenian idea that "the camp as dislocating localization is the hidden matrix of the

³³ Somehow, the section called "la virtualisation des delimitations de l'espace" has been omitted in the English version of the book.

politics in which we are still living, and it is this structure of the camp that we must learn to recognize in all its metamorphoses into the *zones d'attente* of our airports and certain outskirts of our cities” (Agamben 1998: 175).

I have to admit that Agamben offers a formidable conceptual tool box to analyse the *limit conditions*: the *homo sacer*, the banned creature who is reduced to bare life by a political system. There is no point denying that this biopolitical situation exists in the margins of modern societies: capitalist reality is cruel and terribly unfair. However, these are *limit situations* – the camps, the *zones d'attente*, the Palestinian territories, etc. – that cannot apply to other situations. Once again, it is an apriori moralism that reduces technology to its most basic functionality. We are following here what Michel Serres describes as the “detective logic of judgmental philosophies:”

For one, these philosophies took up a position like spying, like looking over the shoulder of someone with something to hide. This position immediately invokes a third person, who in turn looks over the shoulder of the second, who now is also under suspicion, and so on, ad infinitum. This argument, a renewed version of the *third man*, opens up a vista of ongoing cunningness, like a succession of policemen and felons. As a result, philosophy becomes like a police state; in fact, every police force requires another police force to police it. (...) This launches us into a “detective” logic. And the best detective is the one who is never interrogated, who places himself in a position beyond suspicion. The critic's ultimate goal is to escape all possible criticism, to be beyond criticism. He looks over everyone else's shoulder and persuades everyone that he has no shoulder (1995: 133, emphasis in the original).

Indeed, if the political space of modernity itself follows the paradigm of the concentration camps, as Agamben seems to suggest, then what is the weight of any critical thinking in such a suspicious world?

Once again, the objective here is not to deny that technology can be an instrument of oppression. In the case of barbed wire, it is hard to deny that it often plays this role, but *mostly* does not mean *always*. This might look trivial but this ontology of adverbs takes us away from the classic paradigm that presents non-humans only in their instrumental mode of “objects” or “tools.” One could admit that in Razac’s account, barbed wire has been granted some sort of (negative) agency: it not a “missing masse,” but an eminent “lieutenant” in some of the most dark periods of the history of humanity, being an important actant that is inscribed with an important task, and in turn prescribing some “discipline” or “apprenticeship,” as Foucault or Mauss would put it. Yet its agency is still limited to acting as the instrument of the textualism of the history book, and the ideology it promotes: it operates in “sub-discursive manner” in the historical and political text (Marres, Lezaun 494). It is an important tool, but a tool still.

The historical perspective thus adopts a teleological understanding of the artefacts: “asking what a thing is for rather than what it *is*” in the specific context (Knappett 102, emphasis in original). Of course, the oppressive instrument mode of existence is hardly debatable when applied to extreme contexts like concentration camps in the European cultural sensibility. It is also hardly questionable that the barbed wire has become a visual icon of both physical and ideological freedom – as evidenced by Amnesty International’s famous logo.

The question is then to find out now that the barbed wire became such a power symbol of control and oppressions if there is any other way to see them as they are outside of detective

logic of judgmental philosophies, as Serres would say? If one can find another (con-) text that would testify another mode of existence for this artefact?

Who seeks, finds. I found a first path in Allan Krell's book, which offers an alternative discourse about it by getting barbed wire out of the limiting context of war zones, concentration camps and occupied territories. More specifically, it is the second part of *The Devil's Rope* that offers an interesting path to a reconsideration of barbed wire as not only an instrument of oppression and separation, but as a commodity. He mentions that in the 1960s United States, it was a trend to collect barbed wire (140). But I was about to find many more new ways to tell the story of barbed wire, as I explain it in the next section.

Instauration of a Photographic Exhibition

In his review of Etienne Souriau's book *Les différents modes d'existence*, Latour refers to the work of this forgotten philosopher – who despite his metaphysical background – as a great ally in his project to overcome the modernist “habit of asking questions either about language or about ontology” (2011: 309). But more specifically, what pleases Latour is his notion of “instauration:”

Souriau is a metaphysician who always operates on the privileged ‘field’ (if I may say so) of the reception of the artwork, all the better to grasp his key idea of instauration. How can we come to terms with the ‘work to be made’ (*l'oeuvre à faire*) if we avoid the necessary choice between what comes from the artist and what comes from the work? This is what really interests him, rather than aesthetics as such (ibid).

In his experience of art, Souriau is interested in the fact that nothing is given in advance, and the work of art would take form, be made, progressively with the contribution of at least the two actants:

But this growing existence is made, we can see, of a double modality that finally comes together, in the unity of a sole being progressively invented in the labouring process. Often there is no warning: up to a certain point the finished work is always a novelty, discovery, or surprise. So that's what I was looking for! That's what I was meant to make! (Souriau, quoted in Latour 2011: 310).

It is with this Souriauvian motif of “instauration” in mind that I had the idea with two colleagues to plan the “instauration,” of a photographic exhibition, *called Barbed Wold: A Photographic Exhibition* (image 1). The two co-authors of the exhibition are Miriam Grossi and Alberto Marti, both PhD students in the Department of Spanish, Portuguese and Latin American Studies at the University of Nottingham. The photographic exhibition was open to the public from the 1st March to the 18th March 2016 at the University of Nottingham, and was formed of around 100 pictures taken since May 2014 in different locations in Brazil, Cuba, Czech Republic, Italy, the Netherlands, Spain, United Kingdom and the United States by Alberto, Miriam and myself. All of the pictures are reproduced here with the formal consent of their respective creator. The general objective of the exhibition was to encourage the visitors to first notice the barbed wire on the different pictures, and then to think about its interaction with the infrastructure around it. My personal objective was to see if I could find an alternative to the normative representation of barbed wire in history books, which represents barbed wire as a tool of oppression and division.

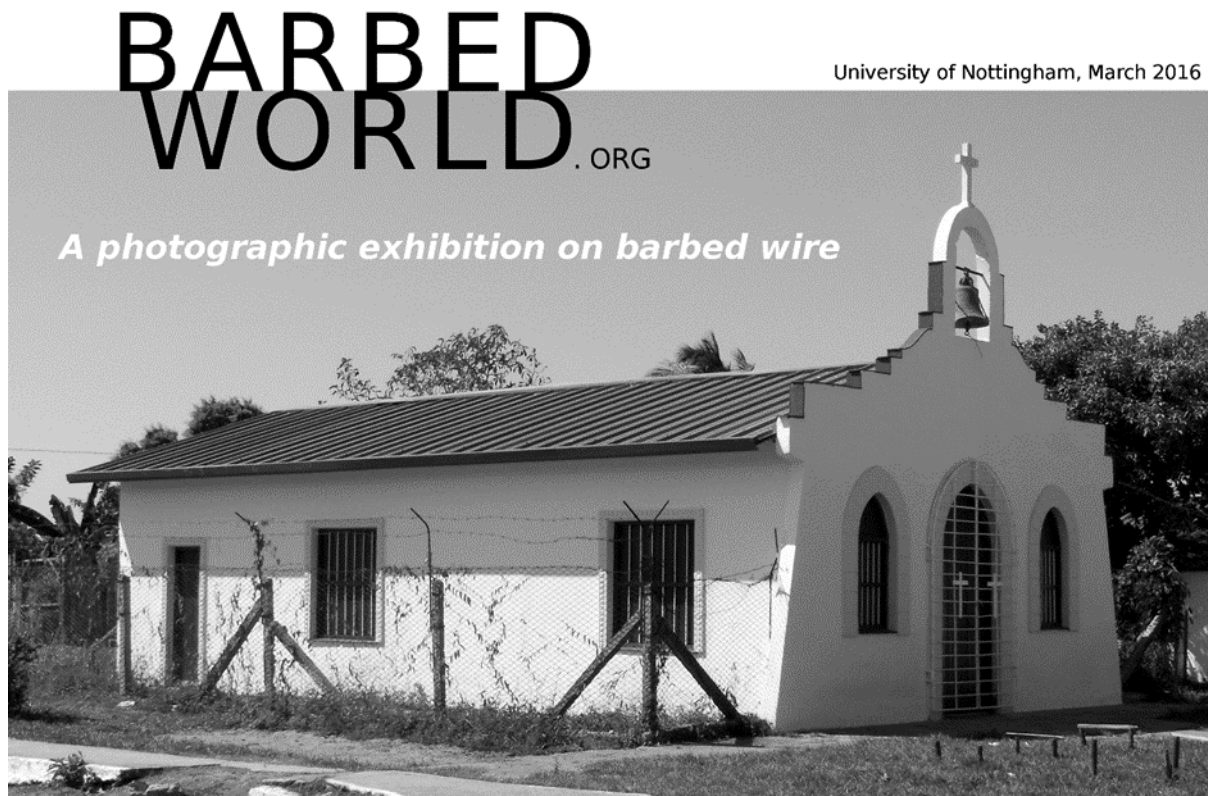


Image 1. Poster used to promote the exhibition (courtesy of Alberto Marti).

I imagined the organisation of the opening event in three movements that would progressively lead the visitor from the familiar to the unfamiliar perception of the barbed wire: *gathering*, *wondering* and then *wandering*.

Gathering. The first thing was to regroup people for the event. So we had the idea of a round table, where four academics from different disciplines offered each a short paper on the barbed wire's capacity, despite its minimal aestheticism, to generate disturbingly deep difference between private and public spaces. The talks focused on the contexts of war and POW camps, but also with the on-going issues such as migration, which imposes practices of inclusion and exclusion in modern societies.

Wondering. Then the visitors were introduced to the place of the exhibition – a long tunnel under one of the buildings on the University of Nottingham campus – by a very simple and

short panel that was mentioning rather the aesthetic and personal interaction with the artefact in our everyday life (image 2). The intention was to make a contrast with the classic discourse about barbed wire, and bring the visitor's attention to this artefact that is paradoxically designed to go unnoticed. The spirit we wanted to transmit to the visitor was very similar to what Ian Bogost description of "wonder" when he writes:

Science, like philosophy, has assumed that wonder is always a type of puzzlement, an itch meant to be scratched so we can get on with things. But, for the child, a computer or a robot or a cake or a definite integral is not merely a wellspring for a possible future career, or even a vessel for play, work, sustenance, or measurement. It's an object worthy of consideration for its own sake, a thing of wonder (Bogost 129)

Wandering. But the real "growing existence" for another modality, to use Souriau's terminology, occurred progressively when the visitors started to walk along the tunnel, go back, go forward in order to get the "maximal grip" of each picture. We deliberately did not put any pre-conceived explanatory texts – except from small cards with the date and the place where the picture was taken – to let the visitor interact mostly with the pictures. There was thus an emphasis on the forms and their interconnections, the visual interaction with the series of pictures, rather than on a pre-established text guiding the viewer to a certain consensual understanding of the barbed wire and its use. The idea was then to constitute a network of the images that would potentially disrupt the a priori representation of the barbed wire, to bring to a limit the textual historical consensus.

being, and this despite the demand that they be distinguished. This is Souriau's most important innovation in philosophy. He devoted his whole career to it, giving it the wonderful name of *instauration* (2011: 309, emphasis in original)

Latour's demand for theoretical allies is quite clear: he wants to enrich the ANT conceptual toolbox to in order to reintegrate better empirical missing masses into theory. He might find a theoretical ally in Maurizio Ferraris, who also claims in *Positive Realism* more space for the thing to "invite," keeping in mind, "the idea that, at least, to some extent, meanings are in the world, embodied in objects which offer us affordances – to use Gibson's term" (2015: 1-2).

Contra a realism based mainly on language and previous knowledge, Ferraris proposes a "positive realism" that advocates the bridging down the divide between commonsense and scientific knowledge, between perception and conception, between an *ontological reality* and an *epistemological reality* (Ferraris 2015: 52-53). Therefore, (human) reality is made mostly of these two modes, which are combined, but at the same time distinct. A text and an image are essentially part of the first mode – a certain representation of the outside, but in the case of the image, especially when it is a photograph that is part of an exhibition, the ontological dimension cannot be undervalued: it invites to a whole sensory experience: walking in the gallery, interaction with other visitors,...sometimes even touching them, however without reaching to have a full understanding of what they are:

Obviously, starting from the objects and their opacity involves being aware that a full totality can never be achieved, and that our relationship with the world is a confusing balance between ontology and epistemology. This, however, does not mean that the positivity of these objects is precluded to us. On the contrary, it is this positivity that allows us to be in the world despite the fact that our

notions are rarely clear and distinct. Being in the world, at this point, coincides with an attitude that could be summarized by two lines of T.S Eliot: “Oh, do not ask, ‘What is it?’ / Let us go and make our visit” (Ferraris 2015: 36).

Consequently, one could say that in material experience of an exhibition, more than in a book, the objects have the initiative, and are freer to deploy their capacity – their minor grip – to invite since they are less hidden beneath the imposing epistemological reality of the text — call it history, philosophy or even science.

Like Latour’s laboratory, one can consider an exhibition as a social technical assemblage place where *facts are made, not found* (Latour 1988c, Latour 1999, Foster 1920). The history book also is composed, by this work of instauration or constitution is less accessible: all the actants are subdued to a preconceived ideology, to a textualism. Said differently, in history books about barbed wire, the techniques that help to constitute the representation about the barbed wire are hidden beneath a very strong textuality which ends up reducing the barbed wire in its representation as an instrument of division and submission. Once, again the point is not to propose a moral judgment, but to see the mechanism of the history book, in order to understand how they are assembled. The aim was to offer the possibility, thanks to the exhibition and its own technique, of another mode of expression for barbed wire.

The result is an alternative to the mode(s) of existence depicted in the historicist narratives about the barbed wire. The issue is not that the barbed wire is enmeshed in a discourse – any text is a valid agent, but the problem is that this interference is hidden by a dominant and powerful narrative of the myth of progress of modernity that has for the three last centuries imposed its metaphysics of the dichotomy between subjects and objects to almost all the domains of knowledge. If the exhibition succeeded in opening some space for the

imagination then it means that we are not forever stuck with a monolithic representation of the ontology of the barbed wire as a problematic object composed of alienating forces of oppression imposed by a (totalitarian or capitalist) ideology; but rather a composing agent that can exist in a different way depending on its interaction with the socio technical assemblages that form an event, a phenomenon. If the exhibition succeeded in presenting another narrative of the barbed wire then it would show that the modern project is about creating these kinds of hybrids: composed and composing society. I have in the previous chapters highlighted that modernist philosophers and social thinkers are very prompt to explain – and denounce – the industrial mechanisms that produce the technological instruments that will dehumanise and exploit human weakness in the benefit of powerful objective forces. I cannot agree more with Stengers when she says: “I do not think we can renounce the reference to progress, for we no longer have any choice: once the question is posed for us, we are defined as the heirs of this reference, free to redefine it, perhaps, but not to annul it” (2000: 152). But, usually, they forget – or omit – to investigate the composing role of the same technological instruments in the composition of the industry or even of their moralising discourse about “modernity,” “progress” and “society.”

Actually, once the social theorist has recognised the composing role of non-humans, once she grants them a sort of social life, then she understands that “socially constructed” is only one half of the social role of the sociotechnical actant, and that society cannot be seen as the origin of all social explanations since it is itself “composed” by the fabric made of the interaction of different elements. Then, non-humans do not have to exist below the bottom line of theory, history, or any other type of text. This does not mean that the one narrative is better or more authentic than the other, but it shows that there is always the possibility of imagining another genealogical alternatives than the linear teleological paradigm where the

objects are subordinated to social structures determined by ideologies and symbols or infrastructures and matter: it should not be one way or the other, but one way and the other. Contra any modernist or postmodernist position, I would say that the subject is not superior to the object – as it is promoted in the myth of the *homo faber* – and there is not an autonomous technology that would alienated the whole of humanity. As explained before, human history has from its origin been and will always be sociotechnical, which means that “[o]bjectivity and subjectivity are not opposed, they grow together and they do so irreversibly” (Latour 1999: 214).



Image 3. A view of a series of pictures on the wall crossed by a (plastic) line of barbed wire.

They do not reveal the justificatory work done by the association of archives, pictures, historical accounts and philosophical concepts that compose the textuality of their book: they just omit to mention how the phenomenon of the barbed wire is composed. The issue is then a problem of (re)presentation of the phenomenon: the historians offer a traditional

sociological version of the barbed wire as nothing more than a diligent tool that serves the ideological design of the human mind. The historicist perspective presents the artefact as an object closed into the textual or ideological structure of history, and does not disclose process of “translation” the novelty that emerges in the interaction between different agents and leads to the “displacement, drift, invention, mediation, the creation of a link that did not exist before and that some degree modifies the original two” (1999: 179).

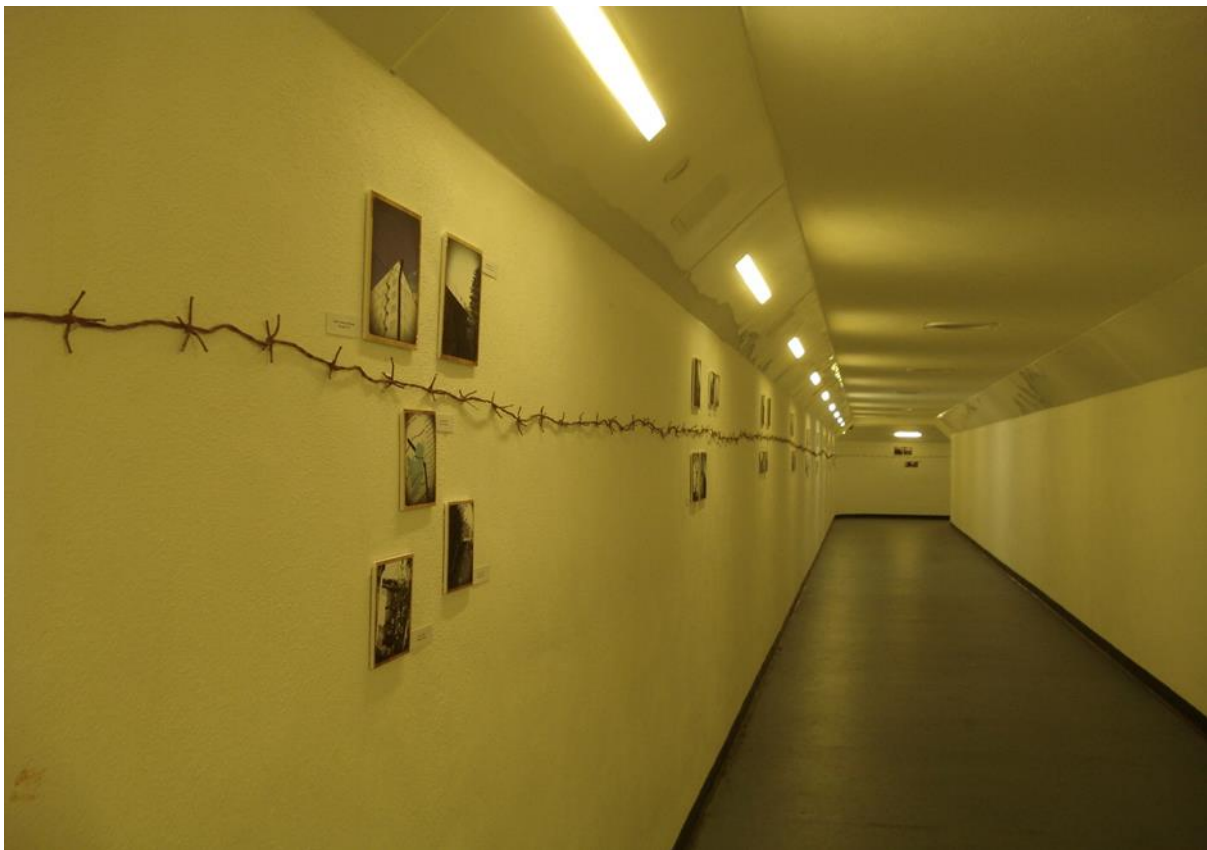


Image 4. Another view of the tunnel where the exhibition was held.

The artefact becomes symmetrical with all the other agents, which means that they are co-constitutive, depending on what each one afford to the other, which consequently lead to more than one mode of existence. Therefore, in the photographic exhibition – like in Souriau example of art – the multiplicity of forms is much more obvious because they are not under the yoke of a text. If anything, they are at the same level of the a priori judgement of the

visitor. Unlike in the history book, the mode of existence in the exhibition emerges (or not) after the interaction between the picture and the visitor, and not before.

Evidence of the greater flexibility of the exhibition space, compared to the history text, is that some of the pictures could perfectly fit in a history book and others do offer another mode of expression. For instance, the picture taken in Uberlândia would fit perfectly a historical discourse similar to those defended by Razac and Netz, by being a great illustration of a panoptic system of surveillance composed by barbed wire in association with the small window (size and shape are important here) and the small camera (top of the wall, on the right) (image 5).

Another example is the picture taken in a rich neighbourhood in Rio de Janeiro (image 6). In this case, the representation corroborates the epistemological reality that Netz, and to some extent Agamben, defends. The very high barbed wire fence, in addition with the steel picket fence and the street lamp (light is on, even during day time), acts as an instrument of intimidation and segregation between two group of people: the rich and the poor.

Some pictures tell a totally different story. Like for instance the image of the plastic bag trapped in the barbed wire in Beeston (image 7). It is really intriguing and “invites” us to wonder about the journey that guided the bag from being composed and decomposed on its way to meeting people and things. The picture taken in the Peak District also gripped the visitors’ attention (image8). Some of them were telling me that it made them imagine the poetic and mysterious itinerary of this paupus – made of a mesh of fine hairs – that have travelled following different air waves or lines before getting trapped by the wire and composing a composition that got the photographer’s attention, and now the visitor’s too.

This brings us back to the question of existence I have discussed at the end the previous chapter. Against Harman’s Heideggerian vision, I would argue that the changing modes of

existence of barbed wire through the medium of the picture imply that there is not authentic inner life of objects, but rather lines and variations that cross all beings and things, changing them and being changed by them. One could say that the context of the exhibition is a more open space than the history book. It is like an amplifier of the various potentialities of barbed wire. But it is also worth noticing again that I am not posing a moral judgement here: I am not saying that exhibitions are good and history books are bad, but rather it is a question of variation or scale. The difference might be that in the context of the exhibition, the visitor is more aware of the fleshiness or the textuality of the world thanks to the photography, that is a wonderful agent, when it comes to amplify what anthropologist Tim Ingold calls the “textility of the world” (Ingold 2000, 2015). The next section is then dedicated to I what call in a Merleau-Pontian way the minor grip of the photograph in our perception of the flesh of the world.



Image 5. Picture taken in Uberlândia (state of Minas Gerais, Brazil), June 2015.



Image 6. Picture taken in a rich neighbourhood of Rio de Janeiro (Brazil), June 2015.



Image 7. Picture taken in Beeston (Nottinghamshire, UK), October 2015.



Image 8. Picture taken in the Peak District (Derbyshire, UK), May 2014

The Flesh of the Image and the Textility of Making

Jacques Rancière asserts in *The Future of the Image*, that in any representative regime, “[v]isual and textual elements are in effect conceived together, interlaced with one another” (2007:35). This means that there is not competition between one medium or the other, but rather different way of interacting and composing with other social actants in order to form what he calls the “community of the sense” (2009: 32). However, like Latour, Rancière notices that modest purists have been busy separating this intimate bond, which leads them to once more talk about the master narrative of aesthetics that has been established in the two last centuries which ends up in a “partition of the sensible”:

The point is that the radicality of "artistic autonomy" is part of a wider plot linking aesthetic autonomy with some sort of political-or rather metapolitical-implementation of community. Aesthetics-I mean the aesthetic regime of the identification of Art-entails a politics of its own. But that politics divides itself into two competing possibilities, two politics of aesthetics, which also means two communities of sense (Rancière 2009: 36)

This irreducible opposition between the two competing regimes is based on the traditional modernist dualism, but eventually dissolves under the postmodern practice of “montage” (ibid: 35). The best example of this hybrid form of art, caught between tradition and modernity, is photography. He invokes Roland Barthes to overturn the mainstream discourse about photography, and art in general:

[T]he sin of having wished to strip the visible world of its glories, of having transformed its spectacles and pleasures into a great web of symptoms and a

seedy exchange of signs. The semiologist repents having spent much of his life saying: Look out! What you are taking for visible self-evidence is in fact an encoded message whereby a society or authority legitimates itself by naturalizing itself, by rooting itself in the obviousness of the visible. He bends the stick in the other direction by valorizing, under the title of *punctum*, the utter self-evidence of the photograph, consigning the decoding of messages to the platitude of the *studium* (2007:10-11)

It is worth understanding here that Rancière's engagement with Barthes' *Camera Lucida* intends to show that unlike his early works, like *Mythologies*, the later ones try to promote photography as a practice and the notion of the image that transcend the social-ideological field of structuralism. He does that especially by foregrounding the ideas of *punctum* and *studium* that "both play on the same inter-convertibility between two potentialities of the image: the image as raw, material presence and the image as discourse encoding a history" (ibid: 11). Without going too deep into a Barthesian study of the images, let just say for now that "such is the rather heavy price to be paid for the desire to liberate the pleasure of images from the sway of semiology" (ibid: 15). Indeed, the sway of semiology is what subordinates the images to a certain ideology, making it a tool to support a discourse, as for instance it happens in Razac's book that uses photographic representations to support the mainstream socio-historical about barbed wire. But, as Rancière argues a purely historicist or semiologist that presents a critical thinking about images – or any kind of artefacts – keeps quiet the intertwined and complex nature of the images, which is also composing the discourses themselves. This central question of modernity and the politicisation between the image and the text echoes the Latourian demand for a more symmetrical social theory that goes against the "separation between the arts [which] is guaranteed not by the simple

fact of the absence of any common term of measurement between words and stone, but by the very rationality of modern societies” (Latour 2007: 40). Rancière’s passage shows that when it comes for the modernist thinker to constitute a fact, it is as much a problem of perception as of mobilisation: the scientist or historian has to gather the right agents to convey the audience or the reader. It is in fact this capacity, this art, or gathering all the effective elements that gives the phenomenon its “realistic” or “authentic” cachet.

In the cases of the historians like Razac, Krell or Netz, the realism of their discourse is to be found in its capacity to assemble, “to design,” all pictures, texts, archives, memory... into a coherent “product” that tells something about human behaviour and society. I deliberately use terms like “design” and “products” to show that there is no clear distinction between the forms of assemblage one finds in art and in industry. Despite their apparent differences, a painting or picture, like the APT or revolving door are subject to the same fundamental act of composition. They are all socio-technical things taken into the variations and lines of social relations and forces. There is no constitutive difference between art and technique, both are part of the general act “of constructing artefacts as a philosophical practice” that Ian Bogost, in *Alien Phenomenology*, calls “carpentry” (92).

Bogost offers an interesting motif here. He says that society is made of this carpentry made of entities that could be perceived through “ontography” that he defines by “the revelation of object relationships without necessarily offering clarification or description of any kind” (ibid: 38). The question is: would this concept be useful for Latour’s call for metaphysical allies?

The purpose of his ontographical project is to acknowledge the existence of the different things which are taken into the textuality of the discourse. Bogost asserts that the existence

of the different elements is even more hidden in scholarly production and literature because of the semiotic obsession that distracts our attention:

[W]riting is dangerous for philosophy—and for serious scholarly practice in general. It's not because writing breaks from its origins as Plato would have it, but because writing is *only one form of being*. The long-standing assumption that we relate to the world only through language is a particularly fetid, if still bafflingly popular, opinion (90, emphasis in original).

He charges any approach that gives a certain importance to the text as a correlationist or constructivist position, say that “the problem is not with lists but with literature, whose preference for traditional narrative acts as a correlationist amplifier” (ibid:40). I agree that the textualism in philosophy, literature and history does cast out many missing masses. But, Bogost position is far too radical, he does want to find a symmetry between semiotics and empirical experience, he goes straight for the ontological project – which he paradoxically writes in a book. Ian Bogost considers that the practice of carpentry, as opposed to writing:

[M]ight offer a more rigorous kind of philosophical creativity, precisely because it rejects the correlationist agenda by definition, refusing to address only the human reader's ability to pass eyeballs over words and intellect over notions they contain. While a few exceptions exist (...), philosophical works generally do not perpetrate their philosophical positions through their form as books. The carpenter, by contrast, must contend with the material resistance of his or her chosen form, making the object itself become the philosophy” (92-93).

His position is unfair with literary forms. And I accept then my position as a correlationist and say that writing is not one way form of existence, it can vary according to how the act is constituted. Unlike Bogost, I do not try to access a nonsemiotic world where things would

reveal their ontologies; I am more interested to see how the text, which I acknowledge as one of the many forms of what he calls textility, is made and might be changed. I am as interested to see how the discourse, as any other assemblage, intervenes to change the human perception about the world. I see books like a complex composition; in the same way I would look at machines, museum or food. I cannot agree more with Latour when he says: “[t]he fascinating thing in text as well as in artifact is that they have to thoroughly organize the relation between what is inscribed in them and what can/could/should be pre-inscribed in the users” (Latour 2008: 161)

Bogost’s position might be compared to what Bruno Latour considers as an “iconophilia” that refuses, or at best forgets, the art of mobilising and giving meaning to the world (Latour 2006: 57). Latour’s idea is to find a third way between this iconophilia that asserts that the signs, images and objects are enough to explain the phenomenon, and the iconoclast tendency of modernity – symptomatic of the critical gesture – to forget or to destroy the material components of the scientific discourse, into a purified form. He named this third path between two extremes as “iconoclash,” which became the title of an international exhibition that took place in May 2002 in Karlsruhe (Germany), and which aimed at presenting a catalogue of iconoclastic gestures in science, religion and art. Writing about the exhibition’s rationale, Latour says:

It is an attempt to turn around, to envelop, to embed the worship of image destruction; to give it a home, a site, a museum space, a place for meditation and surprise. Instead of iconoclasm being the meta-language reigning as a master over all other languages, it is the worship of iconoclasm itself which, in turn, is interrogated and evaluated. From a resource, iconoclasm, is being turned into a topic (2002c: 17).

As said earlier, it is with the same leitmotiv that we constituted our own exhibition. In an attempt to envelop, to cover, to bypass the perspective of the history books about barbed wire, but without falling into a radical ontological theory that would exclude it.

Despite his phenomenological radicalism, I think that Bogost's motif of carpentry can be useful to talk about pictures and paintings. Especially because, like Merleau-Ponty's concept of flesh, it offer a new way to overcome the Cartesian intellectualist perspective. Merleau-Ponty writes, in his essay "The Film and the New Psychology," that "[o]bjects and lighting form a system which tends toward a certain constancy and a certain level of stability – not through the operation of intelligence but through the very configuration of the field" (1964: 50-51).

He appeals to the notion of form (gestalt) to develop his understanding of perception as something that happens into things and not in the mind. This properly immanent experience will influence in his later works his original ontology that overcomes the tradition division between the mind and the world through the notion of *flesh*, which is a key notion to understand visibility – especially in art and visual culture – as a condition where the seer and the seen belong to the same ontological texture (Carbone 2011). The concept of flesh helps to overcome the classic Platonist perspective of images as copies of a model, of certain reality. It goes beyond the intellectualist perspective by saying that actually the image presents something that did not exist before, that it is not a copy or a reference to something prior to themselves. Thus the image is not a copy, a surface, but an important actant that create something new: the image is thus something more than a passive mediator in the interior mental representation of the material world; or, as the painter Paul Klee wrote: "art does not reproduce the visible, but makes visible" (1998:34). Drawing from Klee's conception of art, in his last published essay, "Eye and Mind," Merleau-Ponty sees in

phenomenology a similar effort to find a “new ontology” that would reevaluate the position of bodily perception against the classic Cartesian ontology:

Visible and mobile, *my body is a thing among things*; it is one of them. It is caught in *the fabric of the world*, and its cohesion is that of a thing. But because it moves itself and sees, it holds things in a circle around itself. Things are an annex or prolongation of itself; they are incrustated in its flesh, they are part of its full definition; the world is made of the very stuff of the body (1993: 124-125, my emphasis).

This notion of *fabric* can also be extended to language and texts, which are just other modalities of what Merleau-Ponty also calls the “flesh of the world.” But it is art, and more specially painting, that pushes further the effort that “does not so much toward choosing between line and colour, or even between figurative depiction and the creation of signs, as it has been toward multiplying the systems of equivalences, toward severing their adherence to the envelope of things” (ibid: 142). The act of painting, the gestures of the painter’s hand, thus goes back to the roots of the enigma of the bodily perception which sees and is seen simultaneously, and as Klee asserts: “[the painter] would have to have *a network of lines* so entangled that it could no longer be a question of a truly elementary representation” (cited in Merleau-Ponty 1993: 143, my emphasis).

These rich notions of “fabric,” “flesh” and “lines” had a great influence on anthropologist Tim Ingold who tries to overcome the lingering influence of classic way of thinking about things and “to replace it with an ontology that assigns primacy to the processes of formation as against their final products” that would replace the textility of making that have been devaluated by the hylomorphic model of creation (2010:92).³⁴ Ingold’s ontological claim is

³⁴ Ingold defines the hylomorphic model in this way: “[to] create any thing, Aristotle reasoned, you have to bring together form (morphe) and matter (hyle). In the subsequent history of Western thought, this hylomorphic model

that the textual, the technical and the textilic are made of the same original texture interwoven lines that compose a “meshwork” (2011:84). It does not take long to understand why Ingold’s “comparative anthropology of line” is a rich toolkit to understand the phenomenon of the barbed wire.

Despite the fact that I use and find his concept of meshwork compatible with a Latourian symmetry, I have to make clear that I do not adhere to Ingold’s animistic ontology (2011: 63). First, because I did not have the chance to share the rich and diverse experiences he had as an anthropologist. Then, because I think that his idea of going back to a more direct encounter with authentic raw materials is certainly usefully for a phenomenological or anthropological experience, however, it misses or eludes to answer to the lack of consideration in philosophical (and political) discourses when it comes to non-humans. He pays more attention to the substance (lines) than the modes of expression. His ideal being the Inuit’s conception of existence as a “movement along paths of travel,” he somehow misses or denigrates the depth and complexity of contemporary western live, which has to deal with the rapid growing “meshwork,” to use his term, where the modern human is stitched to due to the proliferation of technology and artifacts. As already mentioned, I do not intend either to enter into a conceptual policing campaign in this thesis – as Ingold does, for instance by opposing his, supposedly more authentic, concept of “meshwork” to that of “network” (see 2007a:80, 2011:70,92). I do not subscribe to this kind of nominalism, but if necessary, I admit that I am more inclined to side with Bruno Latour who does focus more on the constitution, the instauration, created by the relations between the different elements and the emergence of modes of existence of the different entities through their relations. In

of creation became ever more deeply embedded. But it also became increasingly unbalanced. Form came to be seen as imposed by an agent with a particular design in mind, while matter, thus rendered passive and inert, became that which was imposed upon” (2010: 92).

short, I am less interested in explaining why all beings are made of the substance (lines) than trying to understand their variation into different modes of existence. In short unlike Harman, Bogost and Ingold, I am less obsessed about origins, than by becoming.

According to Ingold's taxonomy of lines, the barbed-wire would be a thread that is enmeshed in the texture of a field, a book or a picture: they all emerge from a trail of movement where each element take part in the ongoing constitution of the other. Focusing on the primacy of movement, Ingold does not conceive the human (and non-human) as an entity thrown into or occupying a context already built. Instead he chooses to embrace a "dwelling perspective," which is based on the premise that "immersion of beings in the currents of the lifeworld without which such activities as designing, building and occupation could not take place at all" (Ingold 2011: 10). This primacy of movement can be read as an update of Merleau-Ponty's "primacy of perception," which, as I have already mentioned, despite being an effective critique of Cartesian theory of perception, is still too anthropocentric:

Generally speaking, our perception would not comprise either outlines, figures, backgrounds or objects, and would consequently not be perception of anything, or indeed exist at all, if the subject of perception were not this gaze which takes a grip upon things only in so far as they have a general direction; and this general direction in space is not a contingent characteristic of the object, it is the means whereby I recognize it and am conscious of it as of an object (Merleau-Ponty 2002: 295)

But also, the problem here is that, as I have mentioned in the introduction, it misses all the little masses that take part in its constitution. Still it is certainly a nice motive to illustrate the network that form the assemblage, the constitution of the exhibition with all the humans

and non-humans actants. Despite its defects, it is certain in this sort of context that Merleau-Ponty's grip – as a co-constituted bridge, line, flesh – between the world and the subject, shows it full potential.

Its significance lies in the act of perception, which is not anymore an internal representation of external state of affairs, but composes a meaning in the very process of the use or interaction with inherent potential of the surrounding things to reveal them. Therefore, one could say that the flesh of the images, composed of the lines of the images, is not something we perceive, but rather a something we perceive with. Once again, perception should be conceived as an movement that is not projected on passive images, but rather as a movement “to join with them in a material flows and movements contributing to their – and our – ongoing formation” (Ingold 2011: 88).



Image 9. This is a picture of the plastic barbed-wire we have used as a line along the wall of the tunnel. Visitors were often intrigued by this line, approaching, hesitating to touch it, not knowing if it was a “real” wire made of steel; and sometimes, even asking the curators where one can buy it, and for what purpose would people purchase this kind of item.

For the time of the exhibition, the overhang gaze of the reader – who perceives things through the network of the historical text – is diverted towards a more bodily perception that goes along the lines – composing and composed by the corridor, the pictures, the plastic barbed wire, the other viewers paths,... – discovering different contexts through the pictures that tell stories that are in most of the cases, if not all, much less tragic ones than those imagined by Agamben for modern democracies. The main goal of the exhibition was to offer an illustration of other modes of existence of the barbed wire – not only with the infrastructure and landscape illustrated on each picture, but also with the surface and properties of the pictures, the wall and the exhibition site in general – which would hopefully throw light on a series of issues concerning the relation between the barbed wire and the texts found in the historical accounts.

Consequently, the public or “recipient” is in a social relationship with the assemblage of pictures, they act as actants that are influenced and are changing them, in that the exhibition would not come into existence as an exhibition without its presence. It is their reception of the pictures that cause the emergence of the full potential of the exhibition as an original aesthetic work. In other words, the exhibition is made of the network of the pictures in the vicinity of the viewers (see Gell 1998: 24). The viewer is not a passive observer, he takes part by his perception in movement into the conception of the event: “The perceiver-producer is thus a wayfarer, and the mode of production is itself a trail blazed or a path followed” (Ingold 2011:12).

Extending the ecology of perception, from Merleau-Ponty’s phenomenology to Ingold’s anthropology of movement, to an ecology of attention, helps to politicize the debate. As I have already mentioned in the previous chapters, rethinking artefacts through the attention we show them leads to a reconsideration of notions such as fetish and reification, which

have been coined by Western Marxist thinkers. Refocusing on the question of non-humans in a society where objects never stop proliferating implies necessarily that we should recognise alienation as a necessary condition of the humans' new modes of existence. By showing the artefact modes of existence, one inevitably makes them public.

Showing the Common: “Making Things Public”

Eventually, this brings us to the question of what a context or an environment is, and its epistemological dilemma between a materialist and idealist positions. It is now clear that I am advocating an approach that presents the environment as not only structuring space, called nature or culture, which does not exist in itself, but as an assemblage that is there only in relation to the things and humans that are immersed in it and are composing it. This question of composition is at the centre of what philosophy is today, and Latour's demands of empiricism is aiming at nothing more and nothing less than that. It is an inexhaustible practical, intellectual and affective movement towards the *state of things*, As Michel Serres says:

May these questions never cease and, like the pieces of a mosaic, may they fill all of existence and all that can be thought about, from a blade of grass to the fate of the gods, but, especially, may the answers come less from books that are read and recited or from a packet of index cards than from direct and often painful experience of the state of things. Whoever does not construct a world-place by place, object by object, faithfully, with his hands, with his own flesh, creating a totality-is devoting himself not so much to philosophy as to criticism, logic, history, etc. (1995: 168).

Similarly, I have tried in the two last section to show, through the discussion about perception and textility that the efficacy of the images and the exhibition go beyond an engagement with aesthetics. Showing things differently than how there are usually presented engages one toward a theory of action and social relations where the things are crossed by line of (political) powers as much as humans. When Latour talks about fetishes, he is less interested in art per se than the role effectiveness of these artefacts to trigger conflicts and passions – in the form of iconophobia or, on the contrary, idolatry – through the centuries. As he writes in *Pandora's Hope*, “[t]he nasty problem we now have to deal with is that, unfortunately, we do not have a definition of politics that can answer the specifications of this nonmodern history. (...) It is not only the practice of science and technology that epistemology has rendered opaque, but also of politics” (214).

That is also the reason why he has been taking part in various projects, to bring human interaction, politics back to the things. In the introduction of *Making Things Public: Atmospheres of Democracy*, he comes back to the question of representation of politics and see the exhibition as an experiment that ask the question: “what could [it] mean for political thought to turn ‘things’ around and to become slightly more realistic than has been attempted up to now” or in other words (...)to bring the res back to the res publica” (Latour 2005a: 4,13).

The message is clear: politics is about things, and how they are composed and composing in a shared space, the public space. Therefore, the next questions are: who decides to compose it, how and why? As in the composition of the book, with the writer, the curator has a critical, even questionable, role since composing oscillate between selection and rejection, between showing and hiding, between keeping it private and making it public. The curators then have to go through the choice of different manipulation processes:

printing, sticking, cutting... and eventually they will constitute the space that would become the background, the environment or shall I dare to say the parliament – or at least the public sphere – that would give voice to the assembly of pictures. It is also worth noticing that Latour, often, uses the terms “republic,” “parliament” and even more often “constitution” to refer to the process that “provided the moderns with the daring to mobilize things and people on a scale that they would otherwise have disallowed. This modification of scale was achieved not - as they thought - by the separation of humans and nonhumans but, on the contrary, by the amplification of their contacts” (1993: 41). Since Boyle and his laboratory and Hobbes and his parliament, the task of the moderns has been to unmask and reveal a certain truth under the false consciousnesses and myths, with the price of outlasting those elements, hybrids, which would not be classified in the two categories subject or object, society or nature, humanities or sciences. But the proliferation of hybrids makes this purification very difficult, and ask for a reintegration of the non-humans in the balance and as a result relocating humans. From Hobbes to Rousseau and even in contemporary social sciences, “the Body Politic [has been] slowly poisoned by a fabulous excess of Reason” (Latour 1999: 264).

This does not mean a rejection of the Enlightenment project, but an acceptance that there is (political) power and agency not just in (humans) ideologies or institutions. The constitution of “the Parliament of Things” is done at this price, when (post-) moderns stop considering humans as masters or victims, but really make them aware of their position and responsibilities:

From those who seek to reduce it to an essence and who - by scorning things, objects, machines and the social, by cutting off all delegations and senders - make humanism a fragile and precious thing at risk of being overwhelmed by

Nature, Society, or God. Modern humanists are reductionist because they seek to attribute action to a small number of powers, leaving the rest of the world with nothing but simple mute forces. It is true that by redistributing the action among all these mediators, we lose the reduced form of humanity, but we gain another form, which has to be called irreducible. The human is in the delegation itself, in the pass, in the sending, in the continuous exchange of forms (ibid: 138).

Therefore, the question of public is inseparable from that of things – and especially artefact, since they are produced by humans – and responsibility. Indeed, as Robert Koch, one of the contributors of *Making Things Public*, writes the question of the (re)public cannot be separated from that of media, from book and television to exhibition, and the “means by which [they] ‘construct’ their audiences even as they construct the world those audiences are perceiving” (2005: 747). To say this is not really a revolution, it still demands a shift of the notions of “humans” and “humanism” on the modernist critical conception of politics, which has for a long time being busy with his task of purifying everything with categories of truth and illusion, good and bad, history and myth. Did Foucault ever intend to say anything more than this? After all, as Deleuze points out about Foucault’s use of technology (as part of apparatus) and history in his famous eponymous article “What is a *Dispositif*?:”

Foucault agrees with Burroughs who announced that our future would be more controlled than disciplined. The question is not which is worse. Because we also call on productions of subjectivity capable of resisting this new domination and that are very different from the ones used in the past against the disciplines. A new light, new utterances, new power, new forms of subjectivation? In every apparatus we must entangle the lines of the recent past form the lines of the near

future: the archive from the current, the part of history and the part of becoming, the part of *analysis and the part of diagnosis*. If Foucault is a great philosopher, it is because he used history for something else: like Nietzsche said, to act against time and thus on time in favor, I hope, of a time to come (2007: 346, emphasis in original).

This task is more than essential, but it is not enough to explain the rich and active modes of existences of non-humans, which transcend both and the discursive realities of the structuralists and the epistemologists, accessible (only) through the mediation of language; and the pessimistic world vision of some thinkers, like Adorno, Baudrillard and Agamben, who goes even further than his two predecessors: the modern conditions of life lead him to think that not only we live in a time of crisis made of simulacra or spectacles that hide the grim reality of late capitalism, but also “to look at the [concentration] camp not as a historical face and an anomaly that – through admittedly still with us – belongs nonetheless to the past, but rather in some sense as the hidden matrix and *nomos* [law] of the political space in which we still live” (2000: 37).

It should be noticed that against any classic dualism, Agamben, like Foucault before him, at least recognises the importance of the interaction between the biological, the technological within the political fabric; but whereas Foucault was interested in the historical trace, the genealogy of the emergence of bio-politics, Agamben goes much further and “deshistoricises” it, and presents the bio powers as a biological and mystical lid that annihilates any material trace of resistance (Negri 2008:40). By imagining the camp, the state of exception as the paradigm of the space of modernity – not just as a metaphor, since he sees it as a paradigm of the *zones d’attente* in airports or even of the outskirts of post-industrial cities in the United States – where “inhabitants have been stripped of every

political status and reduced completely to naked life,” he idealises the individual human (body) as the ultimate trace or sanctuary of what remains of humanity (Agamben 2000: 40). As a faithful Heideggerian, his only response to the problems politics is facing today is to admit and to “use” the fact that language as an autonomous sphere:

[T]he age in which we are living, in fact, is also the age in which, for the first time, it becomes possible for human beings to experience their own linguistic essence – to experience, that is, not some language content or some true proposition, but the fact itself of speaking. (...) It does not concern the state but an event of language; it does not pertain this or that grammar but – so to speak – to the *factum loquendi* as such. (...) The new categories of political thought – inoperative community, compearance, equality, loyalty, mass intellectuality, the coming people, whatever singularity, or however else they might be called – will be able to express the political matter that is facing us only if they are able to articulate the location, the manners, the meaning of this experience of the event of language intended as free use of the common and as a sphere of pure means (2000: 115-118)

An event of language? It seems that we are back to Baudrillard and the Situationists. Under these circumstances, any reference to a political common space is seen as a form of coercion, and any technology –not even mention barbed wire – is seen as a potential instrument of domination of body, a potential threat to the freedom of the spirit.

Again, I am not saying that these extreme conditions of existence do not happen. This sort of situation existed in the past and still exists today, and technology has been and is still part of the apparatus used by some people to dominate others. I am just saying that the question of domination of the bodies and the alienation of the spirits can only be addressed

by considering the conditions of their constitution, which is always conceived, produced and consumed (perceived) by an assemblage of humans and non-humans. Consequently, I do not believe either that, like some neo-Kantian perspectives, that a miraculous solution outside the material conditions; nor do I share the gloomy apocalyptic perspective of Agamben, whose ideology of bare life is a mystification of the richness of the modes of existence, and totally misses out on the emancipatory potential of things of life. As Toni Negri sums up very well the deficiency of this *idéologie de la vie nue* (ideology of bare life):

Life and death in the Nazi camps do not represent anything else than life and death in Nazi camps. (...). “Bare life” denies the power of being [puissance de l’être] and its capacity to stretch out over the edge of time through the cooperation, the struggle, the constituent future of humans. But the hypothesis of “bare life” is not only wrong: it is mostly consubstantial of the affirmation of a eugenic constitution of the being that is to say precisely against the eventual power of the monster. The theory of “bare life” is so radical in its negation of power that it ends up considering any expression of the latter as an act of terrorism. (...) It seems that a new Leviathan is born and it has bragged us into this condition. It takes over all the demands of the old Leviathan, and goes even further in its radicalness: it does not promise us to give “peace” but only “life.”

(2008: 39-40, my translation).

As pointed out in the first chapter, in this process of mediation that is constituted and constitutes the common space called society, the role of artefacts cannot be classified in the binary paradigm of good or evil. They are interwoven in the texture that forms that context; “they seek instead to transform the appearance of public things into the experience of the

public as such” (Koch 2005: 748-749). In other words, things are an essential part of what make the public made public, and this is the aspect most experts do not take into (their) account. As in the example of the political historians’ accounts of the barbed wire, they constitute a discourse about how barbed wire was a product of a certain historical context, and how it evolved in different other contexts, using the barbed wire as a pretext to a text that describes and gives access to a certain past or present reality. Indeed, the artefact remains a (pre-) text, something that comes before or under the reality of the text, the book. They are part of a pre-conception, an established discourse that does not challenge the perception of the reader, but merely informs the readers about several modes of existence of the barbed wire, as an instrument (material or symbolic) of division that has been used throughout the two last centuries. This is fine, but not enough to consider how the thing is making the (re) public. To use Ferraris terms, I would say that the book, as object, “invites” the reader to “epistemological realities” (Boer wars, Concentration camps, etc.) that already exists there in the collective consciousness, which implies a linear causality: it was because the barbed wire was cheap, flexible and effective that it was used massively in the American West and later in The Boer War. What I want to say is that this historical point of view, black boxes the thing under the text; whereas in the exhibition, the process of composition is more accessible, more visible, more open to the visitor. As Latour states: “Dingpolitik may become possible when politics is freed from its obsession with the time of Succession” (2005a: 31).

What does this composition involve? It involves that “something is happening” while each visitor accepts the invitation to come to the round table, and then to enter that space, to interact with the different pictures, to talk with other visitors...and eventually be part of the event, be constitutive and constituted actants that will confirm or challenge the collective

consciousness they have about the barbed wire. As Koch writes: “the public must itself be capable of constitution, of belief and creation, of memory and reflection” (2005: 750). This is what the ancient notion of politics: the imagination, the gathering, the making of the “affairs of the city,” as Peter Sloterdijk reminds us:

In actual fact, the birth of ancient Greek political theory implied for them a doctrine of living in an artificial construct. What the early philosophers termed polis is in essence nothing other than an inartificial construct ruled by nomos [law] and amounts to the practical answer to the challenge posed by the improbability of bringing numerous strangers together to coexist behind shared walls (2005: 946)

Therefore, the public comes into being with the interaction with the public thing, which exists both as an ideological epistemological reality and a material ontological reality. And in the constitution of the exhibition, there is no need to distinguish between these two aspects of reality: the text is neither less nor more important than the image, they are all interwoven with the other elements to compose the network of the public space, of the exhibition, this “a domain of entanglement” (Ingold 2011: 71). And it is this sort of public space, where each image comes with its own story – own opinion, some would say – and generates among the public a new occasion to agree or disagree on the classic discourse about barbed wire, that we tried to explore through the exhibition. Such is the experiment that we have undertaken with this small exhibition, which via the meshwork of pictures, people, lines, texts, tries to extract the barbed wire from a sometime rigid epistemology and makes, like Latour’s own bigger exhibition “objects become things, that is, when matters

of fact give way to their complicated estrangements and become matters of concern” (Latour 2005a: 31).

Once again, this shift from objects to things cannot happen without rethinking the positions of humans as part of an environment that is, to a certain extent, conceived by them, but that is most of all constituting them. Once again, it is about questioning the supposed privileges of humans, which have been granted by a modernist world vision, and trying to replace them on a more symmetrical axe with other beings. Here we deal with a photographic exhibition, but this can happen almost everywhere if one pays attention:

[T]he objects of science and technology, the aisles of supermarkets, financial institutions, medical establishments, computer networks – even the catwalks of fashion shows! – offer paramount examples of hybrid forums and agoras, of the gatherings that have been eating away at the older realm of pure objects bathing in the clear light of the modernist gaze (ibid: 13-14).

This passage summarise perfectly what I have been trying to do here: non-human (political) agency is everywhere, because the polis is made of and is making this hybrid constitution of different entities. It also gives me the chance to open the next chapter. Indeed, as suggests the last part of the passage, it is not enough to say that polis-like modes of existence are a constituted way, a consensus, for different being together under certain rules; there is a need for the modernist gaze to perceive it, to pay attention to it.

What is at stake here is the recognition, the valorisation of the different elements, agents, which take part in the constitution of a social phenomenon in the real. And I have insisted that an (art) exhibition, by definition, gives things the initiative to invite the visitor to interact with them, and may confirm or deform preconceptions the latter had about them; it may advocate or go against a strong ideology – let’s say Netz’s depiction of the barbed wire

and Agamben's thanatopolitics of modern society – and offer another perception of reality. To use Ferraris' expressions, the exhibition, may act as a "possibility" or a "resistance" to the epistemological and ontological realities of the viewers, by inviting them to discover some of the different opportunities, always within certain limits, of the things and the world around them. And Ferraris does not forget to remind that this invitation highlights that the primordial need of "the attention to objects" (2015: 58).

Besides, there is also what Sloterdijk calls the "moral enigma of the city," which makes democracy possible and goes beyond the Kantian conception of political life as mere contingent reproduction of the individual powers of judgement. Reading Aristotle's hypothesis of the *zoon politikon*, he notes that:

Humans are, [Aristotle] suggests, by no means urbanites by nature but have to be turned into such; they cannot simply be posited as city dwellers, because a simple decision by individual will does not suffice to stabilize such an improbable state of affairs as the coexistence of the many in polis. So there must logically be third term that comes between nature and such an assumed act of will, one that would be strong enough to neutralize the powers people have to repel one another and to overcome their aversion to involuntary neighbours (2005: 946-947).

Indeed, this commonality, social synthesis, this coexistence needs a compromise motivated by something more than pure ideas; there is something that has to motivate, to generate the formation (empowering the people) and deformation (neutralizing the powers of the people) of the social fabric, that comes before the polis already there, rational and established. As Sloterdijk specifies: "[i]n order to do justice to the pre-political conditions of democracy, a deep link must be forged between political culture and theoretical behaviour" (ibid: 948).

And this what the next chapter intends to do. There should be an act of recognition, a gesture this perceptual and technical at the same time a capacity of paying attention to and taking care of things in order to make them part of the techniques of democracy:

[T]o render political objects public is surely the citizen's ability to capture "the things" for posterity. The *res publica* arises from this act of capturing objects. If you do not possess suitable techniques for arresting them, then you cannot stabilize fleeting events and cannot give voice to them in the political domain. (...) In other words, the polis is a reservoir for symbolic objects that are to be given a longer presence in the shared community" (ibid: 949).

In conclusion, I have been mentioning notions such as assemblage, network and meshwork, leading one to believe that everything is first and most of all about relations. But I have also mentioned, in my critique of the phenomenologist's views of both Bogost and Ingold, that saying that the world is a "carpentry" or a "meshwork" of lines or litanies is not enough. The Latourian *ritornello* about the co-constitutive nature of existence makes me think that the next step is to think about what Latour calls a "Parliament of Things" where "[s]ocieties are present, but with the objects that have been serving as their ballast from time immemorial" (1993: 194). Or as Stengers states:

Only humans have seats in it, are seated there, but these humans are defined not as free subjects, characterized by their convictions and ambitions, but as *representatives* of a problem that engages and situates them. Only humans have seats in it, but these humans are not united by a dynamic of intersubjectivity. On the contrary, they have to invent links within disparity, they have to bring into existence rhizomatic prolongations that refer not to a general interest stronger

than any one of them but to new interests provoked by their coming together
(2000: 155).

This statement highlights once more that the nature of existence of humans is essentially relational, but not exclusively with humans. This deduction is even more obvious today at the age of all-connected era.

It would then be interesting – if not urgent – for social theorists to understand what motivates this global network; and consequently deduce from it a certain ethics, and even a politics, since all relations are not the same (Caille, Chanial 2016: 7). With this in mind, in the next chapter, I will investigate then the nature of this relational lines that constitute and are constituted by all sorts of social actants.

I have generously drawn on Latour's works in the previous chapters, which offer a very effective conceptual toolbox to understand the social role of everyday life artefacts. However, as he himself recognises in the article about Souriau, the path towards an optimal – yet never perfect – method passes through material and intellectual alliances. I have throughout the previous chapter put to the test many potential “philosophical compatriots,” to use Rayer's term. Graham Harman tries to reconcile Latour with Heidegger on several occasion (Harman 2009, 2010, 2014). I have demonstrated in the previous chapter that this alliance does not work because of fundamentally different ontological points of view. But there are many other philosophical options to make a good critique of the anthropocentric *homo faber* myth and technophobia in theory, than just Heidegger.

It is more than evident that Latour's most profound sympathy goes for the empiricist and pragmatic tradition. He also willingly acknowledges his filiation to the speculative philosophy of Alfred North Whitehead that he has encountered mainly through Isabelle

Stengers, in order to develop in his own work a critique of the modernist “the bifurcation of nature” based on what he calls Whitehead’s “second empiricism:” “[t]o avoid the bifurcation of nature, there was only one thing that needed to be added, an understanding of the event of the grasping itself by science as being something that happens not only in the world but to the world” (Latour 2005c: 5). But he mentions Spinoza in some very rare occasions. Among the philosophers of the 17th century, his admiration goes rather Leibniz, who seems to be favoured by Whitehead, according to Stengers:

Whitehead is closer to Leibniz than to Spinoza, in the sense that Leibniz has not turned the “as ifs” with which he populates his metaphysics into a path toward wisdom. If there is a link between metaphysics and wisdom, for Leibniz as for Whitehead, this link cannot bypass trust in the possibility of a “peace” that must be fashioned actively, intelligently, not achieved by some process of conversion (2001b: 229)

But, I argue that Spinoza – despite his humanistic quest for wisdom – can still be a useful philosophical ally to be associated with both Latour and Whitehead humorous resistance to the stern and powerful denunciations of techno science, as described by Stengers in a rather Spinozian passage in *The Invention of Modern Science*:

[H]umor, the art of a resistance without transcendence, is above all linked with a second meaning of the sophistic statement that “man is the measure of all things.” It designates the becoming of the one who becomes capable of measuring, that is, who also becomes what the measure of the thing demands of him, that to which the thing obligates him. “To be the measure of all things,” then, *designates the human as a passion, as capable of becoming “affected by*

all things” in a mode that is not that of contingent interaction, but of the creation of meaning (2000: 166, my emphasis).

Therefore, I suggest in the last chapter of this thesis a rapprochement between Latour’s philosophical anthropology and Spinozian anthropological philosophy to study a case that has been the object of so many criticisms: the smartphone. It is this amazing machine that demands so much attention and that is usually depicted as a technology that fosters addiction to social media and narcissism through its integrated camera. This attempt should not be judged too severely by the reader: I am taking the risk of find some affinity between Latour and Spinoza, without any certitude. My only ambition is to cut a route between these two great thinkers (via Gilles Deleuze and Etienne Balibar), to imagine an intellectual alliance that would offer an alternative and more positive perspective than the “sad passions” that emanate from neo-Kantian and thinkers who emit a moral judgement on the state of affairs, without deigning to get down of their ivory tower to experience things.

I argue that Spinoza’s philosophy is a theory of action that offer an effective analysis of the potential to change the way a human society produce the artefacts and infrastructures that will participate in the regime of powers (or passions) that will constitute and affect this same society, without falling into a naïve faith in technological progress or a technophobic moralism. A Spinozian/Latourian study of the smartphone can help us then to demonstrate how this social agent can be loaded with desire and become not only a mere communication technology –considered as an extension of individual and social rationality and memory – but one of the most powerful “desiring machine,” as Deleuze would say (1983), that has a grip on the regimes of passion of contemporary societies.

Chapter 4

Affective Technology:

The Smartphone and the Mechanics of Passion

Apple: Machine-Hand, Design and Fetish

Everyone knows the famous quotation from Genesis that says “in the beginning was the Word” (John 1:1). This word needed to be pronounced by an orator and received by someone who would understand it. There was thus a pre-established contract between the divine and men whose breach would lead to other types of contact, of relations: between man and other (wo)men (Adam and Eve) but also between man and other non-humans actants (the snake, the apple,...) as Michel Serres reminds us in a conversation with Bruno Latour:

So, then, along comes the first referent of the contract. For example, an apple- the one Eve gave to her first lover. A gift, a stake, a fetish, a first commodity, tracing heavily for the first time the relation of love, of disobedience, of knowledge, of risk, and of mad prophecy- this fruit brought about the first human collectivity, the simplest one in history. We discovered ourselves naked, lovers, mortal and sinful, standing already before the tree of science and standing already before a tribunal- divine, moral, civil, penal, deciding about good and evil- all because of this apple, cause and *thing*, the first object. (1995: 200-201, emphasis in original).

At the beginning, there was a relation, and then what? Well, the first contract – with the god(s) – was broken, and others were created, which inevitably led to a process of

(re)production of other beings, humans and nonhumans, that became part of the endless network of relations that constitutes the existing world. Of course, since Antiquity, the forms have changed a lot, especially in the last two centuries with the advent of capitalism, colonialism and industrialisation. But the content is still usually the same: from the biblical Apple to Apple's iPhone, we are still dealing with the essential need to know. Similarly, Bernard Stiegler, in *Technics and Time, I: The Fault of Epimetheus*, reminds us that this vital desire for knowledge goes necessarily through an affective need of others, an addictive necessity to be related to technics, those “memory supports that organize the successive epochs of humanity” (1998: 183). Using the mythological figures of Prometheus and Epimetheus, Stiegler explains that at the origin, the Greek understanding of technics is based on the notion of memory – or rather forgetting: basically, the gods wanted to allot suitable powers to each creature on earth, but in the process, absent-minded Epimetheus forgot the humans. That is the reason why Prometheus had to steal fire and the gift of skill in the arts (*technè*) to help humankind acquire sufficient resources and powers to survive:

[T]he political community is solely constituted in the memory of the original sacrifice, that is, indissociable from the Promethean fault. It can also be seen in this context that religion and the polis are indissociably understood in ancient Greece in terms of mortality qua the originary departure from all origins, that is, qua technicity—an ambiguous, stolen, all too human reflection of power/potential [puissance] (ibid: 190, emphasis in original).

A few lines later, he makes clearly this affiliation between the theft (the breach in the contract with the gods), the gift (of technics), the political (through speech) and finally the need to invent artefacts:

Prometheus's theft, as a result of which appeared the disappearing nudity of mortals, the advance of their prematureness that is their eternal delay. If they do not yet possess the art of the political, called for by their de-fault of origin, and arising from their technicity, it is because their condition must take root, firstly, in the memory of the Titanic conflict in Olympia, a memory in the sacrifice *out of which* they come to speech. Speech, and later politics, proceed from this memorial participation in the divine, and thus from this theft. From out of this memory, in this speech, they come to *invent* (ibid: 192-193, emphasis in original).

The human condition is thus a relational one, a litany of contracts that emerged from a default that makes humans needy: because of Epimetheus's de-fault, they no longer have available anything ready to hand, and have to imagine and invent new ways of being, outside itself, through prosthesis. This reading is of course very different from the modern metaphysics that, from Kant and on, reduced material things to a concept: *object*, which is no longer presented as solution, but as an obstacle that blocks the way, that resists the subject's will to domination and autonomy.

Thus, it seems that the fault of forgetting is then compensated by the creation of artefacts, which are invested with passions and fantasies, or as Remo Bodei asserts, in *The Life of Things, the Love of Things*:

We invest objects intellectually and emotionally, we give them sentimental meanings and qualities, we place them in coffers of desire or envelop them in repellent coverings, we situate them within systems of relationships, we insert them into stories that we tell about ourselves or others (21).

And yet, like Epimetheus, humans tend to forget about these travelling companions who, from the prehistoric utensils to today's spaceships, as in Kubrick's movie, have always been there along the long journey of humankind. Every generation has produced and been produced by a litany of different artefacts, and, "in their own way, objects grow or perish, like plants and animals; they go on for years or centuries; they are looked after, cared for or neglected, forgotten, destroyed." (ibid: 27). This mediation between the evolution of humans and techniques should force us to reconsider the prejudices of critical theorists towards artefacts. Yes, but this reconsideration demands an effort; and first an intellectual gesture to grasp again the question of technology, which is usually taken for granted. Indeed, by moving away from the old image of *homo faber*, that separates concept from matter, mind from hand, culture from nature, it becomes clearer that there is a sort of sedimentary trail between what is usually called primitive artefacts and high technology, between Eve's Apple and Steve Job's.

It is about attention and memory. With all due respect to religious people, both apples were created by men. But it would be wise to add that they are something more than mere tools : they have the potential to surpass the original design "and from primarily fulfilling a purpose, they start by exploring heterogeneous universes that nothing, up to that point, could have foreseen and behind which trail new functions" (Latour 2002b: 250). Therefore, they are something else than the mystic icon of the worshippers and the mere tool of the modern designers. As Latour states, it is important here to understand that in order to highlight the social agency of artefacts, there is a need of an intellectual gesture to go over two reductionisms, the animist reductionism of religion, but also – which might prove to more difficult – the reductionism of the moderns.



Image 1. This close up of Albrecht Durer's painting Adam and Eve (1507) shows the snake offering the Apple to Eve (Museo del Prado, Madrid, Spain).

The good news is the critical iconoclasm of the moderns has already done the demystification of religious superstition, by showing humans' involvement – with their imagination and their practices, their mind and their hands – in the existence of any supposed mystical artefact. As Bruno Latour explains in *Iconoclasm*:

Since Antiquity, critics have never tired of denouncing the devious plots of humans who try to make others believe in non-existing fetishes. The trick to uncover the trick is always to show the lowly origin of the work, the manipulator, the counterfeiter, the fraud behind the scenes who is caught red-handed (2002c: 18).

Therefore, it is important to unveil the humble origins of the artefact, this being a religious icon or a complex high-tech device, in order to show again any sort of (mystical or technological) determinism at the origin of any text, image or technology. There is first of all a gesture, a movement composed by the human mind and hand. What is at stake here is to recognise that any idea of artefact comes from the convergence of different discourses and practices. If for the biblical apple, the search for evidences still gives a lot of work to the archaeologists, linguists and other social theorists; the genealogy of the Apple smartphone is easier to expose, at least today. However, it took a long time for the materialist moderns to convince their idealist counterparts of the “human fabric of science:”

The same is true of science. There, too, objectivity is supposed to be *acheiropoiete*, not made by human hand. If you show the hand at work in the human fabric of science, you are accused of sullyng the sanctity of objectivity, of ruining its transcendence, of forbidding any claim to truth, of putting to the torch the only source of enlightenment we may have (ibid, emphasis in original).

As I have already pointed out, this clarification helps to interfere with the consensus about the composition of a certain (political) reality. Once again, it is about a gesture. By showing the movement of the hand that cuts the phenomenon into a set of different mediators, actants, one increases the visibility of reality: “the more instruments, the more mediation, the *better* the grasp of reality” (Latour 2002b: 21, emphasis in original). Finding a way to

go beyond the consensual (and moralist) discourses to find the conditions of the possibility of a particular phenomenon is what Foucault's genealogical method tries to do, by tracing the development of human groups and their constituted society throughout history:

I would call genealogy, that is, a form of history which can account for the constitution of knowledges, discourses, domains of objects, etc. , without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness throughout the course of history (Foucault 1984: 59).

My intention is not here to use this genealogical method, but rather its impulse to get back to its impetus to show how the body, and by extension the hand – no more and no less than the idea – takes part in the production of the conditions of the possible and the relations of power from the prehistoric tools, to the mobile phone, by way of religious idols. It is a difficult task: it takes from the archaeologists the objective to link the subject's bodily habits to the material infrastructures, which compose a society, while trying to fill this relation with the regimes of power that emerges from human relations (Latour, Lemonnier 1994: 15). This has kept busy social theorists busy since Marx, and my argument here is that they would usually move too fast from the peculiar to a global vision: applying global ideologies and not taking care to mention the “missing masses” in their accounts (see Latour 2008). I will come back to this in the third section, but for now it would be wise to start by pointing out that the smartphone is a hybrid, born from the marriage of two mass communication technologies – the radio and the telephone – and the car in 1946, when engineers at AT&T designed the first mobile phone system in St. Louis. The technology had to wait until 1964 to be considered as a viable technology, as status that usually goes hand in hand with being a marketable product as Guy Klemens points out in his book *The cellphone: the history and*

technology of the gadget that changed the world (2010). It is interesting to notice that, at the beginning, the infrastructure was more than visible: the device weighed about 10 kilos, something that could hardly fit in one's pocket, and would need a central transmitters than communicate between 200 and 250 watts – which is considerable for a device working in the context of radio – and would cost up to 20 times the price of a regular fixed phone service (ibid.: 46). Klemens writes that in the 1970's, the testing and development of cellular phone systems progress in various countries, from Finland to Japan and of course in the United States, where the Department of Justice and AT&T engaged negotiations to compel the latter to gradually open the market to other phone companies (50). This translated into savings for consumers, but the big problem was still the enormous infrastructure needed to run a still very limited system; the solution came from taking most of the infrastructure *inside* the cellphone, and at this point the artefact becomes a black box:

The interesting workings of the cellphone are beneath the surface and encased in the appealing shell. While the cell phone has entered the lives of nearly everyone, the device itself remains mysterious (Klemens: 170).

As with modern computers, the circuits are not visible anymore but become integrated – called IC's (integrated circuits) or chips. From the late 1960's and on, using the same techniques to make the transistors, researchers and engineers heaped praise on producing IC's that follow a process similar to printing, where the components are put or directly included on a silicon surface that eventually is copying the format of a computer program.³⁵ From here, we can see that this device, which seems so complete, is actually made of different elements and techniques taken from already existing technologies - radio, printing, computer,... - that would form an assemblage called the chipset, around which are arranged

³⁵ For a more exhaustive explanation of IC's and other electronic components of the early cell phones, see Klemens: 170-188.

peripheral devices such as a microphone, a keyboard and a speaker and are covered by a plastic or metal skin (Klemens 176). From that point on, it is just a matter of adding more elements: an LCD screen, thanks to the use of liquid crystals, the battery and an antenna. Klemens explains that even though liquid crystals were discovered in the 19th century, it remained a scientific mystery until the 1960's when researched were used to create the first LCDs. Researchers "found that an applied electric field could re-order the molecules in the liquid crystal and change the optical properties. By switching from an arrangement that allows light to pass to one that reflects light, a liquid crystal could act as a shutter" (178). Similarly, the battery was even an older invention, going back to the mid-seventeenth century, and went through various evolution, from zinc-carbon to nickel cadmium and later lithium ion type, to be integrated into cell phone in order to give them their autonomy. With the antenna, the cellphone achieved its status of wireless communication technology. Klemens highlights a curious fact: "[w]ithin the plastic bodies of the handsets may be more than one antenna. And to be more precise, the metal of the entire cellphone acts as part of its antennas" (184). Thus like for humans kinetic interaction with their context, the whole body of the cellphone is in resonance with the world, radiating and expressing its presence. Knowing this makes the device already less mysterious. Yet, this does not prevent some commentators talking about a "smartphone society," just like others talk about "information society," which implies that in the last three decades "the merging of information and communication technologies (ICTs) is of such consequence that we are being ushered into a new sort of society" (Webster: 9-10). For instance, Nicole Aschoff, managing editor of the online magazine *Jacobin*, published on their website an article with the explicit title "The Smartphone Society" where she states that "if the automobile was fundamental to grasping the last century, the smartphone is the defining commodity of our era." There is

no doubt that there most of the cell phone infrastructure is produced in brutal labour conditions and is part of a neo-liberal scheme of global exploitation contribute, going from the modern slavery of the Congolese coltan miners to the awful working conditions of Apple's supplier FoxConn's sweatshops in China. It would also be naive to not see the smartphone has also transformed "work" by promoting a new kind of distributed labour that challenges any governmental labour code. There are plenty of evidences of this intrusion of work into the everyday, from answering emails before going to bed to specs reviewing on the train to work.³⁶ Phenomena like "playbour," "Uber," "microtasking" that are blurring the line between work and leisure, production and consumption, could hardly exist without mobile technologies (Cooley 2004: 135; A. Ross 2013: 27).

One could say that the real concern for Ashford is that the smartphone is not only about the transformation of traditional working conditions, but also about the exploitation of people's identity: "[the smartphone] provides a physical mechanism to allow constant access to our digital selves and opens a nearly uncharted frontier of commodification." Although at the end of her article in *Jacobin* magazine, she acknowledges that smartphones may sometimes play also a great role in the "resistance to the existing hierarchy of power whose internal mechanisms isolate and silent individuals," or even pointing out that "using a smartphone is no different than using a prosthetic arm, driving a car, or working on an assembly line," the harm has been done: why do we still talk about "a smartphone society" as if we have entered a new area?

³⁶ This continual intrusion of work into the everyday has even pushed the French government to promulgate a "right to disconnect" outside work hours, since January 1st 2017. Although it is still no very clear how this right should be implemented in practice - it is left to each company's judgement to find an agreement with some staff representatives and their trade unions to set up fixed periods of time when the employees are not to respond to emails outside office hours, it shows a real concern on the behalf of the civil society towards the continuous connection to work. See Pierce, Pauline. "'Right to disconnect' in France – More to this than you might have read," in *The National Law Review*, <http://www.natlawreview.com/article/right-to-disconnect-france-more-to-you-might-have-read>. Accessed 10 February 2017.

HAND COMPUTER

These machines began as radios for talking out loud to people who were far away. Over the years, they slowly became more and more like computers.

As these machines turned into computers, they started taking the place of a lot of things we used to carry around—like picture takers, music players, and even books.

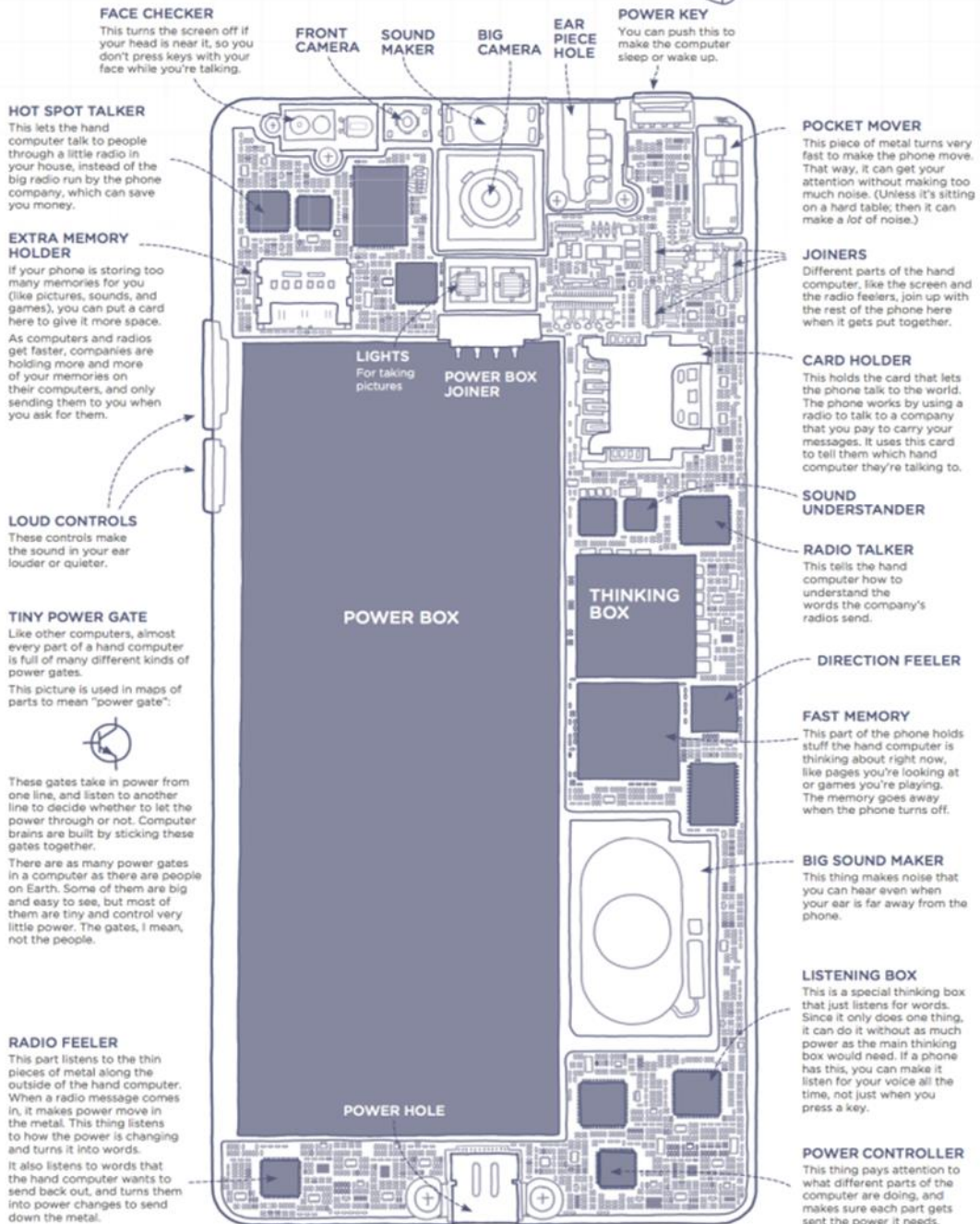


Image 2. This illustration that depicts the “inside” of a smartphone is taken from Randal Munroe’s very interesting book, *Things Explained*, where he explains complex things with 1000 most commonly used words. It has the advantage to open up the opaque box and show in a very simple and effective way that it is made of an assemblage of different elements that can be explained with simple terms. (See Monroe 2015: 42).



Image 3. A picture of the protection case I use form my iPhone.



Image 4. Detail of the same protection case that reminds that even if the brand and design are conceived in the Apple Campus, in the Silicon Valley; the material components are still assembled in the gigantic sweatshops in China.

This nominalism is symptomatic a persistent trace of the latent technophobia that can be found in some technological determinist discourses that envision present society as no more than an inescapable spectacle. From the very title, the tone and the lexicon used here remind

us of a certain tradition in critical theory that argues, referring to some passages of Marx's *Capital*, that technology is a machinery that is the direct manifestation of capitalist power that takes control seeks to "abolish the role of the craftsman as the regulation principle of social production" (Marx, cited in Thoburn 76).

The machines that were supposed to be docile things are now strong, too strong for the human hand, which is relegated to a second plan. And this comes as shock to the moderns, who in their effort to destroy all the old (religious) fetishes to reveal the (scientific) truths, have to reveal that most of the human conditions of existence is – or at least should be – human-made. As mentioned earlier, this prerogative is what the critical spirit is built on. What is to be done with all these new "parasites," to use Serres' term, that interfere with the hand of the (human) creator, and often replace it? Can modern critique destroy the hand machines, without running the risk of a backfiring? Latour points out, this work of purification leaves very little space to other actants, giving all the credits to the *homo faber*, whose imposing hand is shown everywhere to the extent that when "the hand is shown at work, it is always a hand with a hammer or with a torch: always a critical, a destructive hand" (Latour 2002c: 18). But as Latour points out, this destruction cannot control or limit the proliferation of other mediators, which take place in the constitution of the world:

[T]here is no way to stop the proliferation of mediators, inscriptions, objects, icons, idols, image, picture, and signs, in spite of their interdiction. No matter how adamant one is about breaking fetishes and forbidding oneself image-worship, temples will be built, sacrifices will be made, instruments will be deployed, scriptures will be carefully written down, manuscripts will be copied, incense will be burned, and thousands of gestures will have to be invented for recollecting truth, objectivity, and sanctity (ibid: 24).

Indeed, how can one proceed with this work of purification, of clarification without all the instruments? It seems that there is an urgent need to refocus on the relation, the mediation between the hand and the thing: and of course, this close reading of the technical gesture goes hand in hand with an intellectual effort of a revision of the critical mind:

One could say, with more than a little dose of irony, that there has been a sort of miniaturization of critical efforts: what in the past centuries required the formidable effort of a Marx, a Nietzsche, a Benjamin, has become accessible for nothing, much like the supercomputers of the 1950s, which used to fill large halls and expend a vast amount of electricity and heat, and are now accessible for a dime and no bigger than a fingernail (ibid: 25).

Once more, practice defies theory. In order to avoid the pitfalls of the *homo faber* myth, it is not enough to reveal the creative role of the human hand, but we have to pay attention to the necessary action of all the other mediators, animated or non-animated, “[t]hings are our way of dealing with a world in which we are enmeshed rather than over which we have dominion” (Grosz 171). It is in the relation between hand and the assembled phenomena that what we call culture, society or the world emerge. My point in this section was, after Latour, to recall that the presence of the hand is not enough, but there is necessary need to recognise that this gesture has always been accompanied by a myriad of things. The next section will focus on the emotional investment in the mobile phone from its design to its domestication/adoption.

Domestication *of/by* the Apparatus: Bodily Attachment to the Smartphone.

This social and perceptual implications of the presence of technological mediators has been long studied by cultural phenomenologists that invoke, following in particular the work of

Maurice Merleau-Ponty on perception (see 2002, 1993, 1964), that the premise that every human-artefact interaction is first of all a body-artefact relation that shapes the perception of the world. Applied to the way portable media shape people's routine,³⁷ this approach shows, according to Ingrid Richardson and Amanda Third, that a complex interwoven relation between the hand (body) and the artefact takes place, but contra any idea a disembodiment by the technology, the people were very aware of the presence of the artefact:

Against the notion that one can be even intermittently “without a body” when using the Internet, the telephone, or watching TV, cultural phenomenological readings of telepresent media draw attention to the ways they become part of the corporeal schematic, working on and modifying the body, and affording a qualitatively distinct sensorial engagement with the world. Quite literally, we incorporate such technologies into our everyday and mundane experience of having a body. This was highlighted by our participants' frequent reference to their mobile phone as a body part; for example, the anxiety caused by losing one's phone was often described in terms of corporeal distress or dismemberment (“it's like having my arm cut off”) (149).

One can find in this corporal intimacy with the phone in the work of the theorists of domestication, such as Roger Silverstone and Leslie Haddon. They originally developed a method to examine the introduction of technologies in the home and beyond (Silverstone, Haddon 1996; Haddon 2003, 2011). As any relationalist theory does, domestication theory highlights the fact that users are never passive towards innovation, which implies

³⁷ For their investigation, Richardson and Third have lead an ethnographic study of the use of mobile phone among young people in Australia, focusing on the way the interaction with the phone changed their routine practice (see 2009: 147).

simultaneously an individual technical adaptation that involves not only a series of negotiations and discussions that defines and is defined by the social context, but also highlights the anthropologists' idea that technologies are so integrated into our everyday behaviours, that "they can also have a significant symbolic meaning, as captured they can also have a significant symbolic meaning, as captured in statements that the mobile phone feels like an 'extension of the body'" (Haddon 2011: 318). Indeed, because of the protean, polyfunctional, dimension of the smartphone, some functionalities demand a real imaginary and gestural adaptation: for instance, the camera application provides a different attitude than texting, especially the act of taking a "selfie" which requires a real "technique of the body" that demands a lot of practice of finding the right perspective with the right angle between the outstretched or slightly bended arm, the face and the body.

This incorporation and adaptation of the devices sometimes defies the original design and highlights what could be called a reconfiguration of the potential use inscribed by design by the actual use. Of course, part of this versatility can create amazement but also frustration: when the image is too dark, when the message is not sent, when the battery is very low...when the performances of the device do not correspond exactly to those promised by the advertisements, which usually exaggerate the potential of the device and do not mention its materiality, its essential impregnation into the textility of the context. The meaning and role of ICTs both help shape and are shaped by the remainder of the users' life: "how one experiences ICTs is not completely predetermined by technological functionality or public representations; it is also structured by the social context into which it is received" (Haddon 2003: 47).

Therefore, the prospect of symbolic and material intrusion of a device into individual personal space casts light once again on the perennial debate that revolves around the

question of what human beings are: are they just elegant machines full of synapses, neurons, fluids and nothing more; or are they higher beings with an authentic consciousness, and even subconscious, some would say (Katz 2003: 24)? It is this question that still commands the detractors of information and communication technologies (ICTs). They follow a certain tradition that represents humans as beings that are more than the sum of their parts and that, since Plato to Kant and beyond, has been suspicious of *fiction*,³⁸ and its material mediators (icons, images,...), as something that would turn the subject away from the transcendental truth. At the end of the day, for modern thinkers influenced by Heidegger and Sartre, this truth has to do with the rational power of human consciousness (or will), bringing us back to a concept of a ready-made Self, which by principle puts humans above other beings, an entity that transcends everything around it (Martin 2014: 18).

From this perspective, the smartphone would replace the authentic presence of humans by fictional material and extending its influence to participate in a new order of permanent connectivity. It would be then something that a thinker like Giorgio Agamben, after Michel Foucault, would call an “apparatus:”

I wish to propose to you nothing less than a general and massive partitioning of beings into two large groups or classes: on the one hand, living beings (or substances), and on the other, apparatuses in which living beings are incessantly captured. (...) [E]xpanding the already large class of Foucauldian apparatuses, I shall call an apparatus literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions, or discourses of living beings. Not only, therefore, prisons,

³⁸ In the context of this chapter, fiction can be understood as it is in ANT and domestication theory: both draw attention to the symbolic nature of the relation between technology and humans, and present it as a “script” or preformed process made of advertising, design and media discourses that will influence (but also be changed, challenged) by the user’s practice (see Akrich 1992, 2010; Haddon 43).

madhouses, the panopticon, schools, confession, factories, disciplines, juridical measures, and so forth (whose connection with power is in a certain sense evident), but also the pen, writing, literature, philosophy, agriculture, cigarettes, navigation, computers, *cellular telephones* and-why not-language itself, which is perhaps the most ancient of apparatuses-one in which thousands and thousands of years ago a primate inadvertently let himself be captured, probably without realizing the consequences that he was about to face (2009: 13-14, my emphasis).

Here, Agamben magnifies the notion of *dispositif* he finds in Foucault and Heidegger to expand it to a large group of things that according to him oppresses the biological, individual and social bodies – while ignoring the particular potentials of immanent experience. I would say that the major issue with Agamben’s analysis is its antinomic nature. As shown in the passage above, it is based on a supposedly necessary division between two categories: (living) beings and apparatuses. Consequently, due to the intimate implication of the latter into the everyday life of modern subjects, one is facing a strange process that can be compared to the development of a tumour that affects the social human subject. As in many other of his writings,³⁹ Agamben here extends the Heideggerian distinction between a good and a bad relation to existence to modern forms of living, where technology is immediately transformed into a terrifying force that overpowers life. However, as Timothy Campbell points out that whereas the German philosopher locates the improper on the side of the Soviet model of totalitarianism, Agamben extends it, thinking from the paradigm concentration camp to the to modern liberal democracies (Campbell 33-34, 40-41).

³⁹ It is worth mentioning the synthetic value of *What is an Apparatus?*, since as Timothy Campbell points out: “it abbreviates the most important thanatopolitical moments of Agamben’s recent thought” (44).

But, as already discussed in the previous chapter, Agamben takes both Heidegger's ontology of the Being and Foucault's biopolitical theory to another level: indeed, whereas the German philosopher sees a form of saving in an authentic language and moral way of writing (see Heidegger 1993: 204),⁴⁰ Agamben's thanatopolitical perspective offers a devastating reading of technology as a catastrophic power over all aspects of life:

But what we are now witnessing is that processes of subjectification and processes of desubjectification seem to become reciprocally indifferent, and so they do not give rise to the recomposition of a new subject, except in larval or, as it were, spectral form. In the nontruth of the subject, its own truth is no longer at stake. He who lets himself be captured by the "cellular telephone" apparatus—whatever the intensity of the desire that has driven him—cannot acquire a new subjectivity, but only a number through which he can, eventually, be controlled. The spectator who spends his evenings in front of the television set only gets, in exchange for his desubjectification, the frustrated mask of the couch potato, or his inclusion in the calculation of viewership ratings (ibid: 21).

This description of the modern subject as improper and inauthentic subject that goes hand in hand with a societal and political model that promotes the proliferation of the apparatuses that blurs the boundaries between the different domains of social life and marks the foretold "eclipse of politics:"

Rather than the proclaimed end of history, we are, in fact, witnessing the incessant though aimless motion of this machine, which (...) has assumed the

⁴⁰ Concerning Agamben's reading of Heidegger's notion of proper and improper writing, Timothy Campbell writes: "The uncomfortable conclusion that emerges from this reading of Agamben would be its deep indebtedness to a Heideggerian ontology of proper and improper writing precisely when the testimony concerns the camp itself. The effect is once again to extend the biopolitical devastation across modernity so that the form of proper writing today, testimony, is only a specter of its earlier "self." In other words, testimony, in some sense, becomes the privileged mode of a new genre to be called *thanatopolitical writing*" (41, emphasis in original).

legacy of the providential governance of the world; yet instead of redeeming our world, this machine (true to the original eschatological vocation of Providence) is leading us to *catastrophe* (ibid: 23-24, my emphasis).

Foucault has also noticed that something has radically changed in the evolution of technology due to its mass production and implication in everyday life, but here we are far beyond his analysis of the new forms of control under the most recent phase of capitalism and have to face the fact that there is almost no way-out, no redemption for what Agamben calls “the most docile and cowardly social body that has ever existed in human history” (ibid: 22).

This sort of bold statement would give rise to smiles if its catastrophist tone were the caprice of a bunch of ivory tower thinkers. It is almost undeniable that this sort of latent technophobia has become more and more the daily lot of so called “experts” that give their opinions about the impact of technology on society, and especially the younger generation, which at the end of the day ends up influencing the doxa. A good illustration of what I would call a misanthropic technophobia – which works on the binary taxonomy that opposes two poles: young against old, impure against pure, technology against culture – is a photograph of a group of teenagers looking at their smartphones next to Rembrandt’s painting “Militia Company of District II under the Command of Captain Frans Banninck Cocq” (1642), known as the “Night Watch” in the Rijksmuseum in Amsterdam that went viral on the internet last year (see Image 5).

The picture – and more importantly the comments about it – portrays perfectly the sort of supposed docility and distraction of the modern (young) generation to the screen from what is really important: (high) culture. The label “perfect metaphor of our age” reveals the belief in a generational or even civilizational crisis due to a domestication of the cognitive and

sensorial potential of the self by new technologies: the group of young girls are so addicted to their smartphones that they end up being totally hermetic to the beautiful and meaningful art that surrounds them. However, it turns out that they were actually using an app provided by the museum that contains extra information and guided tour of the painting displayed in the room that would help them to complete the assignment asked of them by their teacher.



Fig. 5. The photograph was originally taken in January 2016 by Dutch photographer Gijsbert van der Wal, who posted on his Facebook, which would later be shared over 10,000 times, notably by Twitter user Chris Gunnes with the following headline: “No wonder this photo of #Rembrandt's #NightWatch has gone viral. It's a perfect metaphor for our age RT” (pic.twitter.com/qTsVNIZo5X).

But the real question is, as José Picardo points out, to know if the photograph would have caused so much indignation if the teenagers were holding a leaflet, a newspaper or a book instead of the smartphone (2016). This suggests that for certain people, it seems that once more it is the binary moralism between the text and the image, between the high and low culture, the old and new (communication) medium, that prevails over the actual, contingent conditions of existence. It is the same dual paradigm that can be found in Agamben's deterministic (messianic) theory of technology:

If we consider once again the theological genealogy of apparatuses that I have traced above (a genealogy that connects them to the Christian paradigm of *oikonomia*, that is to say, the divine governance of the world), we can then see that modern apparatuses differ from their traditional predecessors in a way that renders any attempt to profane them particularly problematic" (Agamben 2009: 19).

However, I do believe that this binary paradigm is an impediment to think about the rich complexity of interactions between humans and those apparatus: as I have already stated, the fundamental questions should not be about an authentic definition of the entities, but about the forms, about the modes from which they manifest themselves and interact with each other. These modes form together the regimes that constitute the lines of (social) existence of each individual, which in the case of the interaction with the smartphone, as Richardson and Third point out, goes back to the primacy of the corporal intimacy with the handset which cannot be reduced a frontal orientation of the gaze:

[O]ur participants indicated that interactions with mobile phones are nonetheless structured by a *regime of visibility* that entails not just seeing with the eyes but the whole body. (...) In phenomenological terms, we are always fully sensual

and as such our ocular vision is mobilized in relation to our whole range of perceptual engagement with the world: vision exceeds the capacities of the eyes (153, emphasis in the original).

Whereas in Agamben's account, the relation is conflictual and ends up with one pole (technology) dominating the other; here, the reference of a regime of visibility highlights a certain intimacy in the relation between people and things: Elizabeth Grosz depicts this regime as "one in which the thing is not conceived as the other, or binary double, of the subject, the self, embodiment, or consciousness, but as its condition and the resource for the subject's being and enduring" (Grosz 168). As in Kafka's story the question is how to react to this aesthetic experience. How does the (human) subject react to the "defamiliarising" potential of things around her? How does the attentive visitor, observer, wanderer react to the sensory invitation of something that manifest its affordance, its potential to be more than what its preconceived design – when "objects become things, that is, when matters of fact give way to their complicated estrangements and become matters of concern" (Latour 2005a: 31).

This is the sort of invitation that the Apple CEO, Tim Cook, experienced in a moment of sudden revelation, when he believed that he had spotted what appeared to be a trace of the first iPhone in a 17th century painting during his visit at the Rijksmuseum (Image 6). During a chat at the Start-up Fest event in Amsterdam, on 24 May 2016, Cook said that "[he] always thought [he] knew when the iPhone was invented, but now [he is] not so sure anymore" (in Kharpal 2016). This anecdote could pass unnoticed if it was not such a great illustration of the passionate debates about the evil impact of technology on the masses. Indeed, if we forget for a second about Cook's occupation – even if it may be used as an incriminating evidence – and believe in the genuineness of his optical illusion, this story would look in

the eyes of some intellectuals as another example of the domestication of individual (and collective) consciousness by the smartphone, a fetish born from the information society, that has replaced an old technology (paper) as far as in the way humans perceive things.



Image 6. A close up of Pieter de Hooch's painting "Man Handing a Letter to a Woman in the Entrance Hall of a House" (1670).

The illusion is not only impressive, but terrifying. Is the new generation's perception of things afflicted by an anachronistic veil of modernity that projects computers, screens and smartphones everywhere – even in a 17th century painting? Does everything have to be conjugated in the present?

And yet, I believe that this sort of illusion is not as horrific as it looks. If one moves from the binary paradigm that focuses on absolute material entities or ideals towards a perspective that gives more credit to the context and relations, this sort of scenario would not appear so tragic. If instead of seeing a replacement of a traditional thing, behaviour, culture by another - a letter by a phone, a conversation by a text – the observer would focus on the posture of the “messenger” in the painting, she would maybe observe that it is not only the illusion of the object “phone” that is misleading but the whole context of the painting that is misleading – if this term is even appropriate. A young man standing in a living room, reading or looking at a message, before handing it to a lady sitting on a chair. How many times has one seen this sort of scenery? Even the tension in the gaze, the angle of the elbow, the inflexion of the head, and the relaxed position of the legs match what one can see every day at home, at a bus stop or in a pub. It is just a very everyday life scene that has survived through the centuries and through the spaces. Indeed, there is a sort of continuity in the textility of the fixed movements of the body, a technique of the body, which appears through the, not less important, flesh of the canvas.

My argument here is that in this particular situation, the visual illusion – the replacement of the letter by a smartphone – is less due to a sort of commodity fetishism, than to the familiarity of the aesthetic experience, made of the same familiar patterns. Furthermore, I would say that this visual illusion is familiar, not because the viewer’s mind has been alienated to the point of seeing smartphone everywhere, but rather because, in this practical situation, the smartphone – like the letter – *fits* the hand, the body and the whole scenery represented in the painting. It would be *credible* to see a phone in this painting – a sort of situation similar to the suspension of disbelief the audience experience viewing a movie. And here is where it becomes interesting. In the case of the smartphone – like in the case of

a movie, between the texture of the screen and the eye – the hand and the device meet in fit,⁴¹ which “is not a condition or quality but a moment of acting in and through, a moment that reveals the potential for dynamic and reciprocal engagement. When hand and MSD articulate, the surfaces of the palm and the MSD [mobile screen device] mold each to the other, they interpenetrate. ” (Cooley 137). This textile-tactile quality that could be programmed to a certain extent, but can only happen during – and goes on after – manipulation, the intimate moment the hand and the device meet is what make the device so effective.

Of course, for thinkers like Agamben, this intimacy would be excessive and reveals the potentially malevolent materiality which imperils man. Indeed, what profoundly bothers the nostalgic – or messianic – thinkers like Agamben, and Heidegger before him, is that compared to traditional technology, the new ones come with a potential to be close to the body – to the extent that it can even replace the hand. Therefore, it becomes clear that in their view not only do they somehow resist their (human) masters because of their complexity and their assimilation to the quotidian, but *they are the one domesticating the humans* (mind and body).

Agamben’s observation, after Foucault, that there is a continuous link between religion and capitalism, between the icon and the smartphone, that those things – apparatus – are formed and deformed by the same lines of forces. However continuity does not mean that everything should become mixed up in a foretold fall for humanity, whose lines of forces would be diminished, shattered and eventually absorbed by a myriad of apparatus, a

⁴¹ Even if Cooley does not make an explicit reference to Merleau-Ponty, one can easily find a convergence between this notion of fit and his grip, when she explains: “I identify the term fit to account for the particular relationship between a hand and a MSD, which opens onto a relation of interface through which vision becomes and remains tactile” (137).

confused mass of minor or major artefacts – from the prehistorical biface tool to the modern smartphone, through the mediaeval icon – through the march of history.

I have already mentioned in the previous chapter the importance of Foucault's reference to body (and its capacity to resist) in his biopolitical theory. The issue is that some thinkers, like Agamben, push this to a paroxysm, they overdo it by exaggerating the supposed alienation due to machines – and ipso facto, also the conditions of emancipation – in the debates about the new conditions of existence due to the proliferation of technological devices which were, and still are to a certain extent, limited to certain circles of academics who are interested in giving meaning to this “biopolitical world” and imagine its alternatives (Citton 2011: 26).

Agamben is haunted by the spectre of Nazism. This traumatic experience serves badly his analysis of the role played by technological apparatuses in contemporary societies. His preconception of a governmental machinery that would enslave all the citizen to the extent of creating what he depicts as the most stupid and docile generation in human history does justice to the diversity and potential of the different actants (humans and technologies) in a biopolitical regime. In a few words, his hyper-moralist analysis prompts tragic conclusions.

As Timothy Campbell points out:

[B]y extending technology to include all those dispositifs that create docile bodies, Agamben risks being unable to distinguish the specific features of communication technologies that endanger man, in particular, the power of technology in the form of communication to make individuals the same so as to be better able to slot them into points in a communication network. What are the benefits of collapsing the cellular phone, for instance, into a larger and undifferentiated category of the dispositif that includes contemporary gadgets as

well as the accessories of the first Homo sapiens? The effect in making it impossible to see where the dispositifs of antiquity end and modern ones begin is to dehistoricize to such a degree that the human is always already captured by the dispositif —that the human from its origin is already destined for salvation, which, for Agamben, can only mean catastrophe (57).

But next to Agamben's catastrophism, there are other understandings of Foucault's genealogy work on the biopolitical apparatus, which do not understand these conditions of existence in terms of catastrophe and eclipse of politics but rather as a *crisis*. As Deleuze writes:

Knowledge, power and Subjectivity- by no means have contours that are defined once and for all but are chains of variables that are torn from each other. Foucault always finds a new dimension or a new line in a crisis. (...) There are lines of sedimentation, Foucault says, but also lines of "fissure" and "fracture." Untangling the lines of an apparatus means, in each case, preparing a map, a cartography, a survey of unexplored lands – this is what [Foucault] calls "field work" (2007: 338-339).

What Deleuze calls "field work" implies the observer's to get involved, even superficially, with the necessary immanence of every-thing that happens in this world – which implies the impossibility to think about existence from some sort of ready-made Self. Indeed, compared to Agamben's approach, Deleuze offers an original and much more optimistic reading of Foucault's political theory:

Some have thought that Foucault was painting the portrait of modern societies as disciplinary apparatuses in opposition to the old apparatuses of sovereignty. This is not the case: the disciplines Foucault described are the history of what

are slowly ceasing to be and our actuality is taking shape within arrangements of open and constant control that are very different from the recent closed disciplines. (...)The question is not which is worse, because we also call on productions of subjectivity capable of resisting this new domination and that are very different from the ones used in the past against the disciplines. A new light, new statements, new power, new forms of subjectification? (ibid.: 345-346).

Compared to Agamben's almost exclusively negative reading of biopolitics, a Deleuzian understanding of technology does not evoke implicitly the negative, the catastrophe of a docile generation of people, for the simple reason that it is based on the belief of the possibility of an "affirmative biopolitics" (Campbell 46). I would rather call it a "constitutive" biopolitics, since Deleuze's understanding of the conception and practice of politics is largely influenced by his reading of Spinoza and his idea of multitude, to which I will come back in the next section.

Of course, an observant reader could point out that times have changed, and Deleuze wrote these lines in the joyous momentum of the 1980s when the interaction between machines and humans was still mostly about a technical bodily experience than about artificial intelligence, and even less about artificial artificial intelligence. However, it is the manner of dealing with a crisis that is interesting here: this tendency to see in it an opportunity rather than a pure negativity, is what have influenced a decade later and until today some critical theorists to turn to affect in order to find an alternative way of engaging with the analytical challenges contemporary modes of production and accumulation of information that imply "life itself" beyond the subject identity (Clough 2007: 2-3). This affective approach establishes itself in an effort to go beyond the model of body-as-organism and opens the

body, which is not to be considered anymore as a “sacred space” where everything begins and ends, but is instead a “realm of potential” (Massumi 91).

I am not going to engage deeply with this affect theory, but in some way, the two following sections are an indirect contribution to this theoretical approach that offers an interesting perspective to the general debate about how social networks are formed and deformed, and their “various efforts to theorize the relationship of information, energy, entropy, and ‘life itself,’ stretching from the nineteenth-century interest in thermodynamics and entropic closed systems to the late twentieth-century interest in dissipative structures and open, nonlinear systems under far-from equilibrium conditions” (Clough 2010: 217). A lot more could be said about affect, body and the new challenges that new technologies imply for the very function of communication media. The political economy of intensified connectivity implies a direct connection between capital and affect with the emergence of various phenomena that theorists have studied in the last three decades: from the phenomenon of “playbour,” which I have mentioned earlier, to “affective labour” which is theorised by Michael Hardt and Toni Negri in *Empire* as an “immaterial labour” a practice that goes beyond the somatic materiality of the body’s actual contact and includes the virtual contact of passion (292-293).

This “turn to affect” opportunity goes back to a tradition that starts with another great thinker, Baruch Spinoza, who has inspired four centuries of thinkers, among which Deleuze is certainly the one who gave the most innovative reading of his work. Consequently, in the next section, I would like to explain how a Spinozian approach can be a great conceptual ally to Latour’s sociology and other theories that focus on the social inscription of objects, and explore how this can be applied to the case of smartphones.

Towards a Theory of the Minor Masses

As I have mentioned earlier, one of the issue with the crisis caused by the proliferation of artefacts, and more specifically ICTs, is a problem of perception, or rather attention, towards what Latour calls the “missing masses.” I have shown in the previous section that the theory of domestication textualises the progressive introduction and bodily attachment into the individual’s everyday life, yet it does not deal really with the “crisis” that this intrusion, and proliferation might cause. In other words, this theory does not answer Heidegger’s “question concerning technology” that has been haunting various generation of thinkers until today.

I do believe that this “question” is still very persistent today for two main reasons, among many others. First, because the gap between entities, object and subject, the collective and the individual, the ideal and the material, is still very present in theory. This dualism has favoured some entities over others: namely humans over other sort of beings and things, which have often been relegated to being secondary entities. Consequently, they become the missing – or at best, the minor – actors in the accounts of the modern theorists; they go unnoticed, tamed and controlled by the human hand...until they break, resist or even worse replace the mastering hand.

I have highlighted in the previous section how domestication theory and ANT can help to understand that problem of inscription of the smartphone: how it becomes part of the quotidian of its user. Thus far, it is not difficult to consider that the *raison d’être* of smartphone is, like most ICTs, to gather, record and share the inscriptions – pictures, messages, videos... – and thus take part in the constitution of social realities. Mauricio Ferraris, in a recent book *Where Are You?: An Ontology of the Cell Phone*, not only continues the analysis of this process of “inscription” of social objects – which is, if it is

needed to be reminded, central in the works of both domestication theory and ANT – but pushes it forward to deal with the ontological issue that such powerful “writing machines” can provoke in the (re)presentation of the (social and individual) body:

[S]ooner or later, I bet our national insurance numbers, our driving licenses, IDs, and passports—which today are all paper or plastic documents—will be incorporated into the mobile phone. We will be able to say, “this is my *corpus*” (my address book, my identity, my money, my archive) (2014: 10, emphasis in original).

Consequently, there is a stratification of the linear ontology imagined by Cartesian minds by the fact that the artefact – in this case, the smart phone – simultaneously emancipates itself from its creator’s original control, but becomes indispensable to its hand – and ipso facto, to its attention. First, due to its mobility it is freed from the domestic landline and fixed space of the house and becomes wireless adapting a “nomad-like qualities” (ibid: 15). Ferraris also highlights that this mobility goes hand-in-hand with a multiplication of the devices that is not fixed anymore to the institutional and shared space of the house; it is the device itself that becomes a referent space where the user/citizen records, stores and shares her personal information to the extent that, as he says, “in the future, the mobile phone will be compulsory for all citizens (maybe it is already for detainees in probation). It is an Orwellian fantasy, albeit a plausible one” (ibid: 26). Once again it is the technology’s ability – like the religious icon – to not only convey a message, but to retain it, to memorise it, to record and maybe even to reproduce it, as Benjamin pointed out in his famous essay (2009), replacing the technique of the hand, monopolizing its creative ability – and even being often better and more reliable at it.

The Italian philosopher points out this capacity to produce a “gigantic monopolist concentration” is the most important aspect of the mobile ontology: the capacity of the medium to convey knowledge, as Mc Luhan would say (1964), is therefore one of the many modes of this machine that is much more than a writing tool. Ferraris sums up by saying:

[T]he mobile phone is the center of everything: intentions and intuitions, writing and images, *affects*, instrumental communication, and so on. In a way, it is a case of serendipity: the incredible luck in bumping into very important things while looking for others, like Columbus looking for India and ending up in America, to his pleasant surprise. Here, we were looking for a wireless phone and found instead the absolute tool, absolute because it is handy and hand-sized (2014: 64, my emphasis).

It is a matter of luck then: something that could not be predicted by the designers when they imagined the artefact.



Image 7. This strange card was inserted between the phone and the one year warranty booklet when I opened the box that contained my iPhone. It just says “Hello.” on the front and has a reference number (at the bottom right corner) on

the reverse side. In my opinion this minimalist design illustrates well the unimaginable possibilities the phone offers: before the impossibility to summarise the many abilities of this “handy” device, the designer went to the simplest option and just says hello on behalf of the thing, leaving the rest to “serendipity” as Ferraris would say.

However, despite this excellent remark, Ferraris’ narrative focuses more on the role of cell phones in the extension and transformation of a social textuality. Indeed, his intention seems to be to offer a new taxonomy that would describe better the reifying action of “social objects” like cell phone that offer a palpable and visible materiality – a trace, an inscription – to some ideal functions, trying to make them much more accessible to a human consciousness. This perspective that recognises a certain agentic potential – a mode of expression through the gathering and inscribing actions – to the artefact that goes against its conception as an *idola theatri*:

[t]he idols of the theater: the philosophical prejudices that contribute to dissipating social objects before the more respectable (or substantial) physical ones and ideal ones. The crucial prejudices, in my view, are: First, the Cartesian perspective for which everything that lies outside episteme (that is, for Descartes, essentially physics) must be ascribed to the doxa, that is, opinion and interpretation. Second, the Kantian assumption that the sphere of actions and reasons belongs to subjectivity as a purely intelligible world, entirely separated from the sensible world (ibid: 107).

This is a worthy cause of course. But as for domestication theory, I would say that this is (politically) insufficient. Especially, if one considers that the present crisis has to be resolved not only by “knowledge” or “linguistic” means but has to do with aesthetic (sensory) and affective experience. In other words, I would say that the inscription is a necessary but not sufficient condition to recognise the action of the non-human masses in

the construction of social reality. It is not sufficient to explain the fear and anxiety the presence of these sophisticated non-human social brings about among some philosophers.

This does not eclipse the fact that there has been growing feeling with the social theorists to understand sensory experience and affect as crucial factors in the work dynamics, production and consumption in late-capitalist cultures. However, as Brian Massumi, one of the major thinkers of the “affective turn,” points out:

The problem is that there is no cultural-theoretical vocabulary specific to affect.

Our entire vocabulary has derived from theories of signification that are still wedded to structure even across irreconcilable differences (the divorce proceedings of poststructuralism: terminable or interminable?). In the absence of an asignifying philosophy of affect, it is all too easy for received psychological categories to slip back in, undoing the considerable deconstructive work that has been effectively carried out by poststructuralism.

Affect is most often used loosely as a synonym for emotion (88).

Once again, it is worth mentioning here that the objective here is not to go against the traditional categories of critical theory and social sciences. The aim is not a frontal critique of onto-linguistic theories, the focus on a *narrativisable understanding* of the forces that constitute and reconstitute social networks, but to think with them.

As Noortje Marres points out, a technological device analysed as a *scripted object* is only *latently* political “insofar as it projects a particular role to be played by subjects, (...) it then becomes the task of social studies of technology to expose these normative capacities of objects, to demonstrate that it is going on and analyse its workings” (2014: 263). This type of theory is very effective to study simple artefacts with a normative purpose, but would

certainly run out of arguments when confronted with more complex technological devices that are enhanced, like most ICTs these days, with a multitude of features of electronic display, chip and screen. These “augmented objects” do not particularly follow latently the particular role imposed by the designer’s script, but are *explicitly* political in the sense that, as Marres writes, they “resonate with particular matters of concerns:”

[The politics of augmented objects seems much less “determinate” than that of scripted objects. In this case, whether the object can be ascribed a “politics” hinges on the capacity of the object to resonate with a *spectrum* of issues: climate change, smart grid, peak oil, innovation, the carbon economy, coal-fired power plants, and so on. What matters here is the normative range of the object, the spectrum of issues that may be “loaded” into the object, or as the case may be, that it is not able to accommodate (ibid.: 264).

It is here that I turn to Spinoza, this formidable philosopher to enrich the conceptual toolbox I have been using in this thesis. Among the plethora of the conceptual tools offered by Spinoza’s philosophy, I have decided to use two entries to answer what Massumi seems to see as a theoretical deficiency – or obstacle – in social sciences (93). First, I will focus on the question of *masses*, which implies that the conception of the crisis is a matter of scale, not limited to a reflection on the ontology of specific entities like cell phones, but demands what Deleuze and Guattari call an “ecological thought” (Deleuze, Guattari 1994; Guattari 2000). The second one is the question of *affect*. Both concepts are useful to understand that the crisis among modernists triggered by the proliferation of technology is not only with the realm of the text and rationality, but it is also – some would say *mainly* – an aesthetic and affective upheaval that brings about some major changes in the modes of constituting the

social. Smartphone then are not only “writing machines,” to use Ferraris’ term, but also “affective machines.”

But, let’s not rush things. It is crucial to remind ourselves here that the ontological anxiety emerged when the *homo faber* suddenly hold the tool responsible for his misfortunes, looking at it in a mixture of terror and astonishment, and cries scandal and treason. Scandal and treason, indeed: the philosopher becomes out of necessity – it is always interesting to remark on the high degree of elitism in the statement of this “necessity” – the judge of the modern technology, which according to the Enlightenment project was supposed to participate in the march to progress and emancipation (Seris 330-335).

Perhaps, this is because, the very notion of emancipation that has been promoted in modern Western philosophy contains in them a dialectical logic that generates distrust towards other notions that would restrain or prevent the freedom of the individual. This has been one of the major topics of modern political theory: the tension between contingent necessities and the movement towards change and freedom, which are the conditions that shape all human societies. These necessities that bind the individual, yearning for freedom, to the material context of existence take the form of masses; and as Dilip Gaonkar points out, “[t]his is especially the case with liberal democratic theory where the crowd is viewed as intrinsically ‘illiberal’ – to the extent that it allegedly dissolves the ‘individual’” (7).

In his seminal essay, “Spinoza, the Anti-Orwell: The Fear of the Masses,” Etienne Balibar looks at this detachment and suspicion towards and from the masses, which “becomes an explicit theoretical object, because it is, in the last analysis, their different modalities of existence, according to the historical conjunctures and according to economies or regimes of passion, which determine the chances of orienting a political practice towards a given

solution” (106). It is all there in this initial passage; and most of all the affective dimension that characterises this fear towards and felt by the masses – or *multitudo* (multitude), a term often preferred by theorists:⁴²

The fear of the masses, in its ambivalence, is more than ever the fundamental question: the entire inquiry of the *Political Treatise* is devoted, therefore, to an attempt to find *the point of equilibrium* (or points of equilibrium) between *the power of the masse* (*puissance de la masse*) and *the power of those who govern* (*puissance des gouvernants*), having understood that it is a question precisely of the same power, caught up in a process of division and combination, hence at the same time one or concentrated, and multiple or dispersed, expressed simultaneously in obedience (or in rebellion) and in decision (or indecision) (ibid. 121, emphasis in original).

The transposition of the tension between *multitudo* (people – masses) and *imperium* (state) to the level of the masses of artefacts and the human user/individual may appear excessive, but I argue that from Spinoza’s position, it would be difficult to deny that the same essential dynamics, the same regime of passions, stimulates these different entities that differ only by their modes of expression of the same substance. This crisis, this fear of the masses – the one they inspire, as well as the one they feel has a constituent role in modern societies: “it is precisely this fear of his own people more than any external enemy that will restrain the sovereign from following the siren’s song and indulging in irrational or violent conduct. This confers a rational function on the ‘fear of the masses’ or at least the fear they inspire” (Montag 80).

⁴² For a more exhaustive analysis of the nuances between these different terms, see Balibar 1989: 111-117.

Consequently, one could see very strong similarities between the fears and worries of modern (political) thinkers about the crowds and their worries about the proliferation of technologies. From the seventeenth-century emerging democratic politics or in twenty-first century global societies, the horizon still is the same: to find “the point of equilibrium” or, as Latour would say, to build up a “symmetrical anthropology” between what we call the state and the (human and non-human) masses (1993).



Image 8. This picture was taken during the visit of Sweden's King Karl Gustave to the Rijksmuseum on April 5, 2014. Like fig. 5, it illustrates very well the worries of some thinkers about the downward of the combination of the proliferation of connected technologies and the crowd of visitors that are not paying attention to Rembrandt's master piece, but are “transfixed by screens” as says the title of the article and recording the visit of a celebrity (source: <https://www.theatlantic.com/photo/2015/01/a-world-transfixed-by-screens/384296/>)

Of course, Balibar is mainly referring to human masses when he says that Spinoza among the philosophers of his time is not only unique in placing the multitude at the centre of any political society, but also in thinking “from the standpoint of the masses” (1989: 107). But there is nothing preventing – and certainly not Spinozian philosophy – us to extend this

notion of “multitude” to other modes of associations that would include non-human agents. From the beginning of the *Ethics* (part I) Spinoza insists that there is there is no ontological deficiency in nature, by only variations, modes of expression of a single substance.



Image 9. On the same article, there is this picture of hundreds of people holding their phones over their heads, with the lighted up screens oriented towards the sky – this detail is significant – during a protest march against an Internet tax in front of the Ministry of National Economy in Budapest on October 26 2014 (source: <https://www.theatlantic.com/photo/2015/01/a-world-transfixed-by-screens/384296/>). This picture, like the previous one, are interesting for two reasons. First, the importance of the bodily gesture: the way the individual interacts with the artefact, the manner she holds the artefact – looking through the screen or showing the screen to the others – can have different significance. Second, and I will come back to this point in the next section, it is about the constitution of the multitude of people as a social reality, Balibar writes that: “the constitution of the individuality and of the multitude in the imaginary are one and the same problem, one and the same process: what Spinoza calls *affectuum imitatio*. This is why it is not abusive to maintain that the object of Spinozist analysis is, in fact, a system of social relations, or of mass relations, which might be called ‘imagination’” (1989: 131).

What we are dealing with here is a transformation of status from the crowd to a constituted association, from silenced masses to a network of actant, from objects/subjects to social active beings. This transformation is first of all a political and aesthetical act of recognition that allows us to preserve and provide for what Spinoza calls the *conatus* in his *Ethics* (part

III, prop. VI): this effort of each body (individual and collective), of “[e]ach thing, as far as it can by its own power, strives to persevere in its being” (75).

What sort of being? Not having access to the thing itself, nor to the particular individual – at the risk of going over towards a totally psychologising perspective – the object of a Spinozian ethics is about “individuality” which has to be understood as “neither the Cartesian nor the empiricist ‘subject’ but the process or the network of the circulation of affects and ideas” (Balibar 1989: 135). From this perspective, it is a whole general essence of humankind that is challenged. This has two major coextensive consequences: first, is to tone down the moralist catastrophism of some thinkers: humans are not those immutable being promoted by a philosophical tradition for four centuries. Second, at the same time, it does not take the road to a Romantic escapism, imagining an idealised place that could save us from the tensions that arise and cross the multitude. Against the notion of individual free will promoted by the thinkers of his time, and later by the Enlightenment, Spinoza talks about necessity as an immutable condition of freedom, which is not accessible through an “affirmative” force (through a dialectic movement) but a “constitutive” force. Reason cannot control and is not opposed to a supposed outside world: “there is no absolute, or free, will, but the mind is determined to will this or that by a cause also determined by another, and this again by another, and so to infinity” (1996: 62).

In Spinoza’s time, it was this necessary bond to exterior “mysterious” forces that haunted so many thinkers, since it implies that free will is based on a myth, a belief that can be explained by the limits of the human cognition that has been promoted for so long. In the 21st century, the thinkers face the same fundamental worry about the multitude that have a grip on the human existences. The only difference is that today, with the exponential growth of ICTs, these minor masses constituting a non-human multitude are more present and

louder than ever, to the point of creating a “Zazirocracy:” a term that Yves Citton takes from an obscure 18th c. writer, Charles Tiphaigne de la Roche, to describe those things or *zaziris* – which means “agents” in Chinese – that have the potential to disrupt our biopolitical regimes (Citton 2011: 13-14).

The Smartphone as Affective/Effective Machine

In this section, drawing from the Spinozian notion of multitude, I want to push forward and highlight that the smart phone is an intriguing machine not only because it is a textual machine that take part in the constitution of social codes, but because an important part of this effectiveness is due to the fact that it is fuelled by and takes part in the regime of passions, independently from its designed intentions. Already, Latour reminds us that like the iconic image of the forbidden fruit, the emotional bond humans have with some artefacts, like the smartphone, reminds them that they do not live in a world where they can classify everything into pure mental categories, but rather “in a disgusting world composed of impure but fascinating human-made mediators” (2002c: 16). How come that from the iconic image of the bible to the communication technology, the Apple triggers so much passion?

For it is passion that is delegated and produced by what Latour calls “factishes” - made of a mix of factual reality and imaginary fetichisation - and fuels the flux and the lines that pushes something to evolve and change, and suspend the models of fixed ontologies and goes towards a more holistic understanding of modes of expression based on the “equation between affect and effect” (Massumi 89). The long tradition of critique of social behaviours and, from the old (religious) idols to contemporary (technological) ones, revealed an

essential crisis in the humans' modes of existence that finds a sort of climax in contemporary technologically saturated societies.

By saying that there is a continuity in all human activities and relations, one could certainly say that capitalism (phone) like religion (icone) is not a mere thing nor a dominant abstraction, but a different way, a different mode of expression of a similar effort to persist and growth. It is a similar flux of affects, believes and actions that crosses Spinoza's critique of religious superstition and politics in early modernity and Foucault's biopolitical analysis of late capitalism. A flux that has started long before them, and continues after them, just taking different forms and expressions over time.

Since late Antiquity, philosophers have been influenced by the idea that the soul can control the passions aroused by the body, which is usually presented as a passive bridge to the outside world. The best illustration of this ontological dualism is to be found in Descartes work, who writes in the *Passions of the Soul* about "the power of the soul with respect to the body" (art. 41):

But the will is by nature so free that it can never be constrained. Of two kinds of thoughts I have distinguished in the soul – the first its action, i.e. its volitions, and the second its passions, taking this word in its most general sense to include every kind of perception – the former are absolutely within its power and can be changed only indirectly by the body, whereas the latter are absolutely dependent on the actions which produce them, and can be changed by the soul only indirectly, except when it is itself their cause. And the activity of the soul consists entirely in the fact that simply by willing something it brings it about

that the little gland to which it is closely joined moves in the manner required to produce the effect corresponding to this volition (233).

Descartes develops here a persisting paradigm that represent the soul as this “empire within the empire,” to use Spinoza’s own terms, that controls the body simply by the power of the will (volition). As Descartes does, Spinoza offers a conceptual tool box to understand the mechanisms of these powerful forces called *affects* that can be presented as actions or passions, but presents them as essential elements in his ontology that cannot be controlled totally by a supposedly superior free will. Here is his definition in the *Ethics* (part III, def. 3): “[b]y affect I understand affections of the body by which the body’s power of acting is increased or diminished, aided or restrained, and at the same time, the ideas of these affections” (70).

This definition is important because it puts the body and the mind, action and thought, on the same level on the ontological scale, declining any possible superior (call it consciousness or soul) that could totally control the body (and its passions), which at the same time excludes any analysis of the affects as vices. As he states in *A Political Treatise*:

I have laboured carefully, not to mock, lament, or execrate, but to understand human actions; and to this end I have looked upon passions, such as love, hatred, anger, envy, ambition, pity, and the other perturbations of the mind, not in the light of vices of human nature, but as properties, just as pertinent to it, as are heat, cold, storm, thunder, and the like to the nature of the atmosphere, which phenomena, though inconvenient, are yet necessary, and have fixed causes, by means of which we endeavour to understand their nature, and the mind has just

as much pleasure in viewing them aright, as in knowing such things as flatter the senses (288-289).

His contribution is then to consider the affects as a necessary factor of existence. More importantly, they are not generated by an embodied consciousness in a sort of closed system, as in Descartes; but are changing by a system of derivation association based on the three primary affects: desire, joy and sadness (Spinoza 1996: 101). I am not intending here to give another commentary on Spinoza's theory of affects. But, here is where it concerns the most my purpose. The idea that affects operates by transfer highlights three important elements: first, the necessity of an exteriority, of a human or thing that presents itself as the cause of this affect. Second, these affects should not be judged by their inherent values, but rather according to their effect on the subject that changes according to the circumstances. Finally, and it is this point that interests me the most for the purpose of this section, this transfer of affects demands reciprocity in the interaction between the different entities, which is illustrated by Spinoza's fascinating principle of the imitation of affects (*affectuum imitatio*) in the *Ethics* (part III, 27): "[i]f we imagine a thing like us, towards which we have had no affect, to be affected with some affect, we are thereby affected with a like affect" (84).

Therefore, unlike orthodox Marxist and Lacanian readings which predicate that this passion for objects is a phantasmatic projection of fetishes in order to wash out a sensation of lack, what I am trying to suggest is less reductive consideration of this generative force. The principle of affect can then be understood as the simple root for human sociability, for the interaction between different individuals, but it goes further.

It is a great intellectual *tour de force*, as Jonathan Bennett puts it; it offers an anthropological approach by asserting something about things – from the standpoint of general masses – and then to humans, as a special case:

Spinoza's entire interpersonal morality is based on an interpersonal psychology in which the basic thought is not "that individual is human" – with "human" naming some natural kind – but rather "that individual is like me." Because similarity is a matter of degree, Spinoza can calmly handle borderline cases, allowing for creatures to which we could react in in *almost* the typical interpersonal way" (280, emphasis in original).

Therefore, this principle of imitation permits us to perceive in all beings a potential – since it is always a matter of scale and degree – to socialise, even the borderline cases – like artefacts. And this potential to connect and interact is higher when the other "individual is like me." It does not need to be totally identical, it just needs to be almost identical: it is about imitation and imagination; it is about similarity in an encounter without any preconceived discursive or ontological hierarchy between entities: it would be "meaningless to interrogate the relation between the human to the nonhuman if the nonhuman is only a construct of human culture, or inertness" (Massumi 100).

Spinoza's perspective highlights the necessity to think from the most basic and fundamental type of relations that cement society, which are not different from those found in other beings and things: "[f]rom this it follows that man is necessarily always subject to passions, that he follows and obeys the common order of Nature, and accommodates himself to it as much as the nature of things require" (Spinoza 1996: 119). Therefore, the ontological divisions between entities – subject and object, between mind and body, individual and

society – are rendered meaningless from the perspective of affect, which therefore deserve some attention to build up a strong theory of actants and networks.

There is no place for Kantian moralism here. It is all about an effort to understand – and if possible to channel – this ambivalent intensity, that can result in good or bad according to the context and its association with the things and being where it is accumulated: “*affectio* may be fleeting but it may also leave a residue, a lasting impression that produces particular kinds of bodily capacities” (Watkins 269).

Insisting like Spinoza did in his time, on their ambiguity: “[I]nterest in affect opens up new thinking about nebulous and subtle emotions like *schadenfreude*, or mixed and ambivalent phenomena such as reluctant optimism, intense indifference, or enjoyable melancholy” (Wetherell 2). This necessary ambiguity, which is evidence of ontological pluralism of all the things promoted by Spinoza’s philosophy, is perfectly in line with an approach to socialisation of technology that I want to promote in this thesis. It is this necessary ambiguity that makes me think that Agamben’s “worries about...” and Deleuze’s “encounter with...” the apparatus are constituted by the same biopolitical phenomenon, the same repeatable trace of an interaction, but that might take different forms of expression, different intensity with regards to the subject’s effort to persist in being. The potential – the affordance – contribution or diminution of this capacity to persist cannot be judged before the encounter takes place, before the network is loaded with action/passion and shows its effectiveness. Consequently, any judgement value of “good” or “bad” can only be done a posteriori. Again, this is intimately linked with the perception of the technological device, to the most technical details. As I demonstrate in the two images discussed earlier, even the gesture of outstretched arms with the smartphone with the screen turned inwards or outwards might have a different semiotic understanding.

Of course, as I have mentioned in the previous chapter, it this very ambiguity of things, this “meshiness” tinted with opacity – even of obscurantism – that critics since Kant have tried to undo, and for a good reason. The aim is to demystify the doubt, the aura or the fetish in order to (re)introduce them into the textual trail of a historical and theoretical discourse that promotes the defence and the supremacy of the patriarchal figures of the subject, of the Promethean individual, of the *homo faber* – with all the political and ecological consequences that come out of it. It is this same ambivalence that pushes me to consider smartphones not only as writing machines but also *desiring machines* (machines désirantes), a concept that I borrow from Deleuze and Guattari:

Desiring-machines are binary machines, obeying a binary law or set of rules governing associations: one machine is always coupled with another. The productive synthesis, the production of production, is inherently connective in nature: "and . . ." "and then . . ." This is because there is always a flow-producing machine, and another machine connected to it that interrupts or draws off part of this flow (the breast—the mouth). And because the first machine is in turn connected to another whose flow it interrupts or partially drains off, the binary series is linear in every direction (1983:5)

If you take out of this concept the psychoanalytical reference, you have what Deleuze calls in his later works an “assemblage” that combines both matter and idea, being and things, affect and effect, passion and action:

[I]n an assemblage there are, as it were, two faces, or at least two heads. There are *states of things*, states of bodies (bodies interpenetrate, mix together, and transmit affects to one another); but also *utterances*, regime of utterances: signs

are organized in a new way, new formulations appear, a new style for new gestures (the emblems which individualize the knight, the formulas of oaths, the system of ‘declarations,’ even of love, etc.) (...) In enunciation, in the production of utterances, there is no subject, but always collective agents: and in what the utterances speaks of there are not objects, but machinic state. There are like the variables of the function, which constantly interlace their values of their segments. No one has shown these complementary faces of any assemblage more clearly than Kafka (Deleuze, Parnet 2007: 70-71)

I am tempted to say that we are back to Kafka’s world, but actually we never left him. Deleuze lesson with this passage is that there is no a fundamental difference between the conditions of fiction and those of material reality: everything is interwoven into a dual effort of optimal persistence – call it grip, conatus or affordance - in maintaining and caring about what we generally (pre-)conceive as “existence,” “culture” and “nature.” Kafka’s short story also started with fear but ended up talking about care. As the Family man tells it himself, he had to go through a process of revaluation of rethinking of what the monster, the Odradek, means in relation to him, his family and his context of life, his house. The movement goes from a purely moral position, which is based on strong prejudice against to an ontological encounter between two beings, him and the thing, that shape and are shaped by each other. Once more, rather than a moralistic binary choice in favour or against of a new order of permanent connectivity. All depends on the motivation and the direction of the movement of lines of (scientific) progress and (technological) proliferation and (economic) growth. Thus, the central question is not to appeal to degrowth but rather redirect industrial politics to fight against what Stiegler call the “malignant” growth (*mécroissance*) (2010: 51). The medical original of the term crisis helps to understand that

it is the decisive moment of the illness when one has to make choices that will reevaluate not only the values (ideology) the crisis in itself but the direction of its action. Once again, the words attention and affect come back to my mind, even in the way they give a chance to speak for us to the missing masses, but also in the way we talk about them and conceive of them in what might be called a critical theory of minor masses.

Conclusion

When the Wise Man Points at the Moon...

The aim of this thesis has been to build up a conceptual toolbox for the purpose of contributing to the efforts of Bruno Latour and other thinkers to give more space in critical theory and the social sciences more generally to what Latour calls the “missing masses.” My general strategy has been to adopt what Bjørnar Olsen calls a “theoretical bricolage” that consists in gathering not only “bits and pieces but also to creatively reassemble them – using those parts to construct something usable” (2013: 152). In this thesis the bits and pieces were philosophical, sociological and anthropological concepts that I gathered in order to compose my conceptual toolbox, which general framework is based on the Latourian notions of “ontological symmetry” and “general constructivism” (1993, 2005b). The purpose of this toolbox is to help myself and others to develop a stronger interest in technology and artefacts more generally in critical theory. Its first role is to be useful for thinkers who propose an alternative to the traditional ontologies and epistemologies inherited from the dualism and moralism of Descartes and Kant that trigger a fear of assimilation or domination by non-humans. But as Stengers points out, “as soon as the so-called humans are considered in their associations with what makes them feel and think, the possibility of an assimilation with non-humans loses all interest, all capacity to worry. While what imposes itself it rather the question about how ‘to treat them well,’ without untying them from what makes them feel and think” (2006: 141, my translation).

Within this general strategy, my first tactic was to build up in the introduction a central concept: a hybrid that I called “minor grip,” which was meant to act as reference and

leitmotiv for the reader throughout the thesis. The second tactic was to put it to test with four cases studies of different scales and sizes, and confront it with what the theoretical literature has to say about them in order to find theoretical allies who could enrich the toolbox with some useful additional concepts.

One could say that I was looking for the “idiots” among “the wise men.” My use of the term “idiot” – like my use of minor – should not be taken in a derogatory or reductive way, but rather in the way that Gilles Deleuze and Isabelle Stengers understand it:⁴³

[the idiot] is the one who always slow the others down, who resists the consensual way in which emergencies mobilize thought or action. This is not because the presentation would be fast or because emergencies are believed to be lies, but because “there is something more important” (Stengers 994).

The idiot is the one who looks at the finger, when the wise man points at the moon. As this thesis demonstrated, when it comes to the question of technology, the wise man is the majority voice. Inclined behind his desk, his head in his hands, he thinks that his critical and moralist capacities to unveil the “fetishes,” to unmask the “gizmos,” to decode the “black boxes” is the last rampart against the barbarism of the machines. He believes that his task is to purify the ontological surface from “hybrids” “quasi-objects” and other technological “parasites”: either it is a tool at the service of the Enlightenment project or it is a threat. There are no other options than to be either an object or a subject. Some people make a difference between two generations of wise men: a modern and post-modern, but I

⁴³ Deleuze mentions the character of the idiot during one of his lecture on Spinoza at the université of Vincennes. For a short extract from the lecture (in French), see <http://www.ina.fr/audio/P14351770>

have tried with my analysis of some of the works of thinkers like Baudrillard, Foucault and Agamben to demonstrate that, as Latour writes:

Postmodernism is a symptom, not a fresh solution. It lives under the modern Constitution, but it no longer believes in the guarantees the Constitution offers. It senses that something has gone awry in the modern critique, but it is not able to do anything but prolong that critique, though without believing in its foundations (1993: 46).

From the modernist to the postmodernist, it seems that when it comes to technology, their thought is haunted by the horrific events of the last hundred years, which fills them with nostalgia for “good old” tools that can fit the hand, and with fear for the “bad new” ones. For this reason, in response to the rapid demanualisation of the hand and the proliferation of automata, the mind of the wise metaphysicians counter-attack with concepts such as “reification” and “technological paternalism” as if technology was an independent entity that could work like a mercenary for capitalist forces or for any other mysterious reason. To those who believe in such myths, it is always salutary to remind them that “the machine is always social before being technical” (Deleuze, Parnet 70). Before pointing to the red moon, and predicting the worst catastrophes, they should maybe slow down and look at their finger, at their hand and how it interacts with the things around them. They should be reminded that being a thinker does not mean to be shut away in the ivory tower of reason and to sacrifice the sensory experiences and affects. They should accept that human existence is dependent on things, since society is composed by humans and non-humans that support them, and that afford it, to use Gibson’s term (2015). This is why as Susan Kuchler states:

What we need is a new method, one that recognizes not just the role of objects in the production and appropriation of knowledge technology, but that takes the next step to study empirically the future-directed, transformative potential of materials within which technology is embedded, as the stuff available to rethink the history of modernity (2008: 103).

This is what I have tried to do, setting an empirical ground by choosing for each chapter a case study and offering a brief history of its evolution. Then, I have tried to compose in each chapter a theory that would give voice to these “lieutenants of societies” (Latour 1988a: 310), without an a priori judgement of good or bad. I have demonstrated that, morality is something constituted after the interaction between the different elements; as Latour says: the responsibility for good or bad deed is always shared between the actants (1994: 34).

Of course, there are also the “idiots” that take the time to look at the finger, and ask why it is pointing at the moon. Those are the men for whom a theory about things is not about us looking down to them, but maybe rather look at ourselves: “[things] deserve to be housed in our intellectual culture as so many fully fledged social actors. They mediate our social action? No, they are us” (1994a: 807). These idiots are like the fictional narrator of Latour’s *Aramis*, who learn patiently at the contact of mentors and motors how to use “the word ‘sociology’ in a way that was absolutely that absolutely no one else did” (1996a: 11).

Of course, some among the idiots, those who pretend to be idiots and understand this message in a very radical way and confuse similarity and identity to the point of taking radical perspectives and talking like in an “inner life of things” (Harman 2010), a rejection of writing and language as forms of oppressions (Bogost 2010) or the belief in the primacy

of lines as the constituting material of everything (Ingold 2011). Despite, their radical positions, I also showed that they offer some good conceptual tools for my toolbox. They pretend to be idiots, but they cannot escape their condition of (post-) modern thinkers. My toolbox, as Stengers says about Latour's "Parliament of Things," can only accept concepts created by "'modern' representatives of conflicting interests. Such representatives must be capable of 'promoting' the constraints that, according to them, an innovative device, disposition, or product must satisfy based on commonly intelligible criteria alone" (2011a: 348). After all, one has to accept that wise men and idiots or quasi-idiots... are all subjects to the same condition, and have to find a way to collaborate: "in the very act of defending their interests, must be able to put the formulation of the interests in question to the test of general interest" (ibid: 349) .

The next step would be to get some of the tools out of the theoretical box and see if they work in more specific contexts than I have covered here. With all the case studies – and more specifically with the photographic exhibition – I attempted to answer Latour's *call for more empiricism in theory* and philosophy "in the name of experience itself" (2011: 306). The next step might take my Latourian toolbox a bit further than the APT of a bus station or the cosy atmosphere of a university campus, trying to "translate" what some other missing masses have to say to us. But always at the risk of experiencing the same fate of what Stengers calls the "diplomat:" a type of researcher who knows that "she is obligated to report to those who have commissioned her, and that what she has to report, a proposed agreement, may be associated with a form of betrayal. But, except in the case of unconditional surrender (for which she has no use), she also knows that those she reports to have the power to reject her proposals. The inherent grandeur of her practice is tied to this risk" (2011a: 378). This *risk* is one way of bringing critical theorists into dialogue with

Latour, as long as the formers admits they are not exceptional beings, they are not above the fray, but actually share the same conditions as all the rest of the participants of the constitution of a society; and the latter admits that his project of a Parliament of Things will need those who call themselves “modernists” or “experts” as potential allies, depending on the circumstances, since the “distinction between experts and diplomats is always relative to an issue” (ibid: 395). The fundamental potential of the conceptual adventure of a Latourian sociology is not based on opposing powers, replacing the Constitution of the moderns by the constitution of the pre-moderns – or “non-moderns” – but rather an obligation for the thinkers *to think about themselves*. By contrary to Kafka’s family, the wise philosophers, technical experts and other modern or non-modern thinkers are incited *to think about themselves together*. It is an invitation to think together and listen to what Stengers after “Alfred North Whitehead called Oliver Cromwell’s cry which echoes down the ages: ‘My brethren, by the bowels of Christ I beseech you, bethink you that you may be mistaken’” (ibid: 368). Rather than another rational statement, it is a discreet but insistent *ritornello* that intends bringing critical theorists’ attention to the silence of the human and non-human missing masses, and perhaps create “the space in which the voice of those who are silent becomes present” (ibid.). Thinkers of all fields, *cogitamus!*

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