

### UNIVERSITÀ DEGLI STUDI DI PALERMO

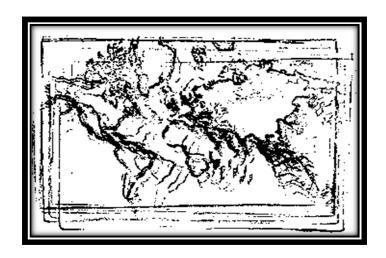
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# (UN) EXHAUSTED CARTOGRAPHIES

Re-living the visuality, aesthetics and politics in contemporary mapping theories and practices



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By Laura Lo Presti

Cover image: Ruth Watson (2014). The world today, today, today...

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#### INTRODUCTION

### Mapping Forwards, Seeing Backwards

Du lebst und tust mir nichts.

[You are alive but will not hurt me!]
(Warburg in Gombrich, 1997 [1970]:70)

Visual theorist W. J. T Mitchell asserts that the "birth of an image cannot be separated from its deadness" (2005: 55). And it is rightly from the presumed death of an image, an inanimate object of desire and apprehension which has seduced, tormented, haunted and felt as exhausting the work of human geographers, that the present research has been nurtured by and simultaneously claims to move on. The critical image to which I direct attention is the geographic representation par excellence, the map.

After the dismantle of the positivist paradigm and in the aftermath of the cultural turn, cartography has been treated by critical and cultural geographers as an exhausted discipline, model, language, and form mostly informed by technocrat and ideological discourses. Even if is common-sensical accepted that "maps and cartography comprise a primary part of the geographer's technology, methodology and language" (Bradshaw and Williams 1999: 250), to tell the truth, nowadays, we are on the cusp of an uncomfortable situation where scholars, especially belonging to the radical niches of human geography, become visibly in unease if it is noted by outsiders that their activity is linked to the production and teaching of the cartographic knowledge. In the midst of the postmodern hangover, cartography has been more likely deconstructed as the master narrative of the geopolitical, colonial, and imperialist modernity and, in its digital transposition, perceived as a ubiquitous and pervasive medium sustaining a new totalizing and violent synoptical vision.

In this turbulent atmosphere, geographers—instead of crafting their own maps—have started to metaphorically and furiously cut and ripped them in order to unmask the hidden and tremendous secret of their tacit and abstract powerfulness. The map has indeed become in more than one sense: "dead, a concept in ruins, carpet bombed by the formidable arsenals of contemporary critical theory" (Prendergast 2000: IX).

Yet, the disfiguration of the map as the evil side of geography, the demonic force that must inevitably bring about the geography's fall, has shown simultaneously a libidinal attachment on the part of geographers to that icon. Such figural approach is suspended between what Mitchell (2005) and Latour (2010) attribute to the iconoclastic attitude (a type of exorcism in the wish to destroy images) and idolatry (the belief in their magical or divine 'presence'). In short, for a great part of human geographers the prosopopoeial nature of the map as it were alive and able to speak for itself the language of power has consequently caused the desire to dismiss and bury the mapping tool once and for all in their own research. Yet, this cartophobic attitude has certainly been positive in the sense it allowed new and others ways to conceive and relate space, places and bodies to spread out in geographic circles. Those are some of the reasons among others that led many geographers to snub maps as a source of analysis, preferring at most a deconstructivist approach to them. For real, the majority of human geographers, especially cultural geographers, seems not to have (anymore) professional technical skills in order to participate into the cartographic knowledge production. Yet, now more than ever, mapping continues exerting a massive influence in the contemporary age. Whether it is a "desire" (Pickles 2004), an "impulse" (Alpers 1983), a "problem-solving practice" (Kitchin and Dodge 2007), a "story-telling device" (Caquard 2014), a "spatialisation without temporality" (Massey 2005), the "affect of geography" (Rogoff 2010), mapping still remains 'a' well-acknowledged way to be interested in the spatial configurations of the world. Despite the metaphoric overload, the result is that, for different purposes and with different expectations, it has never stopped to be one of the most pervasive, intense, and nonetheless overlooked languages of our society.

The research is located in the cavity of this disconnection, a gap that not every geographer would agree, perhaps, to recognize. That is to say, on the one hand, the acknowledgment of an exhaustion, an alleged geographical academic "indifference", a Kantian "interested disinterest" towards contemporary mapping's proliferation and consequent transformation; on the other hand, the recognition of an un-exhaustion, an increasing geographic interest that we might refer to the "cartographic turn" (Cobarrubias 2009, Lèvy 2015), the "topographical turn" (Weigel 2009) or the "new mapping paradigm" (Crampton and Krygier 2006), leading instead visual, critical, literary theorists, artists and activists to consider mapping practices and performances as relevant means, models, metaphors, incubators of spatial potentialities (in a counter, metaphorical, deep, emotional, historical, forensic or purely informational way).

Paradoxically, if cartography as science is dead (Wood 2003) and the map itself is seen as an insufficient tool to learn spatially about the world, as well as a dangerous, reductive and distorting medium of knowledge, it is permissible to ask why, even today, it continues to exert a tremendous charm and a value attractiveness both in everyday practices and in the universe of the arts. The map is very often considered an aesthetic product, a visual form of synoptic knowledge, a visionary and poetic (even poietic) element having the means for inventing places, moulding subjectivities and for discovering new relationships between them. Notwithstanding that the map is a poetic and material medium aimed to symbolize social and cultural relations with space is not enough as it is nonetheless generally perceived in critical geography as a tool at the service of power. The ambiguity and ambivalence surrounding the map trope weigh down any attempt to give a univocal and explicit definition. The difficulties and aporias lying in charting a genealogy of the cartographic thought depend, in fact, on the positioning of the scholar and urge, now more than ever, a deconstruction of the category "map" itself. Hence, the goal should not remain fixed only in trying to understand what is a map, or what it means, but what it really does: how the map, or better various mapping practices work as cultural practices in several discourses disciplining our life. To understand what knowledge is today represented by geography and to what extent and at what pact the relationship with cartography can be recovered, it is necessary to trace the genealogy of discourses and concepts which have outlined the form of this "body to body" until the alleged feeling of the map "exhaustion". Representing past through the chaos of contested and overlapped spaces of thought is a necessary theoretical move to provide new perspectives on geographical representations. New visions able to take into account cultural and social ferments which go far beyond the boundaries of geography.

Importantly, one clarification is necessary at the outset. This is not a research about historical cartography. I say this because the term "cartography" is a neologism coined by Manuel Francisco de Barros y Sousa, Viscount of Sanatarém, in 1839, devoted to the study of ancient maps. Here, it is not considered the semiotics and iconology of the Middle Ages fascinating maps nor of the Renaissance's portolans. The history of cartography traced herein is conceived rather in terms of some of the theoretical and practical turning points from which the epistemology of mapping has been affected in the last three decades. Slowly uncovering the murmur of the discourses and the troubling genealogies of the cartographic thought shows evidence of a *polemology*, a continuing rift with the geography in cahoots with the cultural turn. The inability to dialogue between geography and cartography finds its

materialization in the postmodernism, as I said, and I will try to focus on the crucial moments in which, in my opinion, major blows have inflicted to the map that consequently have marked a present of mutual indifference. The main postmodern discomfort lies in the way of understanding a concept so dense such that of representation, the definition of which traditionally creates a divide between what is perceived as the external world, factual and real, and the internal practices of signification, subjective and partial. The map, conceived as the representation of the territory, has been approached as a cumbersome and tricky figure by which being attracted and from which seemingly walk away. Such fetishization has now substantially crystallized, especially in the discourse of continental geography, transforming the map into a "monad". In this regard, Walter Benjamin argues that: "thinking involves not only the flow of thoughts, but their arrest as well. Where thinking suddenly stops in a configuration pregnant with tensions, it gives that configuration a shock, by which it crystallizes into a monad" (1968a: 262).

I should remind, indeed, that as a well-routinized endeavour, geographers have tended to universalise the "map", to treat it as the evil matrix of all the world metaphors (Farinelli 1992) without studying the differences between and within mapping practices. As the historical geographer Matthew Edney recently suggested, remembering the 25th anniversary of cartographic historian Brian Harley's famous essay "Deconstructing the map", published in 1989:

Instead of a supposed universal endeavour that determines spatial thought and that ineluctably expresses state-focused, juridical power, we can study the several modes of mapping practices, each part of spatial discourses differentiated by their various spatial conceptions. We need to deprivilege "the map" and instead explore the constitution of each mode as a melange of incorporative (performative) and inscriptive (graphic and verbal) practices (2015: 12).

The monadization of cartography is nothing but its exhaustion. Following the philosopher Pelbart (2015: 12), there are at least four ways of exhaustion that the present research aims to decline and twist in the iconosphere embraced by mapping. A cartographic exhaustion involves the matter, forming exhaustive series of things; devours the listening, drying up the flow of voices; attacks the space, trying to extenuate its potentialities; and appeals to the visual, in the desire to dissipate the power of the image. But the exhaustion is also a key moment in revaluating certain images and theories to open new areas for a critique of mapping. To fruitfully galvanise the "monadized" academic view, we need then to make proliferating other perspectives and to put them in resonance with each other. However, this does not mean that the intent of this research is to look for the 'novelty' in the mapping

consumption outside cartography, especially if the novelty is thought as a rapid, painless and romantic going further and beyond our own research tools; rather, this is replaced by an enduring going behind the taken for granted 'use' of professional, mundane, activist and artistic mapping as methods and sources of research or as a simply spatial vernacular experiences. In fact, those heterogeneous contemporary mapping theories and practices require a tentatively work of understanding of their propagation and a differentiation of their uses and aims. This means that they cannot be generalised tout court in the irredeemable violence of the so called "cartographic reason" (Farinelli 2009; Olsson 2007; Pickles 2004) nor in "the cartographic gaze" (Pickles 2004).

All this considered, in the interest of the present research is crucial to explore maps' limits and potentialities, investigating and re-figuring under other perspectives the presumed gap between reality and representation; as well as asking which are the main coordinates defining the epistemology and ontology of cartography as a cultural practice in the current moment. In order to examine this, as first step, it is essential understanding from where our analyses come from: from where do we speak? In which regime of visuality and visibility are those mapping's theories and practices inserted? In which paradigm and from which theoretical coordinates do we need to read the 'mapping' question, today?

Hence, the aim is not to replace acclaimed views and methodologies, but to multiply them. Specifically, I believe that the most interesting way to begin addressing them is to create problematics, not to simply collect and consume them; creating problematics means also to put in dialogue or in a beneficial clash one thought, theory, paradigm or project with others. For this reason, I want to defend and expose my own place of enunciation, that is one of a researcher who has more than a simple feeling that a new convergence between the geographic and cartographic thinking might be found in the cultural and visual theory terrain, leaving the quiet moorings of each own discipline and having the courage to confront outer and hybrid mapping's cultural developments. This gesture could certainly invigorate or resize certain debates that animated the last three decades of both cultural geography and cartography.

Moreover, to unravel the threads binding together cartography and geography, my decision is not to follow a progressive and linear path. On the contrary, very often the reader will have the impression of being in front of a sort of recursive principle, whereby certain images and reflections addressed in previous chapters can come back and lurk in the crevices and in the lines of following paragraphs. It is as if I were writing with one sheet of paper

under the other, so that the strength of certain thoughts remains imprinted, like a shadow or a smear, even in the subsequent. In this sense, lines of investigation crisscross and double back on one another during the writing. Yet, although certain figures of thought and argument will be re-taken, my intent is to propose them each time in a different light and to animate them with a different rhythm. "Thus, in each case, it is not a matter of following a given project to be fulfilled, but to open up the field for a trajectory to be followed according to the questions, problems and unforeseen challenges, each of which must be addressed individually" (Pelbart 2014: 251).

Convinced of its importance, numbed by its complexity, the heart of this research is the representation, the symbolic space shaped by the discursive formations which proffer and mould the world, as recalled by post-structuralist theories. It comes both to explore (and overcome) the consequences in understanding the map as a representation, and in looking at the (mis)representation of the map in the geographical discipline. More specifically, the thesis takes shape and substance through five programmatic propositions, or rather five theoretical gaits that are condensed into the proposed chapters' titles: charting, disfiguring, resuming, displacing/displaying and 'migrating' the representation of mapping.

It is in those movements and shaking that the contemporary practices of mapping and the regimes signifying them can be re-articulated to return the history of cartography that a cultural geographer would, and now more than ever, should re-write. But not all the "geographical mapping" anthology can be trapped in the words of theory. Rediscovering it in its deepest meaning, the theory becomes a mode of seeing and, as such, does not necessarily have to do with "words-reading" modalities, but it should also work out to look at the image without giving any reassuring explanation nor interpretation. The two parts in which the thesis is divided will indeed be introduced primarily by two images that condense or overturn, depending on what the reader-viewer wants to see, the titles accompanying them. It is, therefore, a way to "leaving the images mute as though to speak for themselves" (Crang 2003: 241). Perhaps, in fact, the verbosity of our imagination, which we certainly cannot discard in the present text, should also accept that: "[t]here is a time for images, a right moment when they can appear, inserting themselves, breaking the combination of words and the flow of voices" (Pelbart 2015: 11).

After this preamble, it is now time to go into more detail. In the first part of this thesis, *The cartographic exhaustion: on the life and death of representations*, I discuss, adopting an historical and diatopical analysis, the problematization of representation in the work of human geographers, moving from post-positivism to contemporary post-structuralist theories. The aim is to focus on moments of crisis and critique related to the geography of representation and more vividly to the representation of geography itself. In the context of this research, it seems impossible and senseless to reconstruct the way in which every systematized and disciplinary geography looks at and through representation, but certainly, even if fragmentary, I will consider the common atmosphere of some of them as well as their interruptions and discrepancies, especially considering the work of some Italian and Anglo-American geographers. To be fair, I have my own sense of what it is that might be important in immortalizing the bond between geography and representation and this will inform my argument. Such unfolding is certainly possible to be explored, even if not limited to, through the patrols of the totemic geographic representation: the map.

Maps, valorised under the banner of demystification, have become the site of inquiry within a period of profound dialectical crisis of representational, intended as a specific way to think about representations in critical and dramatic moments of the discipline. Therefore, I propose a triad of chapters in order to trace the philosophical, theoretical and biographical history of how geographers have thought, loved, hated and rejected maps in their research. However, maps do not simply float as detached and dematerialised objects, they have been crafted and produced by human map-makers and today not even so human, if we think about the automation enabled by the algorithm. This consideration suggests more vividly to approach the first three chapters as a parable of the relationship between geographers and cartographers (then GIS specialists¹) where the issue of reflexivity and reflection are put into play, exemplified by the metaphor of the mirror. Here, in strategically distancing and then re-approaching geography and cartography, we realize that they do not coincide once put under tension, but they are somehow over-written, leaving drip at the edge meaningful marks to explore, and small disconnections to re-activate. Once framed such uncollimated

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<sup>&</sup>lt;sup>1</sup>GIS is an acronym for Geographical Information Systems or Science. They are computer systems capable of capturing, storing, analysing, and displaying geographically referenced information. A GIS is configured both by non-spatial attributes - the database - and geographical attributes, which define geo-referenced locations. In a database every object is related to a geographical position, linked to a software able to perform input, management and analysis functions as well as output visualizations such as maps and charts (Goodchild 1995). However, Geographical Information Systems or Science is a broad term that can refer to a number of different technologies, processes, and methods.

overlapping, it is crucial not to take them for granted but to reflect deeply on the effect they had on the systematization of both disciplines.

Specifically, the first chapter, Charting Representation, sets more generically the debate on the crisis of representation, reflecting historically, theoretically and across different timespaces on the relation between the geographical and the representational, by unveiling at least three trajectories of such crisis: the anti-positivist, the cultural and the non-representational move. The purpose is to ask in the next two chapters how such diverse representational attitudes have affected the work of geographers, especially cultural geographers, on mapmaking, considering a postmodern cultural cartography (Chapter Two) and then the impact of the digital turn in mapping (Chapter Three). To simplify, we could argue that the postmodern cultural cartography sketched in Chapter Two—Disfiguring The Map welcomes a set of "map-breaking" practices (Huggan 1989), while the following chapter, Post(mortem) Cartographies, works in the sense of a cartographic mender. Such expressions define the transition from a deconstructive and de-legitimizing analysis of the map to new and contemporary sensibilities animating scholars as concerning map-making, understood as an open and diegetic practice. Oscillating and intersecting the vision of the map as "technology of power" (Foucault 1971 [1969]) and as "performance" (Deleuze 1986 [1988]) opens, in fact, to different and critical approaches to discover and to trace in the panorama of Cultural Geography and Cultural Studies. The key to discuss this encounter between power and performance, or rather the rediscovery of power not just as subjection but also as a potential, is particularly sketched in the Third Chapter. Here, I intend to dent the common and conservative cartographic theory on which are often caught the Italian geographers (but not only them) to disclose it, with due caution, to the appeal of postrepresentational (Dodge et al. 2009). In this regard, the strength of the prefix post lies in the dual attitude of moving beyond and behind a mainstream tendency that has affected the discourse and the rhetoric on map-making (i.e. the positivist representational realism and the cultural one) to re-locate and re-figure the look over contemporary mapping practices and theories differently. Yet, after discussing the critique/crisis of several representational ways of thinking in/of geography, I argue that most of the challenges and potentialities offered by a post-representational approach are more likely to be explored outside or in between the disciplinary world of cartography and GIS as well as of a bounded geography, if we consider how they need to show a canonical credibility by setting very profound scientific and methodological paradigms. This means that, if in the first part we are more likely to find a discourse about the Map, in the second part is crucial to explore the possibility of a discourse made through different mapping practices and modes.

The Cartographic unexhaustion: re-living mapping through visuality and aesthetics explores the possibility of a visual and aesthetic analysis of different mapping projects and methods not strictly bounded to the geographic or cartographic academic milieu and mostly related to a "yet to come" visual/aesthetic geographic approach. Moreover, the obsessive interest in cartography flourishing at the intersection of several theories and different cartographic backgrounds requires an interdisciplinary work and a resulting composite methodology that draws upon the theoretical apparatus of New Cultural Geography, Visual Culture Studies (and visual methods) and Post-Representational Cartography.

In this attempt, the fourth chapter—Displa(y)cing Maps—reframes the cartographic knowledge production through the filters of visuality and aesthetics, by inserting the map within the "image theory" or Bildwissenchaft (Bredekamp 2003). Here, we can better contextualize iconophobic and iconophilic perspectives on images and consequently applicable to mapping visualities. Above all, the reader will grasp the oscillation between the representational and the non-representational modes of analysis, namely both a discursive/interpretative and an affective/emotional or operational stance mobilized around such cartographic production. In this other land, cultural geographers and humanist theorists, in a nutshell the geo-humanists, can find a congenial place where to engage anew with mapping, embracing in their research creativity, performance, affect as well as exposing the more nuanced and invisible power-knowledge nexus within the proliferation and circulation of new constantly produced mapping practices. Put differently, now the space of transitivity comes to be reclaimed. The metaphor I invoke is that of the window on the world. It asks how geographers look and should shape their glance to unfold the experience of mapping practices that are no longer under their control, while involving other actors (graphic designers, artists, activists, writers, corporate and vernacular cartographers) and referents.

In continuing to explore this outer cartography and especially recognizing the proliferation and consequent difference of mapping practices and motivations, in Chapter 5 — Wet necrocartographies — I try to discuss such richness and obsessive proliferation of the map image in relation to migratory events. More specifically, I discuss very different projects related to mapping the injuries and death of migrants in search of new life within the space of Fortress Europe, distinguishing between a figural, an operational and a forensic

cartography. The aim, once moved from the death of cartography to the mapping of death, is to translate in the migratory visual regime that tension between the critical paradigm of postmodern cartography, devoted to the cultural and political approach on representation, with that of the non-representational dashed in the previous chapter. More importantly, what flows behind this research is the possibility "to interface between the general, conceptual questions and the historically specific moment" (Hall 1999, online). A moment in which the media pressure exerted by the 'migration crisis' results even in the dramatic proliferation of maps on migratory fluxes and routes, shipwrecks and 'invasions', as well as in the obsession of statistics and bodies' numerification with the risk of leaving us stunned by a vertigo of saturation and of resulting distance. Under this light, I consider visuality and aesthetics the new coordinates through which to question the hybrid and pervasive character of contemporary cartography. In particular, I tend to privilege projects on what I call "necrocartographies" inhabiting the current space of border crisis. Throughout the chapter, the necropolitics (Mbembe 2003) examined refers to regimes of deadliness and liveness in which subjects and bodies as quasi-objects are experienced in processes of confinement, removal, and exhaustion. This way, I more vividly show how maps, as particular visual formations, can speak via migratory events and how events speak through the maps, trying to develop a hybrid methodology, suspended between the visual and aesthetic approaches foregrounded in the earlier chapters.

I will specifically focus on the work of Laura Canali, graphic designer, cartographer and artist born in Rome in 1968 and responsible for the production and design of geopolitical maps at *Limes, Italian Review of Geopolitics*, since migration proves to be a dear topic for her. The conversation is aimed to explore the genesis and processuality of her cartographic work, posing crucial issues around the visual ethics of map-making and the crafting of geopolitical maps. However, more than an insight into technical aspects of her work, it offers a space where to unfold her subjective, affective, and emotional investment in the framing of contemporary political events related to migratory issues, mobilised through or with maps. Then, I will intersect her mapping production with other and very different cartographic strategies operated by Frontex agencies, that I ascribe as "operational cartographies". Finally, I will contrast the latter to the daily forensic and investigative mapping work promoted by activist journalists of the online platform *Migrants' Files*.

I hope that the exploration of very different mapping visual strategies might give the reader a sense of a multifarious cauldron of imageries, subjects, expectations, targets which cannot be anyhow generalized. There are contexts in which the cartographic tool is dangerous and others in which it proves to be increasingly helpful to promote critical and political debates. Without forgetting that there are many other contexts in which we could do without our maps. Hence, the goal of a good critical observer is to deploy a composite arsenal of theories and methodologies to resist and re-scale the power of maps in contemporary political, social, and cultural scenarios so that even if maps are proliferating and alive, they will not hurt us.

### Notes on methodology

The methodological strategy here is what I have called 'picturing theory', that is, treating theory as an embodied discourse, one that is constructed around critical metaphors, analogies, models, figures, cases, and scenes. A theory of media that follows this path has to ask not only what media are, what they do; it has to raise the question of what the medium of theory itself might be. (Mitchell 2008: 8)

The first undeclared objective of this work is to ask what it means to "define" a concept such that of the map amid a massive production of theories, ruminations, case-studies, and practices which draw from very different backgrounds of knowledge, and, secondly, what are the consequences in the moulding of several modes of analysis in respect to the social and cultural phenomena of mapping through sometimes stable, sometimes murky categories of thought and action. This suggests to capture those moments where such conceptualizations emerge and collide. To achieve the goal, it is demanded to see how the two categories of geography and cartography can be sewn together by mobilizing the voice of those researchers who—amusing or complaining of the lack, inequalities, and abysses between the two—have sought to build bridges for new dialogues. The final challenge is to pour this mixture of theoretical and methodological ferments in a specific case-study (but huge, and complex): the mapping of migratory events occurring in the Mediterranean Sea.

Categorization, definition, classification are thus core aspects strictly related to 'methodological issues' that I need to further clarify before jumping in the unsafe ocean of the research. Indeed, despite postmodern claims of de-ossification (Hutcheon 1989) and deconstruction (Derrida 1969 [1967]), in the midst of everyday life and in the research study, one cannot help classify and reduce the experiences and relationships with people, objects and events in the world of concepts, patterns, models that, firstly, help bringing order among the complexity of reality and, on the other hand, can only be questioned periodically for their

bias and superficiality. Cognitive linguistics has long questioned the principles guiding the categorization, which, once revealed, might signal to use with more caution the repertoire of concepts appreciated by the social sciences and, in our case, concerned with the definition of representation, power, mapping, visuality and aesthetics that impregnate this text. In short, categorization (preparation and organization of real data in cognitive structures) is such that the situations and people we meet are encoded in the classificatory systems that were culturally built and, in some percentage, genetically; the situations and people we meet are stored in containers that reduce intra-categorical differences and increase inter-categorical differences. This means that once a phenomenon has been recognized as similar to another by selected characteristics, we put it in the same category, focusing on the differences that the entire class has over another, and make it losing its idiosyncratic features (Croft and Cruse 2010). On the other hand, this process is productive because it allows predictability (from the classification of an item, you can predict its behaviour) and it provides additional information (since the element belongs to a certain category, it is possible to deduce that has some characteristics specific to the category, although they have not been directly observed). In recent decades, various "turning points" and paradigmatic crises in the humanities and social sciences led luckily to reflect on the risks and reductionism of these classificatory and taxonomic principles that seem to trap the social and cultural phenomena, which, by their nature, are dynamic, complex, murky, and multi-relational. On the other hand, they are difficult to understand, unless the clippings and choices managed by the researcher. The researcher, indeed, when she or he observes reality in order to know how it works, formulates some assumptions consistent with the historical, social, cultural, economic, political and biographical context in which she or he lives, using specific tools and specific ideas, namely methods, that are not abstract or universal but produced historically and therefore valid just temporarily. We must therefore understand that social reality can be known in many ways and, in this respect, the question of knowledge is certainly of "methodological" order (Amaturo 2012).

However, as we said, the choice of models and methods depends on the questions that the researcher poses and the answers that she hopes to find, but especially on the context—or from the places and the space-times—guiding her research. Since, in my case, both the questions and the spaces where to unfold them are manifold and the perspective that I want to return is certainly subjective and limited but not for this limiting, in the course of my research it has proved essential to draw upon different methodologies.

On the one hand, I conducted some interviews (open, semi-structured and structured) with different practitioners of art and members of activist networks, often accompanied by further follow-up. In the case of artistic encounters, I have also attended exhibitions' guided tours made by the artists I was following in my research; additionally, from the meeting and the common discussion of their aesthetics and poetics as well as of their relationship with maps, it has often been preferred a discursive analysis and substantive interpretation of their work because, beyond the non-representational emphasis that in many respects I share and that I will cover more neatly in the course of the thesis, the question of meaning - of what the image symbolizes - has emerged as central from conversations I had with the interviewees. Moreover, a great support to the definition of research questions has been provided by the attendance of seminars related to the constitution of creative mapping community and participatory GIS in London (i.e. Living Maps<sup>2</sup>) and in Maynooth and Dublin, where I spent several months of my research stay. My research was thus in part the result of a participant observation shaped by the preparation of various diaries, whose many notes will be scattered through the text. Honestly, beyond the methods chosen to explore the whirlwind of questions, concerns, unresolved issues that have titillated my head during these years of research, I believe that the various manifestations of places are the ones that had a major role in shaping my reflections. In fact, I cannot overlook the fact that the space and the medium through which the interviews and workshops took place, as well as the abroad research experiences, were always changing. Sometimes it was the crowded room of a museum; sometimes the screen of a computer; sometimes the research area became the public site of a mapping performance, as well as the countless spaces of displays through which cartographic visualizations manifest themselves in their comings and goings.

Obviously, the methods to seize on to undertake the issue vary according to the object of research. Indeed, the space constructed on a website can reveal different characteristics from the one experienced during a performance or an interview. Relations change and mutate in function of our way of looking, experiencing, and engaging with them as well as our willingness to tell them that is based on the methods each of us, more or less consciously, chooses. For instance, when it comes to 'encounter' spaces designed exclusively online, as the Migrants' File platform or even Frontex website, where images are operational or the

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<sup>&</sup>lt;sup>2</sup> Livingmaps Network was established in 2013 with the support of Mapping for Change, the Young Foundation and the Centre for East London Studies to develop a network of researchers, community activists and artists with an interest in the use of mapping for social change and public engagement. I attended its workshops and seminars during the Spring 2015, in London.

result of a broader chain of labour, it might be hard to come back to their producers. Therefore, we should also start to ask which limits underpin the ethno-methodological approach that is usually demanded in 'social' visual studies (Hine 2000; Kinsley 2013); and what kinds of practices of seeing and saying the virtual object prove to be more appropriated than others (see Burnett at al. 2009; Russell and Purcell 2009). Nevertheless, when it is about interviews, it should be considered that my assumptions do not always coincide with what people know and live in their daily lives, therefore a negotiation of meaning and experience is always at work. Hence, if the reader were wondering what is the methodological position held in this research, I would clinch that the nature of my reflections remains mostly that of a "picturing theory", as Mitchell (2008) suggested above. And rightly because images "are 'innately', as it were, bound to the human body" (Belting 2013:93), I am not able to keep separate what is defined practice by theory, just because I consider theory a body itself, a sounding board made of interpretations, feelings, voices, imagery, cases and scenes. In fact, what I still perceive in the current moment is a series of impasses between theory and praxis that should be overcome. Hindrances which intensify when trying to put into dialogue the speculative toolkit of Italian geography with the Anglo-American one. Looking for a compromise, I think Deleuze is profoundly right when in a radio interview with Foucault in 1972 tells the complex link between theory and practice:

At one time, practice was considered an application of theory, a consequence; at other times, it bad an opposite sense and it was thought to inspire theory, to be indispensable for the creation of future theoretical forms. In any event, their relationship was understood in terms of a process of totalisation. For us, however, the question is seen in a different light. The relationships between theory and practice are far more partial and fragmentary. on one side, a theory is always local and related to a limited field, and it is applied in another sphere, more or less distant from it. The relationship which holds in the application of a theory is never one of resemblance. Moreover, from the moment a theory moves into its proper domain, it begins to encounter obstacles, walls, and blockages which require its relay by another type of discourse (it is through this other discourse that it eventually passes to a different domain). Practice is a set of relays from one theoretical point to another, and theory is a relay from one practice to another. No theory can develop without eventually encountering a wall, and practice is necessary for piercing this wall (in Bouchard 1977: 109).

The methodologies for me are nothing more than images of the theory, the walls and the membranes encountered during the search path; they are measures of seeing allowing us to look at some aspects and to keep silence on others, giving, however, an illusion of rigor and seriousness. This is why the methodological approach is revealed to me just like a modality

of seeing, a practice of theory among others, with its disciples and traitors. And between loyalty and betrayal, the life of maps need to be plumbed in the point of conjunction and rupture of these various arrhythmias of looking.

# I.The cartographic exhaustion

On the life and death of representations

It is crisis that reveals to us the forces which have been at play - and redistributes them, by answering the question: are things going in the direction of life or of death? (Pelbart 2015 [2013]: 120)

No wonder that the art of mapping is a question of life and death, for the cartographer has no choice but to explore the limits of representation (Olsson 1994: 218)



Figure 1 Vernon Fisher (1995), Men cutting the globe.

# Chapter One

# Charting Representation

Representation means using language to say something meaningful about, or to represent the world meaningfully to other people. You may well ask, 'Is that all?' (Hall 1997:15)

La rappresentazione geografica è in grado di integrare qualunque nuovo contenuto. Il paradigma della geografia entra in crisi solo quando la società non accetta più certe regole della rappresentazione, non si riconosce più in essa. (Dematteis 1985: 103)<sup>3</sup>

#### Representing Geography

To begin to tell the story of how Geography met, seduced and finally murdered the representation and consequently the map, I might start with a comfortable rhetorical move and, perhaps, the simplest one. For instance, if one wanted to emphasize the symbiotic and crucial relation that geography has experienced over time with the grammar of representation, it would be enough to play with the etymology of the term. In the process of writing, drawing and representing the 'Earth', the *geo-graphia* has been often presented as one of the most compelling and controversial 'image-making' and 'textualizations' of the world. More emotionally, the art of describing the world has been also romanced as an art of evocation, of making things visible and therefore memorable (see Della Dora 2009, Mangani 2006). Hence, concepts of representation, vision and aesthetics resonate familiarly within the event horizon embraced by geography, especially when they address the universe of mapmaking. In this vein, as a study of spatial practices constructed and made meaningful by individuals and groups, any geographic project seems inescapably freighted with the matter of representation, a notion that, at turn, has been variously treated by its practitioners in

<sup>&</sup>lt;sup>3</sup> My Tr. from orig. IT: "The geographical representation is able to incorporate any new content. The paradigm of geography goes into crisis only when the society no longer accepts certain rules of representation, when it no longer recognizes itself in them" (Dematteis 1985: 103).

terms of meaning, medium and form (Barford 2011). Put differently, representation is one of those words that have assumed such currency in the academic geographic glossary that has now become difficult to talk as if it could mean anything specifically. However, it does, even if has changed its uses and conditions over time and across languages and contexts of analysis. In German philosophy, for instance, 'representation' is generally designated by three related words. Repräsentation hints to the inner voice of the subject that needs to be expressed in the outer world in order to become real; darstellung is used in the sense of exhibiting, physically or theoretically, concepts and figures, thus highlighting a mise—en—scène; vorstellung means to bring into the present far things from the past (see Jardine 1985).

In this spirit, these three semantic moves make the art of representation and, at turn, of geographical representations meaningful respectively as an inside-out process, as a performance and finally as an evocation. However, thought as media, representations could also be conceptualized as vehicles and processes through which the meaning circulates between members of a given society (Hall 1997); while if we lag our attention on their forms, is worth noticing that they are materially and contingently configured by specific arrangements and textures (whether it comes to pictures, texts, maps, landscape painting), converging the curiosity of the reader in their 'affordance' (Gibson 1979) and in their visual architecture in order to offer insights on how the creators of such representations perceive and make sense of the world.

Definitions do not say anything, however, if we detach them from the universe of practices within which they emerge. The concept of geography, no more than that of representation, cannot be subjected to a simple and instantaneous definition, the striking of a name from the vocabulary. In this sense, the dense narration of the encounter between geography and representation implies other preparatory considerations. Hence, to dispel the first generalizations, one might reasonably ask: who are these practitioners?

Notably, there are different schools of geography to be considered, a complex "geography of geographies" (Livingstone 1992) to deeply reckon, discuss and deal with. Beside the scientific and professional domain, there is even a whole geographical knowledge sprawling through mass media and popular cultural practices, which has been variously defined long time ago in terms of 'spectacular geography' (Lacoste 1976). In the age of mass-communication, we should bear in mind the plethora of intersections and interlocutions between the two, so that the geography of professionals, much more devoted now with the insurgence and the shifting contingencies of everyday life, becomes always, to some extent,

filtered by the viral geography of the media. This must be added to another major issue of apprehension and complaint among geographers that has been identified at length with the political and economic production of geographical knowledge foregrounded by military, industrial and governmental agencies (see Dematteis 1985, Quaini 1978).

In such multi-layered blueprint, geographers should constantly look both in the mirror and at the window, a window that is increasingly taking on the appearance of a screen, a digital interface. Two or more metaphors to say they need to confront with their representations as well as with those produced by others, when not co-produced. Seen from this angle, an implicit compelling task of this study is then to unfold the modalities through which academic geography theorizes and presents itself (reflexivity) while attempting to represent something in/of the world (transitivity). This also suggests that if one of the undirected goals of Human Geography is to deconstruct or to produce—theoretically and practically—competing images of places, bodies and objects configured in societal and cultural processes, we might argue that, as such, the geographical gaze adds a sort of second reading of society, in terms of a critical re-construction of spatial re-presentations. Nevertheless, and in part as effect of the cultural turn, the more critical strand of the discipline is more often committed to address the politics and the ideology implicit in such signifying systems. However, theoretical issues of what representation might mean, be and do are rarely self-reflective and much more indebted with outer influences. Not by chance, geography occupies in the Gotha of social sciences an ambiguous even if peculiar position, presenting itself as a porous and malleable field, a theoretical sponge ready to filter and to absorb different currents of thought. This particular disposition means also that the critique and crisis of what is commonly believed to be the most meaningful translation of the geographic language—the Map, precisely, which is the main preoccupation of this research comes, not surprisingly, from multiple entries. Therefore, although one might argue that it would have made more sense to start with the crisis/critique of the map as debated in the field of cartography, that choice would not have fully grasped the disputed and ambiguous relation between cartography and geography, silencing important paradigms' shift occurred in Human Geography in the last forty years. Per contra, in the broadest sense, it seems more appropriate to tell the story of the 'crises' of representation(s) as such, which involved, especially during the postmodernity, both the Humanities and Social Sciences and from which, so to speak, the hybrid field of geography has been nurtured and raised. To further corroborate this corollary, we could intersect two 'first hand' comments. The cartographic

historian Brian Harley argues that "the challenge to and continual crisis of representation is universal and not peculiar to cartography" (1990:18) and the geographer Strohmayer concludes: "Human Geography's preoccupation with representation [is] simply a 'pragmatic' response to the wider, preceding crisis of representation" (1998: 106).

The aim of this chapter, then, is to give back this sort of *matrioska* or multi-layered vision, presenting in the next sections the sense of a strongly critical theory's heterogeneous and committed influence over geography. In truth, even recognizing a peculiar and amorphous status of the discipline, I do not want to dismiss the fact that geography has, in fact, its scientific and methodological canon and as such is cyclically and critically called to reflect on a broad set of questions on "representation and communication—rightly because—[they] are dependent upon prior questions of ontology (what constitutes reality), epistemology (how we come to know reality) and science (the formal construction of such knowledge)" (Cosgrove and Domosh 1993:24).

In short, issues of reflexivity and transitivity of the geographical knowledge may lead to assume that occasionally reflecting on how scholars represent what they do is also a way to genealogically understand how the discipline has been constructed and figured over time and, especially, how it has emerged amidst broader theoretical shifts worthy of specific attention. The way in which I refer to the genealogy of geographical thought has less to do with an interest in retracing forensically the origin and the progress of the idea of representation in the discipline; it is rather more committed with the Foucauldian sense of a history of thought, a theoretical disposition here mobilized to reveal how a certain idea, previously taken for granted, somehow silent—such as that of geographical representation—at certain times 'becomes a problem', raises questions and critiques (Foucault 1983)<sup>4</sup>.

To have a better sense of such theoretical facet, the Italian geographer Dematteis comes to state that: "essa [la rappresentazione] ci permette di immaginare (di simulare con la nostra mente o con il calcolatore) tutte le (fisicamente) possibili azioni sullo spazio reale, anche senza sapere che cosa in realtà esse significhino, convincendoci così del fatto che è inutile

<sup>&</sup>lt;sup>4</sup> In one of the lectures Foucault gave at Berkley in the fall of 1983, he referred to the history of thought this way: "The history of thought is the analysis of the way an unproblematic field of experience, or a set of practices which were accepted without question, which were familiar and out of discussion, becomes a problem, raises

discussion and debate, incites new reactions, and induces a crisis in the previously silent behavior, habits, practices, and institutions. The history of thought, understood in this way, is the history of the way people begin to take care of something, of the way they became anxious about this or that" (Foucault 2001 [1983]: 74).

chiederselo" (1985: 38)<sup>5</sup>. At the time in which the Italian geographer makes this critical point, geography has already entered a phase of considerable doubt both epistemological and political. Especially at the end of the '70s, the complex interaction between hermeneutics, studies on epistemology of science and literary theory as well as their following cross-pollination with social sciences, configure a more or less institutionalized 'representational turn'. What does 'representational' mean?—we might ask—And in which sense has representation become the most significant, if not topical, frame through which the discipline of geography has thought, imagined and reproduced itself, at least, for a long time?

Such questions need to be addressed if we want to deeply understand the *critique*, the *crisis* and the recent renewal that the culture of mapping is unwittingly experiencing in a wide but specific range of debates and discussions. Issues that I consider heavily dependent on a constant confronting and propensity that geography has had (and still reserves) toward the burning matter of representation. A matter that asks in contemporary theory, I believe, to be at first contextualized in the philosophical thought and then transposed more effectively into the field of visual culture. We can return to this scenario later in the discussion. Bluntly, as we are going to explore during the text, the notion of *critique* should be always tied with the concept of *crisis*, if it is true that any figure of thought is constructed by a self-reflection—the critique—and an incessant questioning of itself—the crisis (Cometa 2010). To be more specific, the 'crisis' to which I refer is the questioning of some 'critical' ways of understanding the representation in geography, in the attempt to highlight at least three key theoretical gaits that have consequently informed and transformed the discourse on cartographic representation.

#### The event of representation

These moments need to be interpreted more as buffering zones, theoretical clouds rather than progressive chronological lines, where a certain way to reflect and work on representation may overcome others, or may resonate with others, without, still, replacing or discarding them. Paraphrasing Stuart Hall, my desire is: "to go back to that moment of 'staking out a wager' [...], to those moments in which the positions began to matter" (1992: 279). The first buffering zone is what we might define the anti-positivist move, matured

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<sup>&</sup>lt;sup>5</sup> My Tr. form orig. IT.: "[representation] allows us to imagine (to simulate in our mind or with our calculator) all the (physically) possible actions on the real space, even without knowing what actually they mean, convincing us thus that is even useless to ask it" (Dematteis 1985: 38).

between 1970s and 1980s in the wish to dismantle and disrupt the alleged objectivity of the scientific method (see Rorty 1979, 1989); the second atmosphere takes us forward in the 1990s, grasping with the effects of a twofold social constructivist approach, to be distinguished into a semiotic and a discursive analysis (Hall 1997) and mostly related to the emergence of the 'cultural turn' in geography; finally, we approach the early twenty-first century where the attempt is to disclose the disparate body of thought-through-action engraved by the non-representational theory (Thrift 2008). The timeframe in which these epistemological ruptures occur, with consequent change in the way of understanding the representational language, makes appropriate to interpret, even if not fully exhaustibly, the life and death of geographical representations within the intellectual ferments and preoccupations triggered immediately before, during and after the 'theoretical' condition of postmodernity. In this eclectic period, indeed, not only many of the aspects of the world we live in today take shape (Cresswell 2012), but also most of the geographic theories arranged at that time will act as a sort of fulfilling prophecies, changing and expanding the boundaries of the discipline. In particular, at the heart of the postmodernist geography lies a way of looking at the process of representation as a deeply problematic element in the construction of knowledge. More broadly, Johnston and Sidaway point clearly that: "[p]ostmodernism presented a substantial critique to the approaches that dominated much of geography in the period from the 1950s through the 1980s, with their emphases on order and 'grand theory" (2016: 249)6. In truth, this statement could be admonished as a generalization since any attempt to map the geography of postmodernism and its meanings, we know, is doomed to fail. The same fate touches the way in which the postmodern legacy has been narrated a decade later. The tale of postmodern season has been, indeed, reduced into a hyper-verbose and eclectic intellectual moment often discarding its theories and reflections in terms of bothersome residual leavings. It is by virtue of this intolerance that the postmodern has not been officially fully welcomed in all the sub-disciplines of geography as well as in other sociological fields. It has, in any case, provoked a sharp division between what I would call a culturologic (or culturalist) attitude and a socio-methodological approach, opening, in part, a gap which often resonates in terms of mutual critiques. Those who 'theorize' about cultural

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<sup>&</sup>lt;sup>6</sup> The quoted authors are indirectly referring to the American's postmodern legacy. In United States the term was first used during the 1950s with a historical connotation, to mark the epoch followed to the modern one. Between 1960-1970 the postmodern became a synonym for an anti-modernist position flashed out in pop culture and art. It was then the work of Jean-Francois Lyotard (1979) and its English translation (1984) to summarize the season of dismantling and disruption of the grand theory (see also Minca 2001).

representation are more willed to underline the impossibility of objective knowledge and methodological certainty, often worried to unmask the relationship between knowledge production and various political, social and economic mechanism of exploitation and oppression (see Flaherty et al. 2002; Gilmartin 2004). On the other hand, those geographers who pragmatically 'produce' and 'use' for their analyses a wide range of representations (graphs, maps, diagrams, spatial models and other images) remain sceptics and sometimes indifferent to the highly theoretical and philosophical nature of previous approaches, disputing their lack of relevance to the 'real world' as justification for their demise. Seen from this angle, postmodernism has had at least the merit to bring out the contradictory souls of the geographical thought. It did it by embracing a classical issue, that one of the relation between 'the world' and 'the word' or better between reality—conceived as external matter and its construction, perceived as internal, symbolical, partial and ideological configuration to emphasize then the controversies about space and language (Anderson and Harrison 2010). At the heart of the geographical overture to the images of the worlds there are diverse ways in which that relation is addressed through postmodernism. Ways that can give back a sense of the struggle over representation and, at turn, a witnessing of a constant reworking in terms of geographers' positionality within and outside the academic feud.

The geographer Michael Dear acknowledges, for instance, that "[p]ostmodernism places the construction of meaning at the core of geography's problematic" (1994: 9). It is not surprising that there are at least two ways in which postmodernity has emerged as the "event of the representation" as emphasized by philosopher Colebrook (2000). She argues that, on the one hand, it might be retraced a philosophical stream that discusses the primacy and the limits of representations at several levels; on the other hand, a mainstream approach, usually related to Cultural Studies, indirectly claims that reality is always an effect of textuality. "New worlds are made of old texts, and old worlds are the basis of new texts—talk back Barnes and Duncan, both geographers—[f]or what is true is made inside texts, not outside them" (1991: 3). Thus, they confirm "the inevitability and desirability of remaining within the world, and at one with the domain of representation" (Colebrook 2000:47).

Both of these aspects, related respectively to a questioning of the representability of phenomenal reality and to the acknowledgment that realities are whatever constituted through signifying systems, contribute to establish a metaphysics of representation, whose unfinished power, as Minca (2001) recognizes, relies precisely in the discussion of the non-accessibility of reality and in the concurrent faith in its representability.

Let's try to transpose more vividly into the work of geographers the double tendency pictured by Colebrook (2000). Once framed the link between geography and representation, it is important to understand how the notion of representation has shifted its way of being understood and embodied in the passages of great rethinking of the discipline. Moreover, if we have previously intended the notion of critique as a self-reflective judgment, an upheaval of the concept on itself, it would be more appropriate to refer to a multi-directional critique on the geographic language and to its spatial patterns, since multiple philosophical influences have affected and destabilized the study of representation in geography.

In examining the first perspective foregrounded by Colebrook (2000), we could argue that the reaction to positivism and to quantitative analysis has probably been one of the preliminary moments in which scholars have started to discuss the primacy and the limits of representations, but very particular ones, those said scientific and normative. Basing their criticism on a modern conception of representation understood as a *mimesis*, a transparent copy of reality, those critical authors come to dismantle the scientific method and its mimetic approach which indirectly admits that once followed a standard and strict methodology, the knowing and conscious subject is put in the condition to grasp and re-submit reality as a whole, as well as it is, without distortions. The apparatus of science indeed presumes and constitutes a regime of certainty out of which lurk chaos and otherness (Minca 2001). Such a regime of truth is nourished by a hierarchical division of knowledge "into areas which represent reality well, those which represent it less well, and those which do not represent it at all (despite their pretence of doing so)"(Rorty 1979: 3).

In such presumption, "[t]he certainty of representation thus confirms the existence of reality which is revealed to us only through the conceptual cages that our system of representations has constituted in order to narrate this very reality!" (Minca 2001: 207). This smooth equation between scientific knowledge and truthful reality presupposes a dialectical negativity between what is real and what is not. Several philosophers have diagnosed precisely in the dualistic thinking the disease of Western philosophy, governed by the obsession with the metaphysics of the presence. The myth of presence takes root in the divide nature/culture or better in the foregoing of nature before culture. In the recital of their mutual exclusion, the outside preserves a sort of ontological precedence over the inner and 'false' images of the knowing subject.

This is how the "general theory of representation" has worked at length, and although this attitude is now considered outdated, especially in the wake of the complexity brought by post-structuralist theories, I believe that it might subtly show even today its traces in various ways of approaching and systematising the geographical thought. Indeed, it is not unusual to have geography perceived as a repository of descriptive facts about the world than some deeper intellectual and critical perspective on their meaning. Even so, as we said at the beginning, the discipline is imbricated with philosophical and ethical issues mobilised around questions of ontology, epistemology and science that cannot be discarded or taken for granted.

If we proceed a little further, we discover that the 'mimetic' approach complemented very soon other and more complex theories of representation shaped at the intersection of multiple disciplinary debates involving aesthetics, hermeneutics, semiotics, visual and critical theory. What is important to stress is that they do not always have a fulsome focus on the way in which human representation and its world are related. Indeed, it is worth clarifying that an epistemic approach may not always come to the same considerations of an ideological and political reading of representations. In several niches of geography, indeed, the very classical and abused epistemological problem of the certainty of representation has been more likely to be transposed into a technical question rather than a political one, asking whether a model can be perfected to best represent the world in which we live. Whilst, it seems to be another (but complementary) issue to moot the ideological character of every representation. The latter approach must be equally taken into consideration because it is precisely in revealing the political value of the representation that cultural studies have built their fortune and, consequently, marked the destiny of cultural geography. Indeed, as Barford points out: "political representation is predominantly spatial" (2011: 274).

In fact, at this point, is time to admit that like all the words of common sense which are captured by theories, the word 'representation' is a boundary notion, itself ambiguous, ambivalent, contrasting and contradictory in the meanings and uses that are made of it. This is why I am trying to resist and defer to give a unique and reified definition of it. It seems more appropriate, at first stance, to frame different events where the concept has emerged, focusing on the singularity of the debates it triggered.

In particular, in order to further emphasize the impact that the notion of representation has had on geography during postmodernism and how it has concurrently affected the criticism on map-making, I will highlight some exemplary stages of this process, starting

from the reflections made by a large group of continental geographers in 1987. The protagonists of this fervent debate are scholars who, each one with their own discourse and toolkit, share a common feeling of rupture against the conservative, positivist and quantitative geographical tradition. Strategically, the focus is then shifted to new and urgent problems for that time: the irruption of the subjective factor in the geographic discipline; the search for new possibilities of articulation between the scientific objectivism and the subjectivism of the researcher; the conception of space not as container but as the result of ongoing relationships; a varied interpretation of the concept of representation; finally, the urgency of an interdisciplinary dialogue.

#### A semiology of spaces

Ce qui réunit les participants à ce colloque, c'est la conscience de l'importance des représentations comme revélateurs des différents sens que les acteurs sociaux attribuent à l'espace. (Zanetto 1987: 5)<sup>7</sup>

With these words, the geographer Gabriele Zanetto opens the conference Les langages des répresentations geographiques held in Venice in 1987, jeopardizing the mimetic and fixed vision of representation and drifting it to a murky subjective and relativistic ocean. The event is to be seen as the fifth act of an Opera marked by four previous conferences, L'espace vecu in Rouen (1976), Percevoir l'espace in Genève (1981), Pratiques et perception de l'espace in Neuchâtel (1983-1984) and Le représentations en actes in Grenoble (1985)<sup>8</sup>. In this direction, the terms employed in such interventions (language, representation, lived space, perception and practice, acts and actants) are indicative of a mainstream theoretical atmosphere which draws intensively upon a semiological aura, shaped and striated by modern semiotics, structuralism, Heideggerian phenomenology and Vattimo's philosophy among many others. However, as I foregrounded in the beginning, all these philosophical currents converge in the critique/crisis of representation. An argument reaffirmed again in the challenge the geography is to ask itself in order to represent the 'complexity', multiplying its languages, activating its imagination, making sure that its concepts contain more things, even if contradictory (Zanetto 1987: 19 quoting Canetti).

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<sup>&</sup>lt;sup>7</sup> English Tr. from original French: "What brings together the participants in this conference is the awareness of the importance of representations in revealing different meanings that social actors attribute to space" (Zanetto 1987: 5).

<sup>&</sup>lt;sup>8</sup> After Venice, the working group on "representation" continued to meet at Fribourg (1989), Lausanne (1991), Gibellina (1993), London (1996), and Lyon (1999).

European geographers of the 1980s prove to be intensely preoccupied whether they need to go in search of a mimetic and transparent representation of their activity, as close as possible to the 'real' (Zanetto 1987), or with the opportunity to develop new models of spatial analysis that can take advantage of the complex articulations between subjects and spaces (Racine 1987). The answer is feverishly searched in theories and ideas nurtured within a broader context, where the sense of osmotic exchange is not too far from recent claims for inter-disciplinarity. However, reading productively across more than thirty interventions, makes you feel caught in an atmosphere of a profound epistemological relativism. This means an attack to the dominant scientific ideal in favour of historically situated representations, thus neither definitive nor naturalized. Not by chance, the realm of philosophy encourages a great paradigm shift at that time. The 'weak thought' embodied by Italian philosopher Vattimo (1987) fills the pages of numerous papers and the voices of several interventions. By claiming that "Metaphysics is violence", an imposition of the absolute, the school of weak thought dismantles the violent and authoritarian traditional reason inherited from the Enlightenment, the Romanticism, and even by historical materialism and firmly rooted in the strong categories of "Being, Truth, Unity and Dialectics". Everything, now, must be shacked and turned inside out. The real categories will no longer be strong but weak: becoming, subjectivity, eventness, fantasy, liberation of grand truths, indifference and indistinguishability between what belongs to nature and what is the product of culture. Geography is inebriated by this antifoundational and anti-essentialist poison. In this spirit, we get the sense of a highly theoretical debate aimed to discuss the primacy and the limits of geographical representations and verbalizations.

Gabriele Zanetto, for instance, defines representation as "the choice of a possible world" (1987: 14), a system of signs evoking subjectively the phenomena out of there; signs that make language at the very moment in which we conceive them. He, therefore, abandons a neutral and objective conception of reality in spite of a subjective vision that comes through a semiotic reading of space, on the same path followed later by one of the most influent Italian geographers, Franco Farinelli (see 1992, 2003, 2009). Thinking about the work of spatial representation means, according to the Venetian geographer, to distinguish a semiotic nature, a communicative function, and a rhetorical value to the concept itself (Zanetto 1987). In this regard, linguistics and semiotics intend to introduce a functional analysis of spatial verbalizations in the study of the cognitive behavioural mechanisms as stated elsewhere in the conference by Hussy (1987).

Quite differently, Denis Cosgrove (1987) prefers (or better integrates) a Marxist and visual analysis to the semiotic approach. There, it becomes explicit the link between representation and ideology since, in the interpretation of the British geographer, the ruling class holds not only the means of production but also of communication. This implies that the privileged group in a society imposes also its way to conceive the space over other groups. Map-making, as landscape-making, is in fact a way of seeing—or rather—to represent the world that becomes "the" way of looking imposed by a peculiar societal group. In addition, the use of quantitative model as well as the causalism, in short the objectivist and scientist language in geography, are seen by Cosgrove as a reduction to the potential of the discipline. In his words, they storm the imaginative and poetic element in guarantee of truth, concealing the fact that: "geography, such as mapping and landscape painting, is always, to some extent, the construction of utopia" (quoting Dematteis 1985: 25).

On their part, Swiss and French geographers pose crucial issues concerning the representational model. Racine (1987) argues that we must always make explicit which definition of representation we are considering to use in our studies, being aware of the multiplicity of meanings it recalls to itself. Representations are intended by the geographer as actions, constructions realized through an interaction between the individual and the context. The same applies to the map. Is the map a real copy of the earth?—Racine wonders—or, as contended by Dematteis (1985), is it a representation of the territory, that at turn revolves into a relationship between individuals and space?

In this sense, the cartographic model lends the value of the geographical representation as an image of a specific kind of relation between actors and places or, as Gunnar Olsson (1987) alternatively puts during his intervention, the map is to be interpreted as signifier of signifier. Likewise, the critical reading proposed by Lorenza Mondada (1987) challenges the mimetic dimension of the map, claiming, under the influence of Baudrillard (1984), that it is not the territory, if anything it precedes it. According to her, metaphors of mirror, reflection and translation are inadequate and misleading since they presuppose transparency and determinism, preventing the scholar from grasping the complexity of the relationship between space and its symbolic dimension; "dire l'espace signifie donc interagir avec lui, le produire: le discours l'in-forme" (Mondada, 1987: 13)<sup>9</sup>. However, the link between the moment of representation and that of spatial production is not that simple. As she states

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<sup>&</sup>lt;sup>9</sup> Eng. Tr. From French: "verbalising the space means to interact with it, to produce it: the discourse in-forms it" (Mondada 1987: 13).

further during the intervention, the relationship between the enunciating subject and the space is mediated by the words of previous statements interfering with each other. There then began a war of referents where it is up to each subject to negotiate her own image of the territory.

Both on the verbal and visual dimension of geographical representations focuses the intervention of the Italian geographer Vallega (1987). The geographer recognizes two epistemological attitudes at work in human geography: an iconic (representational) and a propositional one (related to the construction of true propositions through falsification processes) and runs through the stages of the discipline in light of the articulation of these two elements. According to Guarrasi (1987), this dual nature of the geographical language reverberates even in cartography. Therefore, after defining the geographical knowledge's production as a literary genre that overlooks the dimension of the writing, he recognizes in cartography a complex but unbalanced linguistic dimension, both iconic and verbal. In consonance with his analysis, the strength factor of cartography over geography is properly the dominion of the word that the latter reclaims over the iconic sign. In fact, within the map's ontology the object resists the domination of the word that can never catch it entirely. In this way, the incomplete nature of the cartographic language marks the fundamental openness of every discourse on the world.

In this maelstrom of words and signs, Augustin Berque (1987) is one of the few figures who proposes a different path from the one beaten by colleagues. Arguing that there is a materialistic experience of space to be distinguished from a theoretical one, the geographer tries to get out of the semiotic cage that reduces the problematics of space at the level of signification. According to him, it is important to tie together the "facteurs chorétiques" (concerning the representations of abstract spaces) and the "facteurs topiques" (related to the experiences of place). What he attempts to do is to shift the question from the theory of representation *tout court* to the materiality of its presentations. According to him, the reality is combinatorial and is a game of appearances and representations, experiences and meanings. Berque, in fact, admits that semiotics can be dangerous to geographers who produce accounts of space: "le risque est d'oublier que le territoire doit toujours passer avant la carte, même si la carte est un peu le territoire..." (1987: 51)<sup>10</sup>.

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 $<sup>^{10}</sup>$  Tr. from orig. French: "the risk is to forget that the territory should always precede the map even if the map is the territory to some degree ..." (Berque, 1987: 51).

In conclusion, apart from few exceptions, once discarded the experimental method, soaked in causalistic pre-models, and a strong commitment to the fieldwork, the protagonists of this fervent debate might appear to be lost in an abstract and theoretical byzantinism, marking the passage from a concrete, controlled, and practical study of geography to an over-interpretational science. In this respect, the human geography advancing in the late eighties seeks to violently break with its past, abandoning its ground truths in favor of the recursive exploration of the heremeneutic circle. This is why the international conference held in Venice in 1987 can be scrutinized as a footprint of a widespread interpretative and contemplative atmosphere which affected several intellectuals in early postmodernism and where one of the main issues tackled on has been clearly stated in the dismantle of epistemic absolutism and scientific determinism. A wonderful season for what it critically and emphatically produced, but perhaps blamed not to fully and often grasp the factual, corpuscolar and contingent world of everyday life. Or, even with more impunity, blamed to have removed the "bon vieil épiderme de la terre" (Berque 1987: 37) to give more space to the theories (Minca 2000b).

# Staying on top of the trees while changing the life on earth: cultural turn(s) and the new wage of representationalism

In the opening programme in the series of *Voices*, recorded by Channel 4 in 1984, two titanic figures of Cultural Studies confront themselves on the crisis and the role of the intellectual. It comes to Stuart Hall and Umberto Eco. In this compelling conversation, the Italian semiotician declares from his part:

Sa, c'è un libro che mi piace molto, *Il Barone rampante* di Italo Calvino; è la storia di un aristocratico del XVIII secolo che decide di passare la vita in cima agli alberi, eppure riesce ugualmente a partecipare alla Rivoluzione francese e a molti avvenimenti e momenti critici del suo tempo. È una persona illuminata; d'accordo, è una metafora, un'allegoria, ma c'è un modo di stare in cima agli alberi e cambiare la vita sulla terra (Eco and Hall 1987: 57)<sup>11</sup>.

Eco's argument refers to the critical work of the intellectual, which is to produce crises, as he states elsewhere in the interview, without entailing a real down on the field. In short,

<sup>&</sup>lt;sup>11</sup>Eng Tr. from Italian: "You know, there's a book that I do really like, *The Baron in the Trees* by Italo Calvino; it is about the story of an Eighteenth century aristocrat man who decides to spend his life in the treetops, and yet he still manages to participate in the French Revolution and to many other events and critical moments of his time. He is an enlightened person; well, it is a metaphor, an allegory, but there is a way to stay on top of the trees and change the life on earth" (Eco and Hall 1987: 57).

without prefiguring a descent to the mundane, otherwise pictured by Hall as a returning "the project of cultural studies from the clean air of meaning and textuality and theory to the something nasty down below" (1992: 278). While for Eco one can stand on the trees instead, observing in a contemplative manner what happens in the world and still offering theories able to change it, possible to put the world in crisis.

If it were not that just the view from above begins to make more and more suspicious and distrustful human geographers in the late '80s, the atmosphere evoked by the Italian intellectual captures a common hallmark to the Italian school of 'weak thought' at the time. The proposed vivid figure leads us to imagine then our geographers in the guise of 'barons in the trees', sometimes hanging in the treetops, sometimes frown on clouds like many Socrates, ready to arm themselves with theories, with new ways of looking at society. The response of Hall, however, is indicative of a complementary vision of the engaged intellectual who comes down from the tree and moves through the streets, actively participating in the political and social change he or she wants to configure theoretically. The two images are probably not antithetical and coexist even in the geographical soul of the time, as I have tried to present them in the previous section. Critical interpretation and radical thought take root in geography, at least in the case of Italian Geography, also through the complicity of an enrooted Marxist and idealistic tradition. In particular, the idealist historicism of Benedetto Croce contributes to exert a massive influence on Italian geographers, precluding the possibility to open the discipline to the parallel ferments experimented by the Anglo-American cultural theory. Beside this, an aspect not to neglect is also due to an academic reorganization of curricula and departments. Once the scientific sector of territorial and urban planning assumes an autonomous status, following the same destiny accorded to physical geography, the geographic thought appears more willed to take an interest in issues related more to the history of ideas rather than to hard sciences' models. In short, material and theoretical upheavals contribute through time to an institutionalization of a humanist rather than social geography<sup>12</sup>. As soon as all these pieces fit together, the entrance of the cultural approach in Italian geography, in the sense embodied by cultural studies, is not long in coming as well as it was for British geography.

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<sup>&</sup>lt;sup>12</sup> We should notice indeed that in Italy, as well as in other countries of Europe, Geography is usually part of the Humanities, and it is often integrated with History and the Arts. On the other hand, in several Anglo-American faculties Geography has gradually distanced teaching practices related to Humanistic Studies to contextualize its research in the Social Sciences.

As a result, two years later, at the 1986 Italian Geographical Congress in Torino, Costantino Caldo and Vincenzo Guarrasi, in the guise of ambassadors for the so-called 'School of Palermo' (see Minca 2005), present the first-ever Italian session dedicated to 'cultural geography' stressing to the importance to address 'culture' in geography in relation to economic and socio-spatial analyses. In that occasion, Denis Cosgrove is also invited, acting as a theoretical smuggler, transporting from shore to shore similar ferments which preoccupied at the time Anglo-American geographers.

Yet, in those years where Italian, Swiss and French scholars were reflecting on the nature and the limits of geographical representations (see Farinelli at al. 1994), English colleagues were already set up in a further step, advocating the emergence of a 'new cultural geography', angrily looming as an attack on the superorganicist Berkeley School of geography and against Carl Sauer's legacy (1925). They foregrounded a new geography,

contemporary as well as historical (but always contextual and theoretically informed); social as well as spatial (but not confined exclusively to narrowly-defined landscape issues); urban as well as rural; and interested in the contingent nature of culture, in dominant ideologies and in forms of resistance to them. It would, moreover, assert the centrality of culture in human affairs (Cosgrove and Jackson 1987: X).

"1987" proves to be a topical year, indeed, even for British geographers since a conference organized at University College London effectively 'launches' the new cultural paradigm. In this variegated context, I do not want to pursue the origin and development of different (new) cultural geographies. What interests me is to show the way in which the 'spectre' of representation continues to hover around, actually even finding a systematization, in the transposition from Human Geography to the sub-field of Cultural Geography. Considering, in particular, the geographic production of the late '80s, the focus on representations takes, in some respects, a stronger direction during what has been named the 'cultural turn' (Philo 2000). Several PhDs trained and raised in the epoch of uncertainty and in the murdering of meta-theories and universal truths, succinctly defined as the 'Meaning of Everything', contribute to a sense of new departure, bringing to the fore a new passionate and intimate cure for everyday spatial practices, usually explored through hybrid theories, and sometimes through reflexive biographies and mixed and provisional methodologies. It is in particular the triad of "text, discourse and metaphor" (Barnes and Duncan 1991) to be privileged with the awareness that in such meaningful membranes: "social order is communicated, reproduced and experienced" (Duncan 1990: 15).

The renewed devotion to the meaning—this time fragmented in particular things and driven by a sense of partial and provisional knowledge—is orchestrated through the use of biographical narratives and translated in a rich mixture of writing styles. At this point, the poetics of geography, experienced as a meta-reflection of the politics of geography, takes over in the discourses of cultural geographers. However, to state it clearly, the cultural turn is not a monothopic and monolithical notion but epitomizes a range of theoretical perspectives and methodological debates within Geography, Social Sciences and Humanities both complex and contradictory (Philo 2000). It has so many trajectories that just in case we wanted to observe a tendency, we might say that if previously the major attention was capitalized in the limits of representational models, mostly informed by a mimetic and positivist account, the second key of discussion embraced by cultural geographers in the mid '90s not only concerns a different consideration of the 'word' representation but also a different field of analysis to research into. Indeed, after discussed the authorship and authority in representational scientific knowledge, the main idea underpinning the political project of the new cultural geography becomes that "to recast the crisis of representation raised within contemporary cultural geography as a crisis of authority and therefore of power as a whole" (Cosgrove and Domosh 1993: 27). In other words, if in a first moment both continental geographers (usually influenced by an idealistic and rationalistic philosophy) and Anglo-American colleagues (the latter usually formed in an empiricist and pragmatist environment), disputed the critique/crisis of representation in a very reflexive way, where the idiosyncratic character of representations was at first stance treated through the framework of the epistemology of science with the aim to dismantle the scientific method, it is only in a second moment (a theoretical moment, not to be seen necessarily as a chronological step) that they become more sensitive in addressing the social and political character of any representation, as more than simply constructions of reality. In recasting a new attention to the knot between space and representation, this time directly contextualized within the discourse on power, a new representational tendency comes to be allured. In which sense, I return to ask, a new idea to think about representation and space is staged?

To have a greater comprehension of what circulates in that period in the *milieu* of cultural geography, we must also recall the parallel ferments experimented in the field of cultural studies, as I introduced in the beginning of the section. For instance, the concept of representation becomes a core tool to analyze the 'circuit of culture' proposed by Stuart Hall (1997) and to refer to the complex relation between practice and representational systems.

In particular, representations are seen to affect political and social dimensions, they are 'discursive formations' and practices that structure and discipline society. Before getting to these considerations, the author depicts the parable of various theoretical analyses that informed the concept of cultural representation, distinguishing between a reflective, intentional and constructivist approach (Hall 1997).

In the first case, as previously mentioned for the positivist paradigm, the language assumes the function of a mirror which reflects the "true" meaning that the world already encapsulates. Contrary to this, an intentional vision of representational thought admits that meaning is constructed by the subject who selects and organizes the reality according to his or her own cultural influences. A way to question the world, this one, particularly beaten by scholars over time. Finally, the main contribution integrated by the social constructivist approach is to recognize that the idiosyncratic nature of representation does not prevent the fact that subjective representations could be understood and interpreted by others. In this regard, the cultural theorist finds a way out of the peril of an epistemological relativism and of a methodological solipsism. Rightly because personal meanings are constructed within what Hall calls a "system of representation—which consists—not of individual concepts, but of different ways of organizing, clustering, arranging and classifying concepts, and of establishing complex relations between them" (1997: 3), what it starts to be considered is the public dimension of language and how it intersects, informs and collides with subjective representations. Practically, the impact of social constructivism in late '80s continues to increase the work on visual and verbal representation so that the term "representation" will sooner become the most influential symbol of cultural studies. Nevertheless, the social nature of the language is stressed in the constructionist approach in two variants, one semiotic and the other discursive (Hall 1997). I have already noted that previously works of continental geographers were informed by a strong semiotic analysis, even if not always focusing on the issue of power relations, especially overlooking that power discipling even the geographers' discourse. The discursive analysis, on the other hand, more indebted with the work of Michel Foucault (1926-1984), begins to stress a central concern on contextualizing texts and representations in the broader political structure within which they come into existence. What is interesting to notice, then, is that if reality is always produced and mediated by

different acts of speech, the argument of the divide between reality and its construction, mobilized by the symbolic reading<sup>13</sup>, becomes useless.

### Nothing outside representation

The matter is to admit that although there are competing representations of society, all valid, some eventually prevail over others and are perceived as true and authentic. The main task of the new cultural geography is then to explain how these hegemonic representations take place and impose themselves while marginalizing those excluded by dominant representations (Söderström 2010). In order to bring to the fore marginal practices and identities, it begins a frantic investigation of spatial practices of significations considered hidden and contested but reproduced in a wide range of cultural and mostly popular products and practices: fictional books, biographies, movies, advertisements, landscape images, photographs, archives, material culture and the like.

Space itself is not only addressed as a social construction but also as a cultural fact, where culture is considered as another name of politics. Yet, as we might easily deduce, this kind of behaviour puts representation in a state of ubiquity, enforcing "the postmodern idea that all we have are representations of the world with no possibility of an ultimate presence" (Colebrook 2000: 48). Indeed, as Trevor Barnes argues:

There is no anchor of some final presence or some ultimate origin point of meaning. [...] For, if there is no ultimate signified and only a shifting system of signifiers...there can only ever be the flux of meaning and no constant presence (1996: 166).

Therefore, if the semiotic approach still accepted the divide between reality and meaning, considering that the meaning of the signifier were constructed in relation (even if arbitrary) with its referent, the heterogeneous poststructuralist theories contaminating the discursive analysis open to see now how—through discourses—reality, subjects and spatial processes are co-produced so that language is not the re-presentation of the world but a force and

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<sup>&</sup>lt;sup>13</sup> The word "symbol" comes from the Greek verb "symballo" (noun. σὑμβολον), meaning "throwing things together". In semiotics it defines a word, phrase, image, or the like having a complex of associated meanings and perceived as having inherent value separable from that which is symbolized (*it thus entails a divide between reality and representation*), as being part of that which is symbolized, and as performing its normal function of standing for or representing that which is symbolized: usually conceived as deriving its meaning chiefly from the structure in which it appears, and generally distinguished from a sign (source: Thesaurus dictionary, my italics.).

event in its own right (Foucault 1970 [1966]). This suggests not only that things do not mean in themselves because is to the human subject to construct their meanings, as the intentional approach assumes, but also that representations come to form and to participate in the construction of cultural practices and knowledge they say to 'only' represent. These theoretical attitudes sharpen what might be called a 'new representational turn'. In the poststructuralist orientation, as already said, there is not an "outside" of/from the representation. In the same breath, addressing indeed the performative character of every representation, the American geographer Hannah admits that "every representation we rely upon is unstable, contestable, 'hot'. Yet we have no choice but to rely upon representations. All paths lead across this 'bed'; none lead around it" (2005: 152). It is especially the postcolonial theorist Trinh Ti Minh-ha to clarify such hallmark, when she argues:

There is no such thing as a "coming face to face once and for all with objects"; the real remains foreclosed from the analytic experience, which is an experience of speech. In writing close to the other of the other, I can only choose to maintain a self-reflexively critical relationship toward the material, a relationship that defines both the subject written and the writing subject, undoing the I while asking "what do I want wanting to know you or me? (1989: 76).

What all this suggests, I think, is that beyond the way in which such representational language conveys the meanings, the approach towards it implies from one hand an ethical question, as considered by Ti Minh-ha, but on the other hand, it also entails a certain arrangement of the eye, a new way to 'stabilize' the researched object. So far I have considered the theoretical cage of representation, understood as language, as a discursive medium, rather than an object. 'Caged' in the sense that prevents it from being another beside itself, even knowing that there is an out of there. However, representations are also and foremost images, frames, things which can be viewed in multiple ways. They are objects and not only the trajectories to see those objects. In this perspective, it is of paramount importance not to overlap the crisis of the language with the crisis of the object. As Gillian Rose (2015a) has recently outlined, engaging in a sort of retrospective glance, the significant literature in the field of the new cultural geography lies on the interpretation of texts, images, objects as reflexive representations of reality "with the aim of construing their implicit meanings and analysing how those meanings affirm or challenge power relations" (Rose 2015a: 3). This aspect, I think, has been fully explored and clarified in the previous sections. However, in terms of perspectives, those kinds of artifacts would require also a close reading provided by an attentive gaze resulting somehow fixed and stable (Rose 2015a). Moreover, when the object in question is a map, a landscape painting, a photograph, they would often be treated by scholars as unique and auratic materials that convey political, cultural and economic ideologies either at the individual or at the social group level. In this regard, we can recall the idea of landscape figured by Duncan as "a signifying system through which a social system is communicated, reproduced, experienced and explored" (1990: 17). For this reason, a cultural approach can easily draw attention to specific questions mostly informed by communication models, considering also the different ways through which a scholar can approach her object: what does it mean? what does it represent? who is the author? what is his message? who has the power to represent? who/what is excluded from the vision?

The culturalist attitude is foremost a diving in the politics of representation. As such, drawing on neo-Marxist theory, feminism and postcolonialism and imbued with the work of—among others— Foucault, Lefebvre and Derrida, cultural geographers focus their attention on the performative and social role played by representations showing the reality how is it exposed to their engaged method of questioning. In such perspective, what returns quietly and silently, as a note on the margin, is the crucial question opened by Trinh Ti Minha: "what do I want wanting to know…?" (1989: 76).

#### After the postmodern 'hangover': the return to the real

In My dinner with Derrida, an imaginary conversation between a spatial analyst and a poststructuralist geographer, Dixon and Jones (1998) propose in all its actuality the burning intricacies of the dual representational thinking. In this spirit, the fictional poststructuralist geographer critically prods his colleague, by stating: "In your view, models merely represent reality such that science progresses through the construction of even better representations – the constructions of even better mirrors, so to speak. But to what extent do you problematize reality as always already a representation?" (1998: 251). He receives consequently a crushing response: "Why don't you jump through that window and I'll show you a representation operating with the full force of objective reality" (ib.).

In other words, the two geographers theatrically stage the two different visions of reality arising respectively from the positivist scientific method and postmodern critical theory. Especially, they mock the great misunderstanding generated by the representational approach to reality as encouraged by new cultural geographers, often criticized for not seeing anything outside of the discursive dimension. In the same vein, the philosopher Maurizio Ferraris,

considered the precursor of the New Realism, a current of thought which takes distance from the previous school of weak thought (Vattimo 1997) argues that "le montagne non si costruiscono, e nemmeno i teoremi, il mondo è pieno di fatti che non sopportano interpretazioni" (Ferraris 2006: 169)<sup>14</sup>. This means that not all we call reality can be object of an endless interpretative and (de)constructivist reading. In particular, in his work Beyond Interpretation (1997), the philosopher Vattimo defines hermeneutics as: "l'attività che si dispiega nell'incontro con orizzonti paradigmatici diversi, che non si lasciano valutare in base a una qualche conformità (a regole o, da ultimo, alla cosa), ma si danno come proposte «poetiche» di mondi altri, di istituzione di regole nuove" (1997: 100)<sup>15</sup>. The difficulty of the hermeneutic question lies, though, in the fact that not all the interpretations and hence representations of the world and, more specifically, of its objects are possible and admissible. There is a constraining role exerted by material realities. Put differently, the reality standing out of the subject exerts a sort of resistance and friction to her interpretation. An attrition that reminds of the knowing subject an existence beyond herself. This is the reason why Umberto Eco (2012) talks about a Negative Realism or a Minimal Realism, articulating the relationship between interpretation and thingness in the name of the limit, that means that we cannot prove the rightness of our interpretations but we can understand when they are wrong or when they do not work well rightly because objects have what Gibson (1979) calls "affordance". The term indicates the qualities or properties of an object that define its possible uses. Better, they make clear how it can or should be used, and, hence, how it could be interpreted. According to Eco, this is the 'hard core' of our way of knowing that he tries to explain thanks to his semiotic formation through Pierce's theory of dynamic object (see Eco 2012). The relationship between discourse and reality articulated after the postmodern 'hangover' gives us a clue of the reasons for by the new cultural geography's status of knowledge receives a series of attacks in the moment of its attempted institutionalization. As Nigel Thrift (2000) outlines, the mutual influence between postmodernism, poststructuralism and cultural studies over cultural geography contributes to an alleged desocialization of the content of the discipline. The critique is laden once again by an attack on

<sup>&</sup>lt;sup>14</sup> My Tr. From orig. IT: "[m]ountains and even theorems are not constructed; the world is full of facts that do not bear interpretations" (Ferraris 2007: 169).

<sup>&</sup>lt;sup>15</sup> My Tr. from orig. IT: "the activity that unfolds in the encounter with different paradigmatic horizons, that cannot be assessed on the basis of some conformity (to rules or, most recently, to things), but is given as 'poetic' proposals of other worlds, as the establishment of new rules" (Vattimo 1997: 100).

the hermeneutic theory. According to a large group of social scientists, it would entail a forgetting of the world out of there (Daniels 1985), that is a more analytical and empirical world, preferring a preoccupation with 'over-wordy worlds' (Thrift 1997). The same atmosphere reigns in Italy after the Giuseppe Dematteis's publication, Le metafore della Terra (1985). The presentation of his work in Palermo in the same year and the subsequent reopening of the debate at the *Postmodern Geographical Praxis* conference organized by Minca in Venice on June, 10-11 1999<sup>16</sup>, fourteen years later, marks a troubled season where the two souls of geography, the culturalist-deconstructive one and the sociological and critical realist other confront themselves in the figures respectively of Guarrasi (geographer at the University of Palermo) and Dematteis (geographer at the University of Turin). In a private anecdote Guarrasi remembered that, on the occasion of the Venetian conference, Dematteis brought a piece of paper reading "there are no interpretations, only facts" and a diagram exposing his argument, putting them in plain sight during his talk. The sentence was explicitly addressed to the geographer from Palermo and to that school of thought devoted in those years to the deconstruction of cultural representations, often driven by a semiotic analysis, but also deeply influenced by the Derridean textuality and the Foucauldian discursive analysis. Dematteis's great concern was that geography was somehow entering a vicious hermeneutic circle that prevented it from scientifically analysing social facts, such as territorial policies and urban planning as well as the impact those had on the population. In his book, he had already argued that: "ebbene è proprio quello che sta capitando oggi a quei geografia che, volendo inventare la 'nuova' geografia, finiscono per perdersi in oscuri labirinti meta-geografici, privandosi così del piacere di osservare la Terra, interrogarla e magari descriverla" (1985: 27)17. Those aspects needed not only sophisticated theories but also hard fieldwork, in short, a return to the "real". Similarly, the problematic of the fieldwork was analysed in those years by American geographers. In particular, Robert Rundstrom and Martin Kenzer (1989) evidenced that between 1945 and 1988 fieldwork was widely used but, as of the 1989s, in decline. In short, what was going permanently opening was the fault line

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<sup>&</sup>lt;sup>16</sup> As Minca illustrates in the Guest Editorial of Environment and Planning D: Society and Space (2000a), the conference hosted both Anglo-American and Italian geographers: Michael Dear, Cindy Katz, Don Mitchell, Neil Smith, Edward Soja, Giuseppe Dematteis, Franco Farinelli, Vincenzo Guarrasi, Adalberto Vallega, and Gabriele Zanetto. There were also Denis Cosgrove and Gunnar Olsson who had extensively collaborated with Italian geographers.

<sup>&</sup>lt;sup>17</sup>My Tr. From. Orig. It.: "Well, that's just what is happening today to those geographers who, wanting to invent the 'new geography', are ending up to get lost in the dark meta-geographical mazes, thus depriving themselves of the pleasure of observing, questioning and, perhaps, describing the Earth" (Dematteis, 1985: 27).

between the so called 'armchair' geographer and the 'leg-work' geographer. Yet, even if the deconstructive analysis required certainly a different engagement from the ethnographic work, not for this it should be considered less valued. As Derrida (1985) himself explained (and whose thought will also find space in the following chapters), the aim of deconstruction has been misunderstood so far. It does not entail a forgetting of factual reality and it is neither a linguistic model, nor a semantic model and least of all a mechanical model. It presumes the deep awareness that foundational elements, pre-discursive notions and categorical truths are rhetorically constructed, thus there is no origin beyond their taken for granted univocal originality but a process. Applicable in every aspect of daily life, the deconstructive moment allows us to understand how a certain 'ensemble' comes to be built and how to re-build it again.

As results, the strongest criticism affecting both British and Italian postmodern geographies regards some limitations in their approaches mainly due to a dematerialization of the research objects. Yet, as Heidi Scott (2004) argues, even if geography's cultural turn involved a decisive focus on text and representation, a concern for the material was by no means ever left outside, especially regarding material culture (Jackson 2000). Moreover, I would venture to argue that the massive academic production of those years does not state any death or disavowal of the social, if anything, promotes a new understanding of the social in a cultural perspective. In fact, the 'social-pragmatic' critique does not pinpoint the same shift toward culture engraved by society itself, as stated by Frederic Jameson;

The very sphere of culture itself has expanded, becoming coterminous with market society in such a way that the cultural is no longer limited to its earlier, traditional or experimental forms, but it is consumed throughout daily life itself, in shopping, in professional activities, in the various often televisual forms of leisure, in production for the market and in the consumption of those market products, indeed in the most secret folds and corners of the quotidian. Social space is now completely saturated with the image of culture. (1998: 111)

At this point, it makes more sense to argue that the main tenets of the anti-positivist paradigm as well as of the cultural turn trigger more specifically a threat to that social theory that usually complies with questions of methodology. Indeed, the interpretation of cultural texts does not demand a clear and proved methodological apparatus, freeing analysis from an over-rigid ossification of approved methods of knowing. The attack on the scientific method, in fact, leads to recognize the fictionality and partiality of every methodology, without necessarily incurring into a new epistemic relativism. Certainly, the opening offered

by the crisis of the previous paradigm gives room to explore other currents of thought, drawing a bit from each, mixing and re-interpreting them as the typically postmodern pastiche. The moving away from fieldwork, often shaped by interviews with non-expertise, is justified by a sense of dissatisfaction matured around a sort of "unthinking empiricism" (Philo 2000) and "obsessed with mappable patterns and devoid of interest in the constitution, contestation and lived meanings of such material geographies" (ib. 42). What it comes to be questioned by cultural geographers is indeed the naïve empirical realism implied in social geographical fieldwork. As for the minimal realism in Italy, we might argue that the discover of critical realism in the Anglo-American geography serves to mitigate and refill the social and cultural abyss, offering a third way (Sayer 2006) between the radical empiricism and the textual postmodernism. Critical realists try to fix the dualism reality/representation by distinguishing between the spheres of the empirical, the actual and the real. The first one refers to the events we experience first-hand; the second opens to a geography of events that happen anyway, whether we experience them or not; the third one tries to unfold the thick dimension of objects, structures and generative mechanism that produce such events (Barad 2007; Gregory et al. 2009).

#### The dead geographies of representation

At the turn of the century, the new crisis of representation has given rise to other visions and theoretical tournaments. The discursive politics of identity and representation which had deeply characterised cultural geography during the '90s seems to have generated a (less ideological) renewed account on the phenomenology of bodies and senses, re-inspired by several strands of poststructuralist theories. Nowadays, metaphors as affect, performance and movement are, for example, some of the most pervasive in social sciences. This leads us to understand that meaning does not lie in something fixed but is constantly generated through practices, processes and negotiations. Moreover, it entails a move away from the burden of interpretation. Everything, instead, can be connected but not everything can be fully captured and deeply explained by human subjectivity. The new poetics of performance has to do with the immanence, with the flow of the contingency, with an unstable time-space, always in the making.

The new geography untethered by Nigel Thrift (1996, 2008) starts from this assumption to invite human geographers to go beyond the representational and over interpretative discourse analyses, incomplete and unsatisfactory compared to the paradoxical awareness that "we know more than we can tell" (Thrift 1999: 316, quoting Polanyi) but in a world "which we can only partially understand" (2008: 19). That means there is "a geography of what happens" (Thrift 2008: 2) flowing silently beneath our theories and scalping to be fragmentally and epiphanically recognized. In the scholar's purpose, the emphasis on experience, embodied practices and affect should destabilize the regimes of representations, normative and partial, by making them less "real". Basing on this imperative, since 1990s Thrift has developed what he calls the 'non-representational theory', sedimented through time in a geological trilogy begun with *Spatial Formations* (1996), continued with *Knowing Capitalism* (2005) and refined with *Non-representational theory: space, politics, affect* (2008).

By "representational" the geographer does not stand for the dominant mimetic approach underlining the positivist and neo-positivist paradigm in Geography, rather for the contemplative disposition which informed the work of cultural geographers during '90s, as we noticed in the previous section and to which I return below. Yet, as pointed by the Anglo-Saxon geographer, the cultural turn which crossed and reformed Geography was the first to gain impetus to everyday practices. Though, still placing them in the politics of representation. The aim of non-representational geography is rather to bring out a creative extra-discursive practice, a human dimension not easily captured by language. Let us stop here, in focusing on the exteriority of the discourse as imagined in radical non-representational terms. The burning question would resonate more or less like this: if we are always inside, what is left of outside? If we live when we communicate, we live through contested representations, what kind of life expects us when we abandon the sphere of language? Can we really do that? Can we really think ourselves as more than symbolic animals?

Thrift indeed assumes that "[f]or what is clear is that all too often in our everyday life we are not open to that pressure and do not inhabit the midst of life, and thus live everyday life as, well, everyday life, clipping our own wings because we inhabit cringes that limit our field of action" (2008: 14). The romance of movement and vital flux helps him better to articulate a new politics of life,

a poetics of mundane space and time which can teach us to ourselves in better ways, that is ways which will allow peoples to survive their own environing (Wagner 2001) by creating more rather than fewer worlds, [...] to produce a politics of opening the event to more, more; more action, more imagination, more light, more fun, even (2008: 20).

In this sense, the outside figured by the British geographer is an immersion in the mundanity, but a mundanity somewhat different from that practiced by Stuart Hall (1996). In the case of the cultural theorist, the mundanity is the experience of the world lived through the concept of the articulation. That is the mundane experience becomes the terrain where to see at work the articulation between subjects, culture and powerful discursive elements. The observation of everyday life is a way to grasp the emergence of ideology and its dirty contestation through different cultural practices as well as its effects in the construction of identity. Indeed, terms as identity, class, race, ethnicity and gender are legion in cultural studies' vocabulary. On the other hand, non-representational theorists seem to refuse the discursive politics of identity and representation, fearing a passage from the criticism of the doubt to the creative power of hope, chaos and indecisiveness. If, according to Hall, life is always a struggle field, those other authors try somehow to suspend their sense of frustration, seeking for a "movement [that] captures the joy – I will not say simple – of living as a succession of luminous or mundane instants" (Thrift 2008: 6).

Less pretentiously, in Human Geography the major consequence of this manifesto is to regain attention to the divide between theory and practice; to the idea to configure the geographical thought as life itself, as a series of "ands" that add to the world rather than to abstract from it (Cadman 2009, Thrift 2008). In short, it designates a call to think *otherwise*, to think immanently. In this regard, the Italian geographer Guarrasi (2015:64) would argue that we entered the geography of contingency, where the era of the great narratives is over and gives way to a more limited horizon, dominated by the present. His sensibility, in many aspects in line with the one manifested by Thrift, is broadly nurtured by the anti-representational philosophy and its attempt to overcome the Bad Conscience and the Weight of Man, facets that could be summarized by the following quote:

The post-structuralist critique of postmodern representationalism often issues in an apocalyptic or utopian projection of a point beyond representation, a radical homelessness in which thought no longer locates itself within a totality, logic or scheme. And this freedom from grounding or totality would also overcome a sense of the world as being or presence, in favor of a continual becoming, effect, or non-presence. (Colebrook 2000: 48).

From theorizing life to living the un-theorizable fluxes of life, the non-representational geography has now become, especially in several geographical and anthropological Anglo-American circuits, an umbrella term where different approaches, often contradictory, have been figured by several scholars as new ways of thinking and practicing the discipline. However, when one starts to explore this universe, is not surprising to feel of being in the cusp of a situation in which it looks like that everyone can find a non-representational endeavour in the reading of very diverse post-structuralist thinkers, leaving open and often undefined the nature of both the prefix "non" and the noun "representation" that together form a sort of dangerous and provocative remixing.

Yet, as we have already seen, the geographer Racine in the 1987's Venetian conference sought to alert geographers on a crucial point, namely to be aware of the multiple meanings and theoretical manoeuvres that the notion of representation draws to itself in order to make explicit which definition of representation is deployed in our studies, by exploring more carefully the fields where this concept emerges. Indeed, in this new questioning the limits of geographic representations (this time the 'culturalist' ones), non-representational authors are already taking a position on it, treating representation as something opposed to or excluding the process, the immanence, the movement, the materiality of things. I will no longer follow the detours of this theme, but I feel to make a little pause again in order to consider that the problem does not lie, it never does, on representation itself (in its meaning, mediation or form) but on the way in which our gaze comes to be configured and arranged by previous debates. Representation's 'essence', fixity, inertness or the opposing processuality, flow and becoming are rhetorically constructed. There is always a background, a theatre, a scene that already prepare us, that gives the lens to examine and understand an object.

To avoid this hindrance, the way in which I would like to address the theoretical ferment of the non-representational is, first of all, not to fall into a merely chronological rupture with its accounts of novelty and radical difference with previous paradigms. Put differently, is not because it is said that something is new that force us to find the immeasurable difference? And, eventually, we end up to make this 'novelty' circulating because is enhanced by the absence of a retrospective and historical perspective?

Indeed, I doubt whether it is beneficial to place the work on representationalism and anti-representationalism merely in a chronological timeline. It suggests the idea that from the '80s there would have been only one way of thinking about representation and that one, at some point, became insufficient and ineffective in capturing other links and unexpected

connections. Perhaps, we contribute to hide other theories and works that have already shed a processual and pragmatic vision on representational objects and language. In this sense, we could return to think to the idea of representations as actions, proposed by Racine (1987) or to consider their materiality as répresences (Berque 1987). Moreover, Colebrook (2000) observes that a new vision on representation is already in gestation in the spirit of post-Kantian representationalism such as in Deleuze's idea of a transcendental empiricism (1987), without overlooking the work of Judith Butler (1990, 1997) on performativity. It comes, in fact, to a way of thinking already practiced in several academic fields that needs to be contextualized, if anything, in terms of continuities and discontinuities, of translations and transpositions. Importantly, several research practices converge in the non-representational rightly because they do not necessarily distinguish very cleanly what the term would mean and in which sense it should work against and beyond the politics of representation. In order to better understand this rhetorical strategy, I want briefly to tease out various philosophical flows that encouraged these "new tactical suggestions" (Dewsbury et al. 2002) and map their internal agreements and disagreements. In other worlds, when you throw the words in the ocean of theories, it is inevitable that in their journey they come to be drained of their original meaning and get charged for new significations. Their use consumes and transforms them according to the contexts in which they emerge or where they are applied.

#### Desiring the Outside: the paradoxical philosophy of non-representational geographies

Cadman (2009) argues that non-representational theory cannot be considered epistemological in its approach and its tenets are not configured for creating an alternative epistemic and ontological framework. Yet, they indirectly produce a heterogeneous and ambiguous body of knowledge by engaging with the work of several poststructuralist thinkers. As many authors have already outlined (Anderson and Harrison 2010, Cadman 2009, Colls 2012, Thrift 2008), different philosophical knots can be detected and untangled. All these lines of flights depart in conceiving theory as supplement of practice, emphasizing the dialogical, processual and not always explicable nature of space. "A theory of mobile practices – underlines Cadman – [...] which offers the main challenge to representational modes of thought" (2009: 4). Those authors, as I said, are not comfortable with the sense of over-explanation that accompanies the work of cultural geographers. They do not look for symbolic ordering or larger power regimes in which both their practices and those of whom

they are researching are inserted and made meaningful. "This means that nonrepresentational geographies refuse to reduce practice to a higher-order interpretation" (*ibidem*). In this sense, they try to avoid to extract meaning that could be counter-intuitive, too intellectual to whom they are practically experiencing as "social animals" before than academics. More often, they try to enjoy the limits of their own knowledge by finding a justification of this playful move into pre-cognivist and pre-discursive accounts.

In so doing, and in some respects, they are still immersed in a typically postmodern attitude even if promoting to escape from it. This process involves a deligitimization of all the dominant codes, the authorities, institutions, conventions, rules and regulations and the irony as a predominant figure of speech (see Rorty 1989). Even their idea to find new world configurations, new ways of life is not so far from the "poetic proposals of other worlds" (Vattimo 1997) embodied by postmodern hermeneutics. The imperative is to subvert, disorient, demystify any ethnocentric, egocentric and subject-centric order. However, the way in which they claim to do that, as it was for the postmodern legacy, uncovers a paths full of mines and halls, which makes them—after all—exciting.

For example, according to the geographer Anderson, the common ground shared by those different non-representational theories is "a sense of affirmation and experimentation" (2010:2). Indeed, as he states further, "non-representational approaches locate the meaning and signification in the manifold of actions and interactions rather than in a supplementary dimension such as that of discourse, ideology or symbolic order" (ibidem: 3). However, as Derrida (2009: 4) would say, the negative appearance of the term non-representational is difficult to remove because it is impregnated in the grammar of the word.

In the following lines Anderson (2010) nonetheless argues that Foucault is a key inspirational figure of the non-representational. Even there, one might argue that is not fully limpid how a philosopher who theorized discursive formations can at the same time be turned into an antithetical figure of himself, especially when what we get from his work is the impossibility to fall outside discourse or to find pre-discursive foundations. Even if the thought of the philosopher crosses different phases, from his analyses we get the sense of a great believing in literature, textuality and in the ways they affect and produce exteriority (Pelbart 2015). The point I wish to make, then, is that the paradoxical use of some of Foucault's reflections might run the risk to misrepresent, by decontextualizing it, not only the truly nature of his theories but also the different political urgency in which the non-representational geography has been proposed. In fact, the purpose of these works

sometimes goes in the other way around, collapsing in a dissolution of the historicist, discursive and Foucauldian analysis of power, space and identity. Yet, this use and misuse of philosophical concepts is the point of strength and weakness of contemporary geography. In this regard, usually the looting and collection of fragments of ideas and thoughts is rather preferred than an all-encompassing commitment to one thinker. And, after all, this was the path suggested by Foucault himself when, provocatively or sincerely, decided to conclude with these words the strongly desired interview by French geographers of *Hérodote Journal*:

If one or two of these "gadgets" of approach or method that I've tried to employ with psychiatry, the penal system or natural history can be of service to you, then I shall be delighted. If you find the need to transform my tools or use others then show me what they are, because it may be of benefit to me. (Foucault 1980: 64)

Foucault here refers to the products of his thought as 'gadgets', little presents he is delighted to offer to other disciplines. Even if is not so clear to what extent the philosopher really agrees with a fragmentary and continuous translation of his work, I doubt he can be wholly considered non-representational. A different argument can be made for the neovitalist thinkers. Spinoza, Nietzsche, Bergson, whose categories of thought have been resuscitated through the provocative and aesthetic interpretation made by Deleuze and Guattari (1988), help better to experiment an impersonal and more-than-human connection with the world that a considerable chunk of non-representational thinkers attempts to reach (see Cadman 2009, Whatmore 2004). It is through the Deleuzian recital, indeed, that the realm of outside becomes a material figure, the Outside, a way of thinking in its own right. As the Brazilian philosopher Pàl Pelbart evokes: "Deleuze increasingly insists upon this: to think comes always from the outside, and is directed toward the outside, belongs to the outside, is an absolute relation to the outside" (2015: 200).

This outside is an escaping from the representational not in the sense of a re-turn to reality of the external world, which would re-propose the divide reality/representation. Therefore, it does not assume a realm of representation and one of reality, a sphere of signification and a detached reign of things. It is, as I said above, an urgency to think differently, *otherwise*. To treat representations not anymore as just membranes of accessing the world nor simply as empirical visual configurations but rather considering the infinite and not-all-encompassing forces that affect them, that make them representations, that make them real, that make them human, that make them non-human or hybrid. Likewise, once detotalising, detoxing and 'mundanizing' the thought as a 'thing' among others, as an object

made of different forces, rather than a force in itself, new ways of life can be imagined and accepted. Above all, the main question remained to ask is how Deleuzian epistemology affects the work of geographers. Regarding this aspect, Thrift admits:

I take Deleuze's work on topics like the gap between sensation and perception, the difference between possibility and virtuality, the heterogenesis of both material density and subjective action from a pre-individual field, and the different time- images of repetition and recurrency to be important (2008: 15).

It is especially the nature of the thought in action foregrounded by Deleuze that heralds a move away from semiotics (what things mean) to pragmatism (what things do). This posthuman aspect is, in some circumstances, envisioned by the Actor-Network theory (ANT), a relational-materialist approach where representations become understood as presentations, treated as objects in action, always able to generate network and to be produced by networks (Latour 1987, 2005). Emerging in the 1980s, ANT instigated its own critique of representational thought by focusing on the heterogeneous practices of association, enrolment and translation between humans and non-humans (called actants), which together engineer worlds. According to Latour (2005: 10), social sciences is nothing more than a movement, a search of assemblages. The term social comes indeed from the Latin verb "sequor" meaning "to follow". Following things, people, events that are aggregated, rising to new configurations. The problem is that the purpose of social explanation tends to interrupt, classifying and reifying the movement of this aggregations. This sense of the social encouraged by Bruno Latour somehow suspends the idea to treat material symbols as reflections of some order waiting to be unveiled and decoded or, at least, it adds another perspective. Indeed, if postmodernism engaged with subjective representations as opaque mirrors of the worlds, non-representational thinkers believe that there is a world full of events, actions, movements, meaningful substances that exists without needing of symbolic representation. This means, in its more radical effect, to "seize life as a power of the outside" (Pelbart, 2015: 201), to refuse biographical accounts and to deny subjectivities.

As new theories begin knocking on the geography's door, others return in all their ambiguity. Nonetheless, we should remind that the work of Derrida has been equally rediscovered in non-representational geography. Although one might turn up her nose at finding an equation between non-representational and the textualism of the French philosopher, some geographers argue that they are inspired by his second vein, in terms of ethics, materiality, and, especially, on his way to explore and deal with alterity and absence

(see Anderson and Harrison 2010). Not by chance, the figure of Derrida does not find a place in the first non-representational timeline proposed by Thrift (Table 1).

Yet, it is true that the later Derrida confronts with a new ontological space which transcends the dialectic between presence and absence, trying to unfold the unnamed and unpresentable face of the Other.

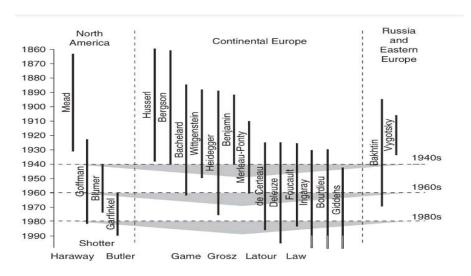


Table 1. Timeline of non-representational theories (In Cadman 2009: 2)

The quick look at the major inspirational figures of non-representational body of thought has been suggested to avoid further ambiguities. Indeed, for instance, the critique of representation as visual object is not explicit in these kinds of work, where it is more preferred a philosophical diving in the ontology of representational thought. In addition, very often we become aware that the criticism on representation can work as anti-representational only for a rhetorical prejudice that leads us to consider the representation only as imagination and interpretation of reality, without revealing the performative value of the same; or to see representation as an ideology, a construction of power without admitting the possibility that there are counter-representations that destabilize the system from which they are produced, on the basis of what has been taught by the postcolonial critique. For example, Spivak (1999), in emphasizing the inevitability of representation, uses the term "catachresis", an operation where the representation is used by someone who knows she or he is not having to trust it but is also aware that it is impossible not to use it at all for progressive politics and strategical essentialism. Yet, in neglecting the importance of symbolic representation, in minimizing the work of power as a totalizing force, in denying subjectivities and thus avoiding to question the racial and gender dynamics (Colls 2012), non-representational theory might appear a not

fully political engaged theory. Liz Bondi, for instance, argues that many feminist geographers find the non-representational theory "too abstract, too little touched by how people make sense of their lives, and therefore too 'inhuman', ungrounded, distancing, detached and, ironically, disembodied" (2005: 238).

In this minefield, and considering not only what geography means but also what geographers actually do, Lorimer (2005) proposes to replace the term non-representational with the 'more-than-representational'. Howbeit, what he unwittingly does is to convert a problem of quality, that is about what things do in different forms of relating, into one of quantity, "the more". Put differently, what else can we add? What is outside, what is more than a representation? The answer is straightforward: performance, practice, life, affect, movement... So, perhaps, even the "more than" does not ask the right question in the way it forgets to account what relations matter and why, as vividly questioned in this study.

# Practising the Outside: non-representational toolkit and cultural re-socialization

The last aspect leads us to consider not only those criticisms that have been levelled against this current of thought but also the effort to understand in what non-representational geography has actively resulted and which particular features distinguish it from a purely cultural approach. Ultimately, this manoeuvre entails to suspend a philosophical retracement of the "non-representational" meaning by focusing instead on its contingent application.

Beyond its arguable fashion, as we already noticed, it is the possibility not to prioritise the role of symbolic representation in the research practice and to deal with the consequences of this movement as it comes to be translated in several sub-field of the discipline of human geography. Without considering it as simply exclusive of cultural geography, we could say indeed that this theoretical atmosphere ramifies (even if we need to consider also eventual overlapping) into an affective turn (Thrift 2008), a performance and performativity turn (Butler 1997, Mckenzie 2005, Thrift 1999), a practice turn (see Schatzki et al. 2005), a mobility turn (Cresswell 2006, 2011; Sheller and Urry 2006) and, recently, into a more digitally-related processual turn (see Graham et al. 2013).

That is to say that now the emphasis is put on the dynamics, movements, relations, processes, circulation that involve and produce geographical objects. On the other hand, however, is also to see our representations in practice, emerging through the more or less embodied use we make of them. This displacement let to multiply other ways of thinking

and of treating the methodology and the object of analysis. In other worlds, one problem is to address performatively the representations that surround and participate in our life, an issue strongly addressed by cultural geographers much earlier of the advent of NRT; another question is to look at how they are practically and technically produced and used, an issue that is often overlooked by cultural geographers since their work was born as a critique to any technical, utilitarian and quantitative methods.

The reconsideration of objects' production and processuality and not just of their meaning has recently had a sequel in media studies that indirectly have influenced cultural geography, especially in the British academia. Many cultural geographers and theorists begin prioritising the question of production and circulation over meaning (Beer 2013; Hartley 2009; Lee and Li Puma 2002; Rose 2015a). However, it is important to point out that technique should not be confused with experience as productive of meaning (Jardine 1985). This new attempts runs the risk to propose a new dialectic, instead to overcome it, where we get the feeling that to explain how things "really" work is more important and more scientific than to understand in which system of meaning they come into existence or they are contested. In this sense, we should always try to tie these two aspects together.

There are also other unresolved problems. As I said in the beginning, nonrepresentational theorists feel disappointed by the cultural representational approach because it speaks for others and tends to assume that what the scholar sees as the fruit of her interpretation in an image (a text, a landscape, a map), for instance, or in a cultural and social phenomenon is what others will also see, without clearly stating that hegemonic representations are ideological, fictional and partial as well as those of the researcher. The overemphasis on interpretation is perceived as a devaluation of other aspects that equally need to be accounted such as bodily and emotional experiences, but even more grounded and technical accounts. Put differently, what comes to the fore is the awareness that: "[t]o interpret is to impoverish, to deplete the world—in order to set up a shadow world of 'meanings'. It is to turn the world into this world" as argued by Susan Sontag (1967: 4). In geography, this idea of returning to a more authentic sense of social practices is advanced through extensive use of ethnomethodology, interviews, focus group, relationality, creative projects that contrast the one-way, univocal, non-participatory reading of the cultural theorists. In this direction, even the emphasis on performance, movement, affect, corporeality, production, things, mundanity quite often is not set as a revaluation of certain relations but as a detox from the saturated work on textuality and on the interpretation of cultural meanings that may give the impression to be just philosophical exercises, somehow disembodied from the contingencies of everyday life. We might better understand this facet when non-representational authors claim that: "our understanding of non-representational theory is that it is characterized by a firm belief in the actuality of representation, not representation as masks, gazes, reflections, veils, dreams, ideologies...[but rather] as 'doings'...[a move away from] 'posited meaning' towards material compositions and conduct of representations" (Dewesbury et al. 2002: 478-79).

If that is where one wants to play the game, if they are once again the two contemporary disguises of the idealist geographer and the pragmatist geographer to contend for the future of the discipline, is crucial to mitigate this attack. We should remember that works marked by a cultural imprint implicitly refer to a constructivist reading, which recognizes the presence of systems of representation, a public dimension of language, whose theorists can take charge and make judgments of (Hall 1997). On the other side, non-representational schools of thought try to challenge the primacy of representational models of the world, whose main focus is the 'internal' and whose basic terms or objects are symbolic representations, and are instead committed "to non-representational models of the world, in which the focus is on the 'external', and in which basic terms and objects are forged in the manifold of actions and interactions" (Thrift 1996: 6). This means that they can be more devoted to a "crucial pragmatic dimension" (Söderström 2010).

In short, representations become performative presentations, not reflection of some aprioristic order waiting to be revealed. Consequentiality, the key focus of representational research is on what things symbolize—what they denote and connote, what codes they inform, what values they refer to. Semiotic and material resources act in virtue of their power in an ecology of many other actors and objects. Non-representationalism, instead, shows how the actions of actors are consequential not in light of what they stand for, as the primary etymology of representation would suggest us, but in light of what they achieve, how they work, whom they serve, how they are felt. If the first posture recalls a representational question in the sense it asks 'what is it all about?', the second gait is closer to a utilitarian question, strictly demanding: 'what is it for?' (see Mitchell 2005).

Thus, as the linguist Charles Sanders Pierce would argue, the minimal meaning of an object is given first of all by its utility. In addition, the idea of the social re-proposed by NRT is more similar to the Latourian one, seen as a certain kind of circulation and assembling, where the action is displaced, articulated, translated through the relations between actors and

objects (see Anderson and Harrison 2010). The utilitarian question, however, runs the risk, as already considered by feminist geographers, to put too much emphasis on the object by consequently promoting a disappearance of the subjectivity, of the human. Beside the social application of non-representational theory, is in its more philosophical strand, however, that we can finally recognize a strong political question, even utopian. Inspired by the work of Taussig (1993), non-representational geographers provocatively and even more profoundly ask themselves: what is the next step? What does it happen once demonstrated that everything is a social construction, once deconstructed all the hegemonic representations?

Seen from this perspective, non-representational geographers invoke a radical thought, even if momentary, where to raise new practicable configurations, new images and spaces arising after having deconstructed everything. Configurations which might emerge in the bubbling of bodies, movements and rhythms of everyday life. Namely, events. All the power and fragility of such creative gesture resides in a choice, and demands them to make a sacrifice: send the culturalist representation to the pillory. Here is the last figure with which we can close this first chapter: the death of the representational, the end of ideologies, the intolerance against the endless numbering the power structures that define and entrap our way of life, instead of seeking those holes in which to breathe and where to create new living spaces. In this texture, the non-representational breakthrough pours on normalized geography, demanding a greater commitment on the life and on the transformation of that life. A bit dreamy, a bit abstract (even though it says not to be), a little utopian and maybe even a little distracted. Forgetting the fact that a utopian and transformative soul has been already at work in some niches of humanist<sup>18</sup> and postmodern geography that, sometimes suspended between an epistemological relativism and a teleological nihilism, have certainly provided many contributions, even if highly theoretical, on how to engage with the dirty and nasty world of down below, teaching us on how embodying experience, affect and emotions in our research. The consequences are also those of a vague, vaporous and striated "geography of geographies" (Livingstone 2003) that might transpose (or remain indifferent), each one in its context, the dictates of this current of thought.

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<sup>&</sup>lt;sup>18</sup> With the term "humanistic geography" one usually refers to a series of geographical work that between the '70s and the '80s reclaimed a new appeal to experience, not intended in the sense of the positivist empiricism outlined above. Geographers Yi-Fu Tuan (1976), Relph (1976), David Ley and Marwyn Samuels (1978), among many others, particularly encouraged by phenomenological and existentialist accounts of space, started to link human agency less in "reasonal" terms and more in emotional and sensorial feelings of place. In this dissertation, my intention is not to refer to such connotation of the term, thus I prefer to use the notion of "humanist" rather than "humanistic" geography to appoint those geographers trained more in the humanistic circles rather than in the social sciences.

# Chapter Two Disfiguring the Map

If geographers chance to meet where maps are displayed (it scarcely matters what maps) they comment, commend, criticize. Maps break down our inhibitions, stimulate our glands, stir our imagination, loose our tongues. The map speaks across the barrier of language; it is sometimes claimed as the language of geography. (Sauer 1956: 289)

We knew geography was theoretically sophisticated, politically engaged and socially committed, but everyone else thought it was about maps. So we suppressed our cartographic impulses and as the cultural turn took hold, our desire for mapping was obscured by our mappings of desire. (Painter 2006: 346)

The meaning of the figure is undecidable, and yet we must attempt to dis-figure it, read the logic of the metaphor. (Spivak 2006: 71)

# Cartographic anxieties

A woman is sitting on a chair at a table with a sewing machine. At a closer view, that table is covered by maps. Several maps of the former British colonies published in different years and at different scales. After moments of deep silence, the sewing machine is turned on and it starts to stitch the land of Ireland onto the map of United Kingdom. Then it goes further on suturing the borders of Nigeria, West Indies and Hong Kong. The stitching of the sewing machine starts at a regular pace, appearing like a person wondering where to go, and setting the cadence for a sort of narration. Appearances are deceiving, though. And just at the moment in which I am accustomed to the routine of the process, the fast but regular rhythm turns into a convulsion. Suddenly, the machine becomes increasingly faster, stitching the maps in a non-stop, furious manner until it drills and erases the surface of the paper. A real-time topography of borders and conquests comes to life and simultaneously dies, agitated by the blows of a household machine, that while suturing the lands of the English colonies with a thumping noise reminiscent of a gun, is capable of revealing the performative value of the map itself. Indeed, each drawn line is historically and materially nothing than a line of subjugation and annihilation.

In the meanwhile, a video camera records and projects a live stream of the image of the sewing machine needle onto the wall, thus highlighting the connection between the gesture of stitching maps and the mechanical annexation of land. Speakers amplify the sounds emitted by the sewing machine emphasizing synqesthetically the impression to be under the regiment of an ensuing firefight. The disfigured maps of the British Empire are finally stitched into an Atlas, provisionally attached to the wall. A chaotic frame that not only shows performative destruction, but consists of it. (Field diary, December 12, 2015).



**Figure 2**. A screenshot of the performance 'Map Series' where the artist is suturing maps of British colonies. Courtesy of Ana Mendes



**Figure 3.** Detail of Map Series. A collage of all the stitched and worn maps attached on the wall. Courtesy of the artist

The woman in question is a Portuguese artist, Ana Mendes, and the chair on which she sits forms a part of an installation/performance—Map Series—presented in London on 12th December 2015<sup>19</sup>. The viewer finds herself immersed inside the whole installation. It is demanded to react with several senses and to move around the table where the artist is sewing and practically destroying maps and to watch the screen to see the same experience from another perspective. Mendes' evocative image powerfully renders the idea that "the map had (and still has) its hand dirty with matters of the world" (Watson 2009: 41).

Maps, on the other hand, are never just 'mere' representations. As it suggests the etymology of the term, the map is a textile (lat. *mappa*) or made of paper (lat. *charta*), is tactile and visual, normative and informative, a haptic materialization and documentation of an abstract order or narration (Harley and Woodward 1987; Mangani 2006).

Likewise, map-making is often (but not always) associated by several artists with a desire of control endowed in a logic of containment and division made possible through boundaries and hierarchies. Rather than giving any illusion of a frictionless vision of the world, cartography is hence diverted by Ana Mendes in a pervasive colonial device. It is by virtue of this intolerance that the sense of oversight and coercion is twisted as a feeling of exhaustion; an "exhaustion" around those powerful cartographies, pillaging an expression coined by art theorist Irit Rogoff (2010), that has been at length pictured and experienced by cultural geographers themselves.

Whole swathes of critical geographers have spent their careers to expose the nature of maps as technologies of power, ideological devices and performative representations developed on the basis of statist and corporate interests (territorial control, facilitation of citizens' self-identification, explorations, colonialism, and imperialism). Italian geographer Farinelli (2009: 61) drags the argument directly to the *heart of darkness* of representationalism when he firmly claims that the modern state is nothing but a copy and assemblage of the geographical map. Put differently, it can be argued that a power machine needs an image of thought—a figure—to which it procures the strength to function in return (Deleuze and Parnet 2007). Seen from this angle, the map has anticipated, created, moulded the face of the state. In short, geography has provided the grammar of power, the abstract machine needed

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<sup>&</sup>lt;sup>19</sup> The performance "Map Series" was presented at Rich Mix in London on December 12, 2015 as part of the broad multi-disciplinary exhibition "L' Intru-Invaders" curated by the same artist and dealing with issues of post-colonialism, memory, identity and capitalism. Before that occasion, Map Series has been performed in Lisbon, Berlin, Munich, London and Vienna. I attended the exhibition after earlier interviews with the artist. Ana Mendes uses second hand maps, buying them in markets, finding them in books or asking for copies in libraries, as for the case of the British Library (Interview May 31, 2015).

by institutions to organize their own form of control. A refrain repeated in chorus by critical geographers, a tremendous syllogism returned in its caustic clarity from the words of Brian Harley: "[i]n modern times the greater the administrative complexity of the state—and the more pervasive its territorial and social ambitions—then the greater its appetite for maps" (2001: 55).

In the spotlight on this critical endeavour, the reader should not be disoriented to find Mendes's performance as an anticipatory figure of the main theoretical trajectories—strictly imbued with the cultural representationalism sketched in the previous chapter—that will be unfolded in the present one: the performative and discursive dimension of the political map, the apparent indissoluble knot between map-making and colonialism intersected with and revealed by the paradoxical incursions, i.e. "map-breakings" (Huggan 1989), encouraged by interloper cartographers such as feminist and postcolonial subjects. In short, those are the chosen reading strategies of a genealogical critique of the map trope. Here it is, now, offered to you, dear reader, a map not as a simple piece of printed or handrawn paper but taking the form of a figure and an image of thought. Thus, after mapped out the epistemological, philosophical and cultural coordinates binding the concept of representation to that of geography, is now time to see closer the theoretical debate on the geographical representation par excellence, the Map, mobilizing the contributions of the most influential Anglo-American and continental geographers. Indeed, speaking theoretically of the forms of thought such as that of representation cannot have the same effect as talking on a specific and contextual level. We need now to consider how to translate the vertigo of several representational crises on the cartographic ground. Specifically, if this totemic word representation—allows to build a bridge between reality and desire (Dematteis 1985), the map-representation has become the fetish image within which to pour all the desire, anxiety and paranoia experimented or unveiled by critical geographers, especially during the postmodernism.

In truth, the gesture of exposing and unveiling the cartographic gaze is concerted and it reaches its peak in the late 1980s. It is in fact in the theoretical ferment unleashed by the dismantling of positivism, but also propelled by the cultural semiotic and historical reading of the cartographic enterprise, until the final dismantling fuelled by the deconstructivist and textual approach of the cultural turn that the contours of a cartographic neurosis begin to be sketched and then systematized. Diverse and intense interpretations, disfigurations and refigurations of the map unwind in the driving figure of the "cartographic anxiety": an

intellectual syndrome of suspicion and doubt condensed in the political project of unmasking every silent and totalizing knowledge.

To be more specific, this is not the common idea that geographers have about the notion of cartographic anxiety. Geographer Painter (2008) has noticed that the term "cartographic anxiety" was firstly used by Derek Gregory (1994) about the notion of "Cartesian anxiety" by Richard Bernstein. It designates the frantic search for a foundation, a stable ordering principle from which follows classification and knowledge. Importantly, this approach commonly considers the perspective of those in power and their paranoid obsession for control, hence for mapping and totalization. However, I will no longer follow the detours of this theme. My aim is rather to overturn the meaning of the concept made by those authors, by addressing such anxiety from the point of view of geographers themselves, therefore as a feeling of apprehension they have for those who want to map everything. The paranoia becomes then a typical post-modern scepticism towards the universalist claims of modern science in the attempt to unmask those "principles" and "unsaid" governing order. In other words, I am asking myself: is the faceless power anxious of knowing and controlling everything or is the geographer anxious that the power could actually reach its purpose?

As I have already more than implied with this disposition a great piece of cultural geographers started during 1980 and 1990 to show feverishly and frantically the evil side of cartography in order to unpick "the violence associated with the drawing and policy of mapping" (Painter 2008: 89). Since that moment the consequent 'cartophobia'<sup>20</sup> will act as the marking line to separate the careers of many geographers from the cartographers' ones, whose scientific background will be later transposed in the technology and science of geo-information (see Chapter 3). The following cartophobia is a critical gesture with its strengths and weaknesses that works simultaneously on two complementary levels. For some geographers the problem is inherently ontological and it concerns closely *the map per se*, since as a model of knowledge it pretends to precede or to substitute the territory; for others, the difficulty lies in "the bad things people did and do with maps" (Wood 1992: 50), hence in the extrinsic-pragmatic power of the map, seen as a discursive device used to exert (by naturalising) political and economic power through several actors in different epochs and spatial contexts. Looking at the human geographers' massive production on the historical

<sup>&</sup>lt;sup>20</sup> Similarly, geographer Wheeler curated an editorial for the *Journal of Urban Geography* in 1998 on 'Mapphobia in Geography' signalling the period 1980-1996 as the most engaged to and obsessed with such cartographic anxiety.

cartography is indeed incontestable that historians, geographers, philosophers, and sociologists have begun during the 80s and 90s: "an analysis of the ways in which politics has intruded upon or imbued mapping so that maps serve particular interests" (Crampton 2003: 4). Along with those who claimed that maps could be also used for political ends, there were those who implicitly argued that *all* maps were always a matter of power, serving the interests of specific classes and political groups. In such recital, it is crucial to keep in mind the two operating forces of the map, the two already sketched features that will run through the analyses of this chapter: the extrinsic-pragmatic power and the intrinsic-ontological power of the map. This dual attitude has then heavily influenced the way in which geographers have perceived the work of/on spatial representations, looking at their inherent limits as well as at their ideological applications.

In such over-emphasized blueprint, the work being done by critical theorists in the United Kingdom, United States, Canada, Italy, Sweden, France and the like is far too rich and multiple to be reduced to a number or a school and one often perceives only the most visible, situated in the Anglo-American area. There are nevertheless very different sets of reading effects being produced in the several countries, each one with its own set of debates and limitations. But they did, in their collective emphasis, designate a particular attitude, a certain posture toward thinking critically about the cartographic epistemology and ontology. For these reasons, the path proposed should be intended as a truly rhizomatic, partial, and subjective journey, given that the work of each scholar could be situated at the intersections of several and multiple theoretical trajectories. Yet, sewing the numerous threads of analysis may help to unfold eventually the status of cartography today, considering both the reflexive attitude of cartographers and the reflective attitude of geographers. Indeed, there is a way in which cartographers tell the history/fiction of their discipline and a way in which geographers, especially human and cultural geographers, look at the same. It is precisely this divide, this tremendous gap, that demands to be discerned, observed and then filled with new critical inquiries. The purpose of the next two chapters is a shaky and precarious crossing of this scenario.

In this dissertation, though, it is more explicitly considered the point of view of the human geographer, intersected with some critique then raised by historical and contemporary cartographers as a way to defend or to re-scale the scope of the geographic demolition of the map-maker's career. In this regard, each phase of the relationship between geography and cartography is marked by important and peculiar questions, dictated by epistemological and

philosophical influences. Consequently, the effort to propose a progressive line of the cartographic 'affaire' is an impossible and divert task; firstly because of the amount of work that has been produced in this field; secondly because the classification and systematization of various paradigms and interpretations runs the risk to tell a full-filled history of the cartographic thought (Edney 1993) without considering the intricate relationship, time lags, the redundancy of certain claims that, after historicized and put in resonance in a broader network, may also recast and demise the fashion of novelty in which contemporary approaches are often set, letting instead to shed light to a reversibility and recursion of theories, anxieties and interpretations around the 'map trouble'.

Therefore, I insist on arguing that the themes to be discussed are concatenated to each other according to a "diagram at multiple entry ways" (Deleuze and Guattari 1988). However, not to get lost in the chaos of these tortuous levels, we should untangle the layers of this process, even if this operation may give an impression to reify and perhaps caging that fluid and not always systematized theoretical suggestions. As a first step, it is crucial to understand how the concept of the map has been articulated and re-articulated with that of representation, and in cascade with the notion of power, performance, and subjective experience. For this, in the previous chapter it has been considered essential to reconstruct the impact of the cultural turn on the discipline up to the non-representational theory; that manoeuvre can be now seen as an attempt to address the same preoccupations within the critical study of the postmodern and cultural cartography, where "map metaphor becomes a key site for the poststructuralist critique of classical and modernist thought" (Mitchell 2013: 3).

#### Drilling holes into the cartographic language

Reading the map as a figure leads us to make a brief leap in the etymology of the word. In its Latin meaning, indeed, we discover that the term "figure" has the same root as the Latin verb *fingo* which means "to create, to shape" as well as "to pretend, to simulate".

Therefore, the Map, when considered a figure, can be scrutinized both as a concealment of the world and as a material and haptic object. In hindsight, the epistemological gait suggests that representations are textural images which may also be worn and corroded. In the same vein, it may not be surprising that the dramatist Samuel Beckett has exposed his writing project against the limits of the language as a "drill one hole after another into

[language] until that which lurks behind, be it something or nothing, starts seeping through" (1937, 1:518).

Many geographers, especially between the 1980s and 1990s, have applied the same surgical operation against the cartographic language, manifesting a need to pick holes in the map to see or understand what is hidden behind, signalling the passage into an epoch of disfiguration, a tremendous reading of "the logic of the metaphor" (Spivak 2006: 71). In such a vivid and material picture, we can now better understand that thanks to a controlled fiction, to be understood in the literal sense of a dissimulation and of a fabrication whose original traces are lost, the reasoning about space has long posed as objective and neutral. This way, the language conveyed has not been questioned by its producers and considered rather as a neutral medium. Hence, the adoption of a geometrical spatial model by positivist geographers already in the XIX century has conducted the map in the realm of phenomenal where there was no clear distinction between how things appear and what they are (Farinelli 1992). Hereafter, critical thinking has knocked the door of geography, dragging a heavy arsenal of harmful theories. Under the bombs of critical theory, geographers have metaphorically and furiously shredded and slashed globes and maps to unmask the hidden and tremendous secret of their tacit power. Disfiguring and dismantling the mimetic pattern of the map, that is—in a nutshell—its pretentious claim to be the territory, has coincided with the rethinking of the discipline's main tenets, by digging the bottom where the roots of certain theories and methodologies are implanted, if we think that the map as well as other economic and urban location models are all representations—namely constructions—to be believed to be true and real through a series of conventions that are repeated to the point to be taken for granted. These have been functional, as well as the illusion of geographical calculation, to the transformation of the geography in nomothetic science (Dematteis 1985). Yet, as long as geography has been trapped in the cage of modern science with its positivist paradigm, especially reinvigorated by the quantitative revolution, a truly cartographic epistemology has not been called into question; the map has been addressed as a form of neutral and objective knowledge—a transparent copy of the world—within pact to eliminate (meaning hide) as much as possible the intentionality and the distortion 'added' by its human creator. Even with the neo-positivism, maps have continued to act as tools of a silent spatial knowledge, since their analyses have remained exclusively technical (Harley 2001). Consequently, issues of communication and information were the major interests of cartographers between the 1960s and 1970s. One could argue that this is a classic and almost

known narrative; moreover, the positivist paradigm in its various facets has infiltrated, in the past, most of the social sciences. This story, however, may take on a different flavour when one looks at long-term perspective and breathes the smell of certain positivist postures and certain rigid methodological approaches even in the present. Broadly speaking, indeed, they are perceived by critical geographers as still occupying a main seat in the scientific status of contemporary cartography (see Chapter 3). As a proof of this methodological stance, Waldo Tobler discussed in 1976 analytical cartography as a purely mathematical way of knowing the world, without questioning its social and cultural context. In the same line but from a different point of view, Arthur Robinson (1952), who is considered with David Woodward the pioneer of the post-war American cartography, proved to be mainly interested in the 'map effectiveness'. He imposed through his research an object-based approach to the role of maps as documentary sources, without questioning their ideology. Robinson, indeed, assumed that the map was a medium just capable of disseminating spatial knowledge, without considering the fact that instead was able to build it. The objective rules he proposed ended up to treat map as a "social token" (Casti 2015). In such representational cartography, maps have been treated as truthful documents and the main problematics arise in how to best communicate that truth by focusing on the design and their thematic features. In this respect, cartographers have started to divide themselves between those who study the cognitivesemiotic aspects of the map's visualization and those who explore its functional capacity. The effects of these postures are anyway the same: systematize the status and the progress of cartography as a hard science. Hereof, nowadays scientific cartography aims at mastering quantity in a communicative sense, namely to spatialize numerical information. Similarly, in order to propose a research methodology valid for any disciplinary subfield and to standardizing results, it proposes a unity of intent based on the use of the same instruments (Casti 2015: 49). The technical and instrumental dimension coincides with the ideal of "the certainty of representation" (Farinelli 1992), or better with the belief that the formal accuracy and a controlled methodology can ensure a genuine and faithful representation of the world outside of the subject partiality and constriction. It also means opting for an empiricist model which admits that space—the geographical fact—is an independent attribute of discrete entities in the real world (Edney 1993) that can be fully discerned.

As we argued before, the artifice is given by the total accession of the thing to the word, the direct correspondence between the phenomena and their spatial representations (Edney 1993; Farinelli 1992, 2009); in short, it works through the mimetic representational paradigm

we have at length discusses in Chapter 1. Not by coincidence, cartographic historians usually speak of a "cartographic modern ideal" (Edney 1993), based on the myth of objectivity, scientific dogma, hierarchy that involves an exclusion of those mapping and spatial knowledge that are inconsistent with this ideal. In this regard, the first effect of the scientific rules is that of creating a standard on which to measure all the other (less valuable) degrees of knowledge (Rorty 1979). It could even be said, and I will explore this aspect deeply in Chapter 4, that geography as a scientific arrangement is shaped within a given scopic regime (Jay 1988, 2002). Which is the reason for in a society there is a way to see, imposed to others, where it is hegemonically defined and culturally constructed what you see and how you see. Similarly, we can imagine that cartographic practices follow the orientation of this look and at turn discipline it. Therefore, we find on the cusp of an unease situation where there are practices of vision that seem to geographers active and operative—for by they produce knowledge—and others ways of seeing that are supposed to depend on or replicate passively in a subjugating way that knowledge. Thereby, in the recital of the omnipotent visual dominance of the map, the geographer takes for granted the monological gaze of the viewer, considering him or her as static and passive, the object of seeing rather than a dialogical agent. Additionally, another focus of map's apprehension lies in the awareness that there are eyes and hands which try to disappear to give an illusion of objectivity, order and abstraction. However, traces of such manipulations are often left on the cartographic frame as fading footprints. The selection, omission, simplification, classification, symbolization, the addition of colour, the line thickness, the size of the symbols that we might find on a map, not only are often visibly discernible but they can be analysed as rhetorical procedures that allow to make some places' features more salient than others (Boria 2007; Harley 1989, Monmonier 1991). By investigating such "persuasive cartography" (Tyner 1982), it is possible to recover the hidden agenda of their crafters. Yet, if maps are rhetorical and persuasive devices, an important task for geographers should be that of trying to unveil the kind of inherent rhetoric foregrounded and to understand the purposes. Above all, they should also ask themselves if such persuasive evidence they want to unfold has really some effects on the viewer. Indeed, the feeling that we are going to grasp in the following sections is that, although the richness and thickness of critical interpretations offered by cultural and critical geographers, what has been advanced and perhaps reified in the postmodern and radical niches of cultural geography is a discourse about the Map, as a universal trope, and not always about different maps and cartographic contexts and responses. My hunch is that this posture is peculiar of a mainstream figural approach to cartography which has particularly seduced postmodern geographers. As Lyotard wrote in Discours, figure (1971), it occurs in a time where becomes essential to question the libidinal and desiring aspect of the image. Image offers itself as an exemplary and unique experience of seeing to be read subjectively by freeing the meaning and the lateral semantic reserves that every well-structured word masks. The resulting effects of the figurability in geographic circles are a prolific verbosity of concepts, neologisms and reflections that eventually collapse in the same direction: disfiguring the map as the demonic force of geography, showing simultaneously a libidinal attachment of geographers to that icon. Such speculative approach is suspended between what we referred in the Introduction as an iconoclastic attitude (a type of exorcism in the wish to destroy images) and idolatry (the belief in their magical or divine 'presence') (Mitchell 2005; see also Latour 2010). Yet, not all the maps are conceived and thought in the same way. First of all, the attention due by critical geography is different from the kind of questions posed by those who research mapping as an empirical form of applied knowledge (Perkins 2003). Secondly, over time, multiple mapping practices, modes of spatial representation, have accumulated in different societies which is very difficult, if not wrong, to bring them back all in the same pot, in short, to read them always through the same pair of glasses. Not by accident, map historian Matthew Edney prefers to talk about a "cartography composed of a number of modes, or sets of cultural, social, and technological relations which define cartographic practices and which determine the character of cartographic information" (1993: 54).

In this regard, I think that only once shaped the historical and theoretical background that defines the present (in)attention of cultural geography toward map-making, it will be possible to fully discuss the different modes of mapping inhabiting our society. As soon as critical geographers would recognize that the generalization is a hindrance, they can claim to re-put their hands in cartographic discussions. I think that one of the main problematics inherent to the universalisation of the map's trope lies in the strategic homologation or distinction between historical and contemporary maps. Sometimes geographers read in the old maps an overall political and ideological dimension by which they are impregnated; sometimes these are positively opposed to the abstract, and therefore more dangerous, Euclidean modern cartography. In particular, from the part of human geographers the turning point of the clash of cartographies is often considered in the historical, perhaps overemphasized, cartographic reformation at work between 1670 and 1770 and resulted in the separation of the art of mapmaking from its scientific status, namely in the replacement of

the geometric sign to the pictorial mark (Edney 1993; Farinelli 1992). This passage is usually interpreted as another way of saying that the subject of volition disappears and denies participating in the construction of reality. Nevertheless, such transition, figured as it is all-encompassing, provoked the nostalgia of several geographers. David Harvey, for instance, has argued that after 1700 maps had been "stripped of all elements of fantasy and religious belief—becoming—abstract and strictly functional systems for the factual ordering of phenomena in space" (1989: 249). According to Dematteis, the real gap is to be seen a century later, in the passage to XIX century:

Nel 700 le carte erano finalizzate ad un agire pratico. Se venivano confuse con la realtà era per residui del pensiero magico analogico e non positivo, come quello che nell'Ottocento attribuirà alla carta la capacità di indicare rapporti di causa-effetto tra gli oggetti rappresentati (1985: 55)<sup>21</sup>.

Franco Farinelli (1992) argues, indeed, that in the transition from the plotted and hand drawn sign, peculiar of the medieval cartography, to the geometric sign, typical of modern cartography, what has been hidden is the first term of the relationship: the point of view. The intention of the cartographer would often emerge within the cartouche, the artistic ornamental frame of the map, usually filled with symbols and quotes readable as the motivation of the cartographer/topographer, then replaced by the modern scale (Farinelli 1992). Yet, map historian Andrews has pointed out that "geographical and ornamental elements in the same map have often originated with different individuals" (2001: 11). This consideration suggests that it could be misleading and inaccurate to look for the alleged cartographer's subjectivity simply along the frame and the interior of the map, since every cartographic project has to be considered an enterprise, a collective of institutions and of different professionals and not as the work of a singular and deceivable cartographer. I firmly believe that this aspect should be valid also for contemporary cartography. Yet, for the reasons outlined above and considering the close reading inaugurated by the hermeneutic and cultural paradigm (Rose 2015a), most of human geographers have concretively assessed that reading a map is a singular operation. It means: "interrogarsi circa la sua natura di segno,

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<sup>&</sup>lt;sup>21</sup> My English Tr. from original Italian: "During '700, maps were aimed at a practical act. If they were confused with reality it was for the analog magical thinking's residues and not for the positivist one, like the nineteenth century that will attach to map the ability to indicate cause-effect relationships between the objects represented" (Dematteis 1985: 55).

indagare il motivo esterno che la produce e la giustifica e individuare il punto di vista adottato dal cartografo" (Farinelli 1992: 23)<sup>22</sup>.

The gaze, the diabolic eye that re-appears only once the geographical canvas has been torn and slashed to see what it lurks behind, is a critical gesture since what is seen and represented is certainly dependent on the position of the subject, from the "where" she/he occupies to see and represent. However, such unveiling is a difficult operation since "the dominant form of mapping—as Massey points out—does position the observer, themselves unobserved, outside and above the object of the gaze" (2005: 107).

A frantic investigation of the potential of meaning inherent to the map might uncover something that is present to us but not visible if we do not pose the right question. Eventually, we need to know not only where and what to look but, more importantly, we have also to constantly ask ourselves if we are really seeing (Farinelli 2009). Be careful, then, my fellow geographers! The work on representation is indeed a field of productive tension and delusory missteps.

# The silent arbiter of power

The mission of drilling holes into the cartographic representation to see what it lurks behind has been global and concerted. However, especially in the English domain, it has been pivotally conducted by Brian Harley, a seminal figure who blazed the trail for those who came after, and thus, unfortunately, belatedly. He died prematurely in 1991 at the height of his intellectual activities as a censurer of positivist and military cartography. The map historian, in fact, begun his research in a period of great philosophical ferment investing the geographical discipline, especially reinvigorated by postmodern and post-structuralist theories, whose ideas stimulated him to rethink many of the discipline "hard hooves", particularly in the relationship with historical cartography. "It is better to begin from the premise that cartography is seldom what cartographers say it is" (2001: 9) will be the mantra, the operational falsehood pushing Harley<sup>23</sup> to investigate the omitted discourse of cartographers, the other half of the story emerging when the map stops to be a transparent

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<sup>&</sup>lt;sup>22</sup> My translation from original IT: "to question about the nature of the sign, to investigate the external reason that produces and justifies it and to find the point of view adopted by the cartographer" (Farinelli 1992: 23). On the other hand, Christian Jacob defines a map as the point where three variables come together: the medium, (or space of representation), the referent (or represented space), and the gaze of the user (or, more generally, of a viewer), this way shifting from the cartographer's point of view to that of the reader.

<sup>&</sup>lt;sup>23</sup> And with him, so many other scholars, as we are going to explore in the following sections.

window on the world, a designed and communicative display, and starts to be read as a cultural and social text.

Significant about this theoretical atmosphere is the year 1987, when Harley publishes, in collaboration with David Woodward, the first volume of the titanic work on The History of Cartography, signalling the emergence of a humanist vision on the history of map-making. The persuasive idea for that time, for which the history of cartography is a humanistic discipline concerned with human practices that are part of larger socio-cultural trends, demanded a consideration of all mapping endeavours and not just those which contributed to the presentday concerns of academic cartography (see Edney 2005). In this spirit, the European geography's paradigm shift of the 80s toward a cultural and social constructivism finds more than a resonance with this work. Thereby, in the same years in which continental geographers engaged in a call to arms against the objectivism and the impact it was having on their discipline—as we have seen in the 1987's Venice conference—or in the dismantling of the ideological and political power of representations in society allured by the new cultural geography (see Cosgrove and Jackson 1987), Harley leads a fierce critique of the mimetic model thanks to a historicist and philosophical approach which is not affected, if not in a little way, by semiotic studies. Since there, maps will be discussed and presented not as mirrors of nature but as: "social construction[s] of the world expressed through the medium of cartography" (Harley 2001 [1990]: 35).

Once the attack against *mimesis* will be set out, in tune with the atmosphere of the moment, new ghosts will haunt the head of the geographer. There are, indeed, at least two issues tormenting Harley's work until death. One is specifically linked to the meaning of the map, to the effort to explain what is a map, the ontological question which will drag him in the familiar realm of definitions. However, it is still far from the attempt to underline the agency and ontogenesis of maps as it will be addressed in the next chapter. Secondly, already in 1976, the essay by French geographer Lacoste published in *Hérodote*, "La géographie, ça sert, d'abord, à faire la guerre", makes more explicit the concealment of the political dimension of geography for which maps act as a kind of medium in military-strategic operations. Lacoste harshly criticizes both the New Geography and the quantitative revolution for their highly empiricist and apolitical analyses, preferring instead a militant Marxist engagement to the discipline. The Swedish geographer Gunnar Olsson (1987), for instance, has argued that the main difference between 'those in love with the calculator' and

'Marxist geographers' is that the firsts work on the Saussurean signifier, whereas Marxist geographers are interested in the meaning, on the signified part of the sign.

Perhaps following this dictate, Harley abandons an empiricist study on early map-making and starts an investigation of the political character of the map: "by linking the idea of maps as a living graphic 'language' with aspects of the key Marxian concept of ideology—with the aim—to illustrate the possibility of writing a social history of the map rather than one which is mainly antiquarian, bibliographical or technical in its emphasis" (Harley 2001: xiii). The new epistemology advocated by "the writing of a social history of the map" very soon concretizes itself in a political discourse *about* the map as a figure of speech and not *through* the map as a semiotic device. As the Irish map historian Andrews suggests, "Harley's nonpositivist alternative entails looking not through the map at the world it depicts but inward or backwards to its maker and outwards or forwards to its readers" (2001: 6).

By investigating the work of map-makers and map-readers, thus entangling the causes and effects of maps in the Anglo-American society, Brian Harley gives a big picture of a connection long concealed by insiders, that between cartography as a discursive order and the political power, borrowing reflections from Foucault (1969, 1977) and Giddens (1977), and shaking them with the deconstructive philosophy of Derrida (1967). This theoretical mixture is evident when he caustically asserts:

I shall specifically use a deconstructionist tactic to break the assumed link between reality and representation which has dominated cartographic thinking, has led it in the pathway of 'normal science' since the Enlightenment, and has also provided a readymade and 'taken for granted' epistemology for the history of cartography [...]. Our task is to search for the social forces that have structured cartography and to locate the presence of power—and its effects—in all map knowledge (Harley 1989: 3).

In this quote, we could see at work the two caveats informing Harley's thought. From one hand, the idea to dive in the representational text of the map in order to expose its fallibility and idiosyncratic character; in short, to show all the features for which it cannot be considered an objective transposition of the territory. On the other hand, an intentional approach to cartographic representations implies to discuss the politics of such representations, namely to ask: what are maps and who profits from them?

In this spirit, Foucault is needed to understand that the map is a "technology of power" (1977), an act of control, an invention for the control of space. Harley's encyclopaedic knowledge of many cultures' spatial systems let him arguing, indeed, that maps are tools that

reveal the way of understanding and controlling the world typical of elitist groups. The dominant group, in fact, has the privilege to set the rules of the vision: dynastic Egypt, Greek and Roman intellectuals, medieval Christianity, the mercantile elite, sultanates, until the same political geographers à la Mackinder had the opportunity to build and pass off as universal their image of the world in a game in which culture, politics, and economics intersect (see Harley 1988). This means to admit that the progress of cartographic knowledge has served to legitimize political operations, even if in different contexts. The contextualization of the map discourse is indeed an argument very dear to Harley. In this regard, even if often speaking quite theoretically of "the universality of political contexts in the history of mapping" (2001 [1988]: 55), he feebly tries to propose a methodology to analyse maps as historical documents, by considering the context of the cartographer, the context of other maps and the context of society (see Harley 1990).

Regarding the relationship between the cartographer and the map, Harley supports what has been already noted in the previous paragraph by Andrews, namely that maps are usually the product of a labour division where several individuals act and work: the surveyor, the editor, the draftsman, the engraver. Moreover, since "every map codifies more than one perspective on the world" (2001 [1990]: 39), it remains crucial for the geographer to understand the political function of such maps, a function that emerges when a particular map is compared to others of the same cartographic genre in order to grasp how "a social order is communicated, reproduced, experienced, and explored" (ibid: 45). Understanding the rules of society means also defining the exercise of such power structures in the content of maps and how such power affects reality through mapping practices. This means for Harley distinguishing and intersecting the 'inner voice' of mapmaker to the 'outer voice' of the patron, who has hired the mapmaker for his own purposes. Considering at least these two voices suggests entering a realm of spatial and cultural negotiations. In this regard, Denis Wood comments:

It means, first of all, that the mapmaker is not autonomous, that the history of maps cannot be written as a hero saga from the mapmaker's perspective, that the interests of the patron are always a part of the story – an essential part of the story – where no doubt interests has some of the sense of curiosity, but far more that of self-interest, of personal advantage, of things in which rights, claims or shares are held, as in commercial interests, military interests, political interests. This instantaneously makes of the history of cartography a mercantile history, a military history, a political history; and this makes of cartography – of mapmaking – a mercantile, a military, a political, practice. But in the very same breath it means that the patron is not autonomous either. His dependence on the mapmaker to advance his interests is real, the binding so effectively achieved

through the medium of the map can be achieved only through the hands of the mapmaker, hands attendant to a voice that whispers of elegance, that speaks about acid and copper, that natters on about the difficulties of showing both the hill and the town below it. In fact, it is only because his hands are attendant to this voice that the mapmaker is able to serve the patron. This makes of the commercial history, the military history, the political history a history of aesthetics, a history of technology, a history of signs (2002:146).

What the geographer is illuminatingly arguing is that the tale of the cartographic fiction is complex and it needs to be unfolded with an equally complex theory. And we know, every theory depends on our method of questioning, on our more or less disciplined way of looking. More closely, cartography is a story of interests but in the very literal sense of them. Interest, a word from the Latin "inter-esse", means "being in between". It suggests, as Gunnar Olsson has noticed, "a razor-sharp limit of ontological categories" (in Abrahamsson and Gren 2012: 229). In truth, more than a limit, such interests are the possibilities to consider more theories, contexts, and agencies when approaching the study on mapmaking.

In the case of Harley, walking in the razor-wire between an economic and political history of interests and a history of signs, inevitably pushes him to exploit and take advantage of the Derridean and Foucaldian speculative toolkit. Adopting a Foucauldian perspective means denouncing the power effects of certain discursive orders and observing how this power introduces the dimension of materiality, of a discourse affecting life itself. Whilst, the textual approach of Derrida presented in his early work *De la grammatologie* (1967) leads Harley to prefigure a very subjective, perhaps misleading, idea of deconstruction: "[d]econstruction urges us to read between the lines of the map...and...to discover the silences and contradictions that challenge the apparent honesty of the image" (1989: 3).

Howbeit, at a closer reading, Harley is discontinuous and eclectic in its conception of the cartographic representation and does not seem to put fully into focus the idea of "discourse" as defined by the French philosopher, not even the deconstructive ideal promoted by Derrida (Belyea 1992; Edney 1993, 2005; Sparke 1995). This is clear when Harley (2001) argues that a map represents, even ideologically, a truth of the world, while Foucault is quite linear in wanting to treat discourses "not as sets of signs (of significant elements that refer to content or representations) but as practices that systematically form the objects of which they speak" (1970: 45).

Seen from this light, Harley does not attempt to fully engage with the post-structuralist theory, whose transpired intuition will be rather critical in advancing the 'newness' of cultural geography. The conviction that the only reality we can talk about is the one constructed by

the language, from the discourses that create and produce what they are talking about is rather replaced by "the modernist conception of maps as documents, charged with confessing the truth of landscape" (Crampton 2003: 7).

If Harley's theoretical intervention cannot be claimed as poststructuralist, it can instead be considered a Barthesian act of "map's demythologization" (Sparke 1995). This perspective is imagined as an attack to the myth of objectivity, by criticizing the map's vision as a neutral representation of the world while revealing rather the ideological, historical and social dynamics within which it is shaped. Once shattered the mirror of mimesis, the idea of spatial representation that is put into play is constructivist and performative. Within the historical critical cartography strand, consolidated by the theories of Harley and continued by later scholars, the map ceases to be a neutral and transparent camouflage device; it is rather understood as the result of cultural and social modes of construction. The transparent view of the map, therefore, is abandoned in place of a "pregnant opaque" (Harley 1990) vision that takes into account the selections, omissions and subjective and cultural influences moulding the cartographic product. Silences and omissions that are not considered as resulting of technical tricks or mistakes, namely frictions, rather as political choices (i.e. elision of poor neighbourhoods, military bases, strategic locations). Since geometry and technology might suppress our attention to social relations, it is crucial for the cartographic historian to search "not so much what the map shows, as what it omits" (2001: 45). Ultimately, historicizing the production and use of maps allows us to interpret cartography as an instrument of domination and order essential in the colonial conquest, in military strategy and in the propaganda of states. For instance, Lyotard, commenting the famous Borgesian "Aleph", argues:

The great concentrator wants stable circuits, equal cycles, predictable repetitions, untroubled accountability. It wants to eliminate every partial pulsion, it wants to immobilize the body. Such is the anxiety of the emperor of whom Borges speaks, who desired a map of the empire so exact that it had to cover the whole territory in every aspect and therefore duplicate its scale exactly, to such an extent that the monarch's subjects spent so much time and used up so much energy in putting the finishing touches to it and maintaining it that the empire itself fell to more and more ruin as its cartographic blueprint became more and more perfect - such is the madness of the great central Zero, its desire to bring a body, which can only 'be' if it is represented, to a standstill (1993: 215).

One of the prerogatives of maps would be indeed that of producing a geo-body, presenting the territory as a thing while obscuring its historical origins (Wood 2010).

The reasons of the reification and nullification of historical becoming are manifold and, as we are going to see, I do not want to underestimate them.

### In the beginning was the Map

As we have just seen, in the Anglo-American geography several and innovative aspects of cartographic theory and practice have been advanced by Harley during the last years of his life. The richness but not always fully systematized nature of his work has led to different and often contrasting interpretations by other geographers. Such interpretations are always a matter of translation. Sometimes, when it travels from a context to another, the original meaning and purpose of a concept or a theory might be preserved, as the Leibnizian operation of salva veritate would suggest; others, however, we could assist instead to a misrepresented, partial, even inaccurate speculative translation, the same that Harley has addressed to poststructuralist theory. In this game of treacherous traditions, Italian geographers were not from less. Harley's studies, although in a sobbing way, in fact, landed on the Italian peninsula, but especially those concerning the first phase of his thought, condensed in the historical and massive project started with Woodward (see Harley and Woodward 1987). In that period, the arguments addressed were especially devoted to the matter of representation. For such reasons, one of the characteristics which has often been outlined by Italian geographers has been Harley's emphasis, or better, turn on language and from that point—and lingering in that point—they have prosecuted their analyses. However, is it possible to trap his elusive and disjointed thought in a paradigm or a phase?

Harley was allergic to systems, to those theories, such as semiotics or structuralism, which claimed to explain everything by always applying the same grid (Sparke 1995). In the scholar's purpose, a discursive and linguistic analysis must have seemed freer and less trapped, methodologically speaking. It is by virtue of this perceived hindrance that he comes to state: "The idea of a cartographic language is also preferred to an approach derived directly from semiotics which, while having attracted some cartographers, is too blunt a tool for specific historical enquiry" (Harley 2001: 53). However, according to Farinelli (in Iacoli 2014), reading the map as a linguistic text—the operation made by Harley and Woodward with their students—might be seen as an interesting preparatory gesture to scrutinize its power but not complete enough. He argues, indeed, that:

La mappa è molto più potente, nessuno sa che linguaggio una mappa parli, ma se parla un linguaggio è il linguaggio geometrico, non è il linguaggio verbale. Per comprendere la logica di una mappa bisognerebbe comprendere la logica di una linea retta: non lo sa nessuno cos'è una linea retta! (Farinelli in Iacoli 2014: 9) <sup>24</sup>.

The Italian geographer has thus propelled the discourse on the map to a deeper and inner level. In his analysis is not only at stake the extrinsic use of the map as a materialistic means of power but its 'being', therefore, its ontology. As I noted before, this is surely another aspect which tormented Harley as well; however, what distinguishes this approach from the almost parallel one is that the map is now read as the matrix of all world metaphors and consequently as the reduction of the world into the image. In this sense, the map becomes the "machina machinarum of all reality" (Farinelli et al. 1994, Farinelli 2009).

Therefore, from one hand, the historical cartography's analysis proposed by Harley gives an idea of how maps have been used as weapons, strategic documents, and propaganda tokens<sup>25</sup>. In this sense, they very often regard the status of a corporate cartography and are the result of comparison between different sources and contexts. Whereas Farinelli opts for a philological and hermeneutical erudite analysis. He scrapes the contours of a history, epistemology, and cosmology of the cartographic thought as the spatial archetype of Western knowledge, perhaps approaching more closely to Foucault's archaeology of knowledge than Harley did. In particular, the primordial figure that holds the Western spatial thinking is considered by the geographer the Anaximander's pinax, which would represent the first attempt to immobilize the nature of visible things on a support (Farinelli 1998). According to the intellectual, Anaximander's gesture would be nothing than a sacrilegious act. For the first time a Greek would have dared to challenge the gods by assuming their point of view, the view of the earth from above. Yet, there is another consequence that the encapsulation of the world in the tabula would entail. As the Italian geographer argues: "soltanto su una tavola geografica una cosa c'è o non c'è, esiste o non esiste" (1992: 9)<sup>26</sup>, thus establishing a deep correlation between visualization, spatialization and ontology. Seen from this perspective, a map does not only show the location of things, but tells us what things are/

<sup>&</sup>lt;sup>24</sup> My Tr. from original Italian: "The map is much more powerful, no one knows what language it speaks, but if it speaks any language is the geometric one, not the verbal language. To understand the logic of a map, one should understand the logic of a straight line: no one knows what a straight line is!" (Farinelli in Iacoli 2014: 9).

<sup>&</sup>lt;sup>25</sup> A discussion on the ideological dimension of the cartographic enterprise was already advanced in Italy by Quaini (1978) and Dematteis (1985) whose work anticipated both Harley and Farinelli's analyses on the cartographic discourse.

<sup>&</sup>lt;sup>26</sup> Tr. from orig. Italian: "only on a geographic pinax a thing is there or not, it exists or not" (Farinelli 1992: 9).

are not. On the same line of thinking, as pointed out by Dematteis (1985: 54) through the lens of Foucault, the epistemological problem of modern cartography is that of situating things in a taxonomic frame, following a measured order which reveals the identity of the located things through a game of identity and difference. The map is thus conceived as a "representational machine for archiving and classifying a wide range of geographic and ethnographic material and a rhetorical medium for establishing various claims to truth and authority" (Cosgrove 2008: 166). Howbeit, what is more problematic for Farinelli (1992) is the fact that once the sign is embossed on the map it tends to self-signify, to generate figures that have no relationship with their original function. In this way, preferring a semiotic reading, the scholar emphasizes the prosopopoeial nature of the map. Despite its abstraction, the map comes to life and is invited to speak based on the internal power it radiates and exudes. Such illumination will mark the path of his thinking for the next decades. It addresses precisely the inherent agency and the vital and dangerous ferment of the map. Therefore, we might conclude that, even if Casti (2015) reckons a sort of filiation of the Farinellian thought with that of Harley, I would argue that his theories seem to flourish independently, even a decade before the publication of Harley's work. It is the scholar himself to remind of such a-synchronicity:

Era il '75, la rivoluzione cartografica di Harley e Woodward doveva ancora venire, era li imminente ma sarebbero passati degli anni ancora, almeno sette o otto e io cominciai ad accorgermi del potere ontologico delle mappe, vale a dire del fatto che le mappe erano in grado di produrre la realtà, piuttosto che accoglierla, descriverla e rappresentarla soltanto (Farinelli in Iacoli 2014:4)<sup>27</sup>.

As I have already mentioned in respect to Harley, the performativity of the maps is one of the core digits of a post-representational approach, namely the ability to produce reality and not merely to copy it (see Chapter 3). Yet, as recently noted by Rossetto (2016), in the cultural and postmodern cartography (that I am trying to retrace or 'invent' in its genealogy), the constructive character of cartographic images does not often regard their being in the making, the becoming, the possibility of being subjected to different interpretations and unpredictable uses and consumptions. The ontological power of maps as figured by Farinelli and Harley rather concerns closely their status as ideological constructions, codes which

<sup>&</sup>lt;sup>27</sup> Eng. Translation from original Italian: "It was 1975, Harley and Woodward's cartographic revolution was yet to come, it was imminent but it would have needed other years still, at least seven or eight, and I began to realize the ontological power of maps, namely the fact that the maps they were able to produce the reality, rather than simply accept, describe and represent it" (Farinelli in Iacoli 2014).

frame and provoke events in the world according to particular and not randomly coordinates (see also Pickles 2004). Further, the geographer Farinelli ventures to argue that is impossible to recast the intention of cartographer through the reading of the map because it is the map to think by itself and to order actions to the viewers. The rhetoric of such reading has tremendous effects. I would insist in noticing that a reflection of this kind leads inevitably to a fetishization of the map as a subtle and pervasive icon which controls and absorbs human actions and representations instead of arguing that objects are 'animated' because of the process of their presentation. It is not surprising, then, that the crisis of Western thought is dramatized by the geographer as the deeper crisis of geographical thought. In other words, Farinelli returns a priority to geography than the other sciences, where even semiology is phagocytized by the geographical *Chronos* since it is pictured as "una versione priva di memoria del sapere geografico [...] per esempio di come all'origine del triangolo semiotico vi sia la triangolazione cartografica... (Farinelli in Iacoli 2014:14)<sup>28</sup>.

In the light of such reflections and considering the enormous influence that the thought of the Italian geographer has had on continental geography, we can admit, following the generalization offered by the same scholar, that as well as for the post-structuralisms there is nothing outside of representation, in the same breath, for those following this theoretical line: "Western thought is nothing but cartographical reason..." (Farinelli 1998:135).

Such extremism is courted by Farinelli as an answer to one of the most crucial questions that geographers have posed through time, an obsession that could resonate more or less like this: why we firmly believe on maps? (Farinelli 2009: 18). For an intellectual who follows the detours of a cosmology of the geographical thought the answer cannot be other than metaphysic:

Ci fidiamo dunque ciecamente delle mappe soltanto in virtù del fatto che in ognuna di esse s'annida, e silenziosamente e ormai inavvertitamente opera, il cuore del "sacramento dei sacramenti", il mistero dei misteri dell'Occidente. Crediamo all'istante alle mappe perché ognuna di esse è l'ostia del corpo della Terra, l'altare del suo sacrificio, nei confronti del quale continuiamo a rinnovare il nostro inconsapevole atto di fede (Farinelli 2009: 26)<sup>29</sup>.

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<sup>&</sup>lt;sup>28</sup> English translation from original Italian: "[m]emory-free version of the geographic knowledge [...] such as at the origin of the semiotic triangle there is a cartographic triangulation" (Farinelli in Iacoli 2014: 14).

<sup>&</sup>lt;sup>29</sup> Tr. from orig. Italian: "We blindly trust maps only for the fact that in each of these [maps] the heart of the "sacrament of sacraments", the mystery of mysteries of the West nests, and quietly and now inadvertently operates. We instantly believe in maps because each of them is the host of the Earth's body, the altar of its sacrifice, to which we continue to renew our unconscious act of faith" (Farinelli 2009: 26).

Hiding behind an airtight and Byzantine language, the geographer sets out the *modus* operandi of the cartographic reason, founded on the principle of a perspective linear distance between things. An invention, that one of the perspective, that not casually coincides with the advent of the modern State (see Cosgrove 1986; Farinelli 2009; Wood 1992 and 2010). Here, also, takes place a kind of lexical short circuit since the perspective, rather than the projection, is considered at the birth of modern cartography. It stands as a double-edged sword in the words of Panofsky (1970), because on the one hand, perspective establishes a distance between the subject and the world, while on the other provides a likelihood effect.

The map is then seen as the totemic image that disciplines and condenses the world view of those in power and, therefore, owns the iconology and the grammar to say and to prowound it. Hence, the fact that maps are always subservient to ideology is an aspect clarified by Farinelli and not only by Harley (and with them by a very composite army of human geographers). However, if the English geographer is much more concerned with the effects caused by using maps as political tools, thus asking "what are they made for?", the Italian geographer pushes the question in the more radical term of "what is it all about?".

As such, the utilitarian and the hermeneutical questions presented in the previous chapter find a vivid translation in the architecture of map thinking. More importantly, even if we are leaving guided by the speculations of Farinelli, it is important to underline that he shares a common vibrant and theoretical tendency with a considerable chunk of geographers who more or less simultaneously try to dismantle and disfigure the logic of the map. Vincenzo Guarrasi and Gunnar Olsson have had, in particularly, a massive influence in the theorization of the Italian geographer due to the intense friendship and attendance. Such influence, in the wake of the postmodern hangover, went to swell like a river in flood involving, over the years, other figures from Micheal Dear to Denis Cosgrove. Broadly speaking, they tried to put together the largely unremarked and contradictory multiplicity of relations implied in those geographies fermenting and pawing at the edge of the academic empire.

In this light, comparing the thoughts of continental and Anglo-American geographers that unfold over the course of the eighties and nineties, we should ask ourselves whether what they staged through their arguments can be considered a fully deconstructivist operation, as they claimed in a scattered way in their work. Certainly, some aspects do they answer in the affirmative, especially when the sense returned by a careful reading of this great cauldron of knowledge is the constructive as well as the constricting aspect that

representations exert on our imagination. Yet, these geographers seem often still highly metaphysical in their manoeuvres, when they claim to be still "in search of geographical essences" (Olsson in Abrahamsson and Gren 2012: 8), ready to rediscover a nature—a being of things—truer than the one encoded by the map and subsumed by modern Western reason. Seemingly, in "Silences and Secrecy", Harley (1988: 23) considers that European maps of sixteenth-century America are biased and inaccurate: "far from being actual portraits of America, [die extant maps] really show landscapes whose advent Europe desired and they remain silent about the true America". What should be, indeed, the true America? And for whom should it be true?

Yet, even for those who unhinge every type of "authenticity" and "claim for truth", sometimes immersed in in the obscure meanders of the meta-geography, the metaphysical thought returns when they refer to the power of the map in the singular. In this regard, David Michael Levin argues:

in the discourse of metaphysics, what is reflected and taken for granted is the domination of a vision of domination, the domination of a vision in which the will to power, not as the affirmation of life but as the will to dominate and master, prevails. This way of looking and seeing, and the optical vocabulary in which it figures, makes metaphysics a metaphysics of presence: a discourse that subjects the presencing of beings and even the presencing of the being—the inherently open ground, context, and field—of these beings, to reification, reduction and totalization (1999: 399).

In this residual metaphysics of presence, there are still pieces of a timid objectivity, far from considering instead the reality effect produced by certain discursive, historical and technological factors. Whilst, if we consider the Derridean project, we should admit that the French philosopher had no interest in showing that there was an origin of things, a truer aspect of life, as well as the geo-philosophers seek to do when they reconstruct the genealogy of cartographic thought as  $\dot{\alpha}\varrho\chi\dot{\eta}$  of the world. The deconstructive project  $\dot{\alpha}$  la Derrida intimates to look at the origin as a process, to show that the character of the pre-foundational and pre-discursive is nothing but an effect of discourse itself. It is especially in this last mission that carto-geographers sin of negligence and it is for this omission that the theoreticians of non-representational have tried to produce a counter-discourse. In fact, if the map is the machina machinarum and the pre-cognitive motor of the world and similarly the radix omnium malorum (the root of the world evils), which alternative path is one committed to follow? Would be it better to inhabit and gut the cartographic gaze from within or try to

let other spatial forms grow and germinate in order to supplant it? Or, perhaps, the problem is starting to appear for what it really is... not the map per se but the use that is made of it?

## Haunted cartographies

If deconstruction is the ambiguous and paradoxical swamp on which the postmodern geographer attempts to move, the same ambiguity goes for Foucault's thought. As we argued in the previous chapter, with Derrida, Foucault has had and still has a tremendous impact on geography. Likewise, we should not cease to wonder how we read him, if we were honest in the application, that is in the translation, of his thought. He proved, we said, to be of paramount importance to understand that the map is a "technology of power" (Foucault, 1977). Somehow, he revealed to geographers the caging and deadly effects of bounded and normative spaces, of those spaces (as the prison and the madhouse) which end up to devouring modern society. The investigative and censorious nature of his philosophy, aimed to unveil the working mechanism of Western disciplinary society and its means of subjugation, was perceived by some scholars as steeped in an overly pessimistic mood, unable to imagine a not oppressive future. "In Foucault country, it always seems to be raining" complaints indeed geographer Nigel Thrift (2000: 20). To tell the truth, not only the French philosopher, especially in the last years of his life, has been more engaged with programmatic outcomes for the future, proposing against subjugation the Stoic self-care (Foucault 1984), but we could also admit that he has never really entrapped the soul of the geographer in such an unproductive way. Contrariwise, cultural geographers redolent of is thought have been urgently concerned with how to destroy the oppressive system of cartographic representation, by looking for, or at least advocating, new horizons of thought. At that point, it was necessary to trigger some map-breaking operations (Huggan 1989), theoretical exercises endeavoured to carry out a real deconstructive and delegitimizing analysis of the map and of the cartographic discipline as a discursive order.

If we would not only speak theoretically, we could now envision such breakings through Ana Mendes' performance, where maps—somehow paradoxically—are gradually destroyed through an act of connection. The more the stapler advances to tie with its wires the various domains of the British Empire, the more the map crumbles and collapses. It becomes corrupt and unreadable, opening to a story of abuse and subjections. We have already referred this necrotic gesture as a visual translation of the cartographic anxiety, considering both the

Power's desire of synoptic completeness and the counter-gesture of apprehension, the anxiety felt by those intellectuals worried about the disease of totalization.

Not surprisingly, on the same year in which the term "cartographic anxiety" is employed by Gregory (1994) to discuss the dismantling of the anaemic and positivist geography, it appears also in an article on postcolonial mapping by Sankaran Krishna (1994) to describe a persistent paranoia that seems to mark Indian practices of state and nation building. The author scrutinizes several cartographic products of postcolonial India with the aim to reveal diverse representational practices that, in various ways, have attempted to inscribe something called 'India' and to endow that entity with history and meaning, taking within its ambit not only the drawing of lines on a map but also the coercive processes by which those lines are socially produced and made effective.

The anxious and neurotic gesture is then reported to the machine of power that seeks always new tricks and manoeuvres to establish and stabilize the body of the nation through the body of the map. The propaganda dimension stands out in the foreground and its rhetoric needs to be analysed through the theoretical instruments proposed by Harley years before, and thus proceeds the author (see Krishna 1994). However, I wonder, if this study can be reclaimed as the only map-breaking operation we can take charge of.

To put it crudely, the ruminations we made so far urge to think through an aspect that has been largely overlooked. Indeed, we have fathomed the speculative focal points of the great historians of geographical thought, but I am aware that this operation allows only to tell part of the story, and let me say, all-white male. The tale of the cartographic anxiety as a speculative gesture, encouraged at the beginning of the '80s and crossing the 1990s, has been told without taking in fully consideration postcolonial and feminist insights mobilized around the epistemology, the ontology and the cultural and social practice of map-making. Hence, the purpose of the following sections is to glimpse to this contribution, perhaps much more evident and explored in the amorphous field of literary geographies rather than in what we could call visual geographies.

Honestly, it is difficult, if not impossible for me, being able to disentangle and to treat as two separate issues the two faces of this 'cartography of rupture' unleashed by postcolonial and feminist theories. Inevitably, the reader will find continual allusions and traces of both critical stances, even if they are presented distinctively. More deeply, there is a conceptual alliance between postcolonialism and feminist studies, drawing on similar theories to address issues of representation, hegemony and othering (McEwan 2003). In this breath, they share

a common ground in the dual attitude of "unmasking and re-placing" hegemonic representations. For these reasons, I hope the reader accept such confusion because we are now facing with a 'dirty' thought and iconology condensed in a horizon of provocations. In short, in order to make palpable such horizon, I decide to unleash some questions: what if map-making were strategically phagocytized (and then regurgitated or digested) as a feminist and postcolonial practice both theoretically, literary and visually? And if a window could be opened, to where and to whom should be addressed our gaze?

To answer, I need to deploy a composite arsenal made up of images, stories, biographies, and suggestions. Not methods and measures, but flights of fancy stirred with a substantial dose of creative speculation.

### Gynesis of mapmaking

I find myself facing a sea of ash that lies on the floor to form a map of the world. At a second glance, it is possible to see black spots scattered on the dusty surface of the map. At the top, perched on a stool, a pressure cooker stands, where again a map is engraved. The task of deciphering by the viewer would begin—and end—here. Probably in an amused grin appearing on her face when she displays the pun in the title: "World under pressure". And presumably, from the sense of fragility perceived with the use of a volatile material such as ash's wood. But the artist wants to tell me something. She is speaking from a kitchen. What in fact is made visible and how it is made through a non-random selection of materials and objects is a project undertaken to contribute with a political idea in a social debate. The kitchen, she tells us, "is a space for reflection because, in this room, a Moroccan woman often can 'listen' on television news that lead inevitably to women on geopolitical considerations, their role in the public arena and the perception of their subordination". There, in the kitchen, the hearth in which the woman has been assigned by the patriarchal society, and in which more than a century of feminist battles has tried to eradicate her, the world can quietly come in with all its turbulences and fights. (Field diary, July 8, 2010. Revised in 2016<sup>30</sup>).

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<sup>&</sup>lt;sup>30</sup> From July 2010 to May 2011, I worked at Palazzo Riso, the Regional museum of contemporary art of Sicily, in the guise of museum guide, finding myself in the situation of having to mediate between the work, the artist, the audience and the articulation of several artistic sites. At that time, I took part in the organization of the exhibition "Others", from which this installation is taken. The work of Batoul Shimi, "Monde sous pression", was first exhibited in 2009 at Bahia Palace on the occasion of the first edition of the Biennale of Marrakesh. In 2010, the same curator, Abdellah Karroum, organized the exhibition "Others" at the Palazzo Riso in Palermo. In both cases, we come across two ancient noble palaces deputies to museums after an intense negotiation with the municipality. Traveling from Marrakesh to Palermo, the installation of Batoul Shimi has been hold in the second floor of the building, where the walls, after the bombardments of the Second World War, have not undergone a restoration work and remain in stucco, providing a cavernous atmosphere, enhanced by the presence of suffused light.



Figure 4. "World Under Pressure", Batoul S'himi, Palazzo Riso. Source: personal picture

On a deeper look, the visibility of women is returned by those black spots. They are actually made of *kohl*, a powder composed mainly of galena, malachite, antimony and animal fat used for eye's makeup. Metonymically and metaphorically, those traces of makeup become to Batoul S'himi a way to represent women in the world, especially North African ones. But the heat of the light proceeds to dissolve the *kohl* with the effect of expanding the dark traces, day after day, on the fabric map. The precarious cartography of ash lying on the floor of the room not only is constantly modified but it is also replaced and overlapped by the invading presence of black female fluxes. Is it not perhaps true that "feminists have been likened to invaders from outer space, alien, ugly, women warriors, came to destroy the cozy tranquillity and predictability of an established order of earthly life" (Hanson 1992: 569)?

In this sense, the aesthetical presence of women on the map, metonymically transformed in black spots, succeeds in destabilizing and demystifying materially and figuratively such fixed and immutable order. Unwittingly or not, the gynetic map-making takes the shape of a harshly critique and re-configuration of its cartographic ontology and politics, pawing the ground to let enter the frame of the map those bodies that have been rejected and erased, following now their liquid now their corpuscular rules, and not those signalled by the geographical map. I chose the term *gynesis* here to refer to this iconosphere of mapping in respect to a wonderful work written by philosopher Alice Jardine in 1985 and basically fell into oblivion. She proposed the neologism "gynesis" to address the discourse of/on woman

as a process "intrinsic to the condition of modernity" and "to new and necessary modes of thinking, writing and speaking" (1985: 25). She stated further that: "[t]he object produced by this process is neither a person nor a thing, but a horizon, that toward which the process is tending: a *gynema*. This *gynema* is a reading effect, a woman-in-effect that is never stable and has no identity" (Jardine 1985: 25).

Thinking in terms of horizon, effects and processuality within which the category and subject 'woman' becomes, opens to a space full of fertile contradictions, unresolved knots and multiple lines of flight. Dissolving these speculative tangles is not the goal of this research, of course. From my partial point of view, what is interesting to notice in the chaotic frame of feminist epistemologies is the compelling ways through which the cartographic image comes to be absorbed and figuratively transposed in an ambiguous and paradoxical game by many feminist scholars to advance their arguments. On the one hand, claiming the will to enter the epistemological frame of the map by making it their own; on the other, demonstrating each time the inevitable limitations of representation of the female universe there engraved. Is not surprising that Gillian Rose (1993) has spelled out the inevitability to think about feminist epistemologies as occupying a very "paradoxical space".

This dishevelled attitude towards the map is due to the fact that it subsumes some of the most important perspectives on which the feminist thought confronts itself. The cartographic medium allows triggering suggestions and speculation around issues of somatophobia and somatophilia, totalizing knowledge and the visual substance of power relations. A positive vision of the cartographic tool or rather an attempt to reverse the defining power of mapping comes, for example, from the work of Rosi Braidotti and Adrianne Rich. In particular, the theoretical work of Braidotti, highly influenced by Deleuzian neo-vitalism, looks at the not-unitary vision of the human subject for which "adequate cartographies of our embedded and embodied positions" (1994: 31) are needed.

Loyal to the feminist politics of locations, I remain committed to the task of providing politically informed maps of the present, convinced of the usefulness of a situated approach as a critical tool to achieve an enlarged sense of objectivity and a more empowering grasp of the social. Politically, a cartographic method based on the politics of locations results in the recognition that not one single central strategy of resistance is possible (1994:7).

The concept of positionality does not late to bind with that of the location on a map. However, those are still theoretical work dealing with the map as a figure of thought, a metaphor, rather than actively engaging in the creation or distortion of geographical maps as Mendes and S'himi artistically do. Therefore, in this frantic search of an iconology of feminist cartographies, I wonder whether we can find a visual geographical translation to what Adrienne Rich wrote in the *Politics of Location*:

I need to understand how a place on the map is also a place in history within which as a woman, a Jew, a lesbian, a feminist I am created and trying to create. Begin though, not with a continent or a country or a house, but with the geography closest in: the body (Rich, 1984: 76).

This geopolitical claim has a provocative geographical interest and, perhaps, somehow ambigous in the way in which the author is imagined to find a place on the map as a body, that body who is instead rejected or seen as oppressed by the disembodied space of Western cartography. Within certain limits defined by the ontology of mapping —both scientific or mundane—Rich's provocationmay perhaps suggest that such embodied subjects, at the edge of the cartographic enterprise, may haunt and infect cartography when they become mapmakers, recovering the sense of place, memories, and subjectivity or revealing the axes of power and consequential resistance's strategies through which contemporary societies are shaped. In order to explore the question that I've previously launched, then, it is necessary to do another operation first; that is to push the conversation beyond the purely artistic or philosophical realm, and rather trying to intersect them with the critical feminist and postcolonial geographical thought.

Feminist geographers as well as radical, Marxist, and postcolonial intellectuals have indeed participated with great emphasis and deep contribution to the tale of the cartographic anxiety. The new critical direction they detrimentally encouraged is a convulsed and provisional path, troubled by a maelstrom of questions and multi-layered passages. By transposing such attitude in the mapping figure, it comes to a frantic work of re-visioning and envisioning, disfiguring and re-figuring cartographic representations. As Adrienne Rich once proposed for her writing, by revision I mean the theoretical act "of looking back, of seeing with fresh eyes, of entering an old text from a new critical direction" (1972: 18). For instance, in terms of cartographic revision from a feminist and postcolonial stance, let us take into consideration the two main critiques mobilised by geographers in light of this look. At the beginning of this chapter we argued that the geographical cartophobia works in a dual binary, as a critique of the *map per se* and as a fustigation of the specific mapping consumption as a tool to exert violence of various kinds. If we consider the critique of the *Map per se* from a feminist position, we can better realize now that re-visioning cartography appeals to expose

it as a disembodied knowledge of space, opposed to the lived place of subjectivity, performed by the privileged position of an autonomous, objective and masculine knower who controls and defines with his lines and names what to represent (and hence put into existence) and what not. Indeed, as a shelter from the abstractions and the universal vision that led to the construction of modern science and of the geographical discipline, feminism has precisely begun as a critique of male domination and point of view that "has imposed on the world and continues to establish itself in the world as unique ways of knowing" (Mc Kinnon 1983: 71). In a similar vein, concerning the discipline of geography, Gillian Rose (1993) pointed out that the so-called objective observation, by experts from afar, strives for a disembodied perspective that belies serious issues of male control and coercion: the god-trick. However, those critiques work if we understand cartography as a scientific model of thought, variously called—as we already seen—the "modern cartographic ideal" (Edney 1993) or the "cartographic reason" (Farinelli 1992, 2009; Olsson 2007). It is within this context that a map is conceived as a system of projections which are precisely the result of a game of expulsions, as it suggests the lat. proicere which preserves among its meanings "to expel" and "push out" (Farinelli 1992). In this topographic reduction, we can now refer to a double erasure since not only we assist the expulsion of the person who creates the space, the map-maker, who gives us in return a view from nowhere, but also of the bodies living that empty space who float as haunting presences. Therefore, the double deletion of the subject no longer concerns the view from above, but also the interior of the representation that excludes what could emerge as a possible écriture feminine (Cixous 1988) of space, signalling by reaction the irruptive emergence of feminist apprehensions for affect, emotionality, and corporeality.

The gynetic cartography may indeed highlight the ambivalence of the body on which feminist philosophy reflects upon. The body in the map is now seen as what has been consumed, worn, distorted and foreclosed by the masculine representational logic. In this sense, the body is the *pinax*, the first map—we could argue correcting Farinelli's suggestion—on which the patriarchal hierarchical system of thought has been built and moulded as a game of expulsion. In this breath, Elisabeth Grosz (1994) argues that Western thought exhibits a profound somatophobia and such forclusion of the body, I would argue, would work also in the visual architecture of the map. However, once revealed the body as a site of oppression, the situation can be also reversed. The feminist literature on neo-vitalism and materialism let us see the body as an agent of forces, emotions, and processes. It can be now interpellated as an opening site for a specific female representation. Likewise, this gesture

creates not irrelevant problems; enhancing the body as a positive female feature can also mean restoring the Cartesian dialectic between res extensa and res cogitans, simply giving salience and value to the first member rather than overcome the dualism itself, thus, without bringing the conversation to another land, where both the language of the executioner and the victim can be rethought. Translating such apprehensions in the field of map theory, we could admit that the tradition of feminist geographers appears to be divided. Most of them argue that maps are not able to represent women and their lives because they are the product of a masculine culture and, as artifacts of that culture, they can be used just as instruments of domination and power (Molen van Ee 2001). Concerning this aspect, Nikolas Huffman (1997) argues that there is another reason that weighs on the demonization of the cartographic medium by feminist geographers. It lies in the systematic and materially exclusion of women in cartography. Probably, we can imagine, according to what has been articulated above, that is due to the way in which "masculinity is reflected in maps as images of power, communicating world order as well as world views, and in the virtual silence about women in the disciplinary discourse of academic cartography" (1997: 262). In this sense, the world of cartographic representation seems to be inimical to feminist account of place and subjectivities. But we should also wonder what happens when we turn our attention on the map tool rather than just in its imagery. Put differently, let's try now to understand which are the theoretical and ethical dispositions informing feminist geography when we look at the "bad things people did and do with maps" (Wood 1992). Under this statement, there is also a historical condition that discredits from a feminist and postcolonial perspective the engagement with cartographic practices in the way in which "as much as gun and warship, maps have been the weapons of imperialism" (Harley 1988: 282). The link between cartography and colonialism, slammed in our face by the artist Ana Mendes, has been another battleground for feminist and postcolonial geographers (an aspect that we will see in detail in next section). From one hand, attention has lagged in recognizing how the woman's body has been identified as the desired land to penetrate and conquer. For instance, in the travel diaries of explorers and colonizers is possible to recognize the use of a sexist and misogynist vocabulary which calls 'virgin' lands to conquer and calls 'penetrations' such conquests. In this respect, we might run into the 1862's map of Carolina, edited by the European cartographer Joel Gascoyne, showing in the cartouche a seductive and feminine topless America. Furthermore, a stronger image might come from John Mitchell's Map, used to draw the borders of the newly independent nation. It depicts a Native American woman sitting on

top of a male figure with the typical symbols of New World's fertility: corn, timber, fishing nets, a beaver, and coconut palms. We can say it with greater emphasis, now: woman, like the land, is nothing that the enslaved object of male representation (Huggan 1989). As visual theorist Berger (1972) might further explain, the objectification, the act of control, makes women different; at the same time the eroticized act defines this difference as sexual difference. In this sense, "the map operates as a dual paradigm for the phallocentric discourse which inscribes women, and the rationalistic discourse which inscribes the land, as «Other»" (Huggan, 1989: 37).

On the other hand, it is crucial to remind that there have not been just analyses which suppose a self-pietistic vision of women. When feminist scholarship intersected with postcolonial insights, it was no longer to come the revelation that even white women (female cartographers or imperial women travellers) were actors who participated in surveys, discovery of unknown lands, and in the production of the Eurocentric geographical knowledge (see Blunt and Rose 1994). In this sense, post-colonial feminism is instrumental in setting not only a critique of the masculinist dimension of power but also of the female one. It is a feminist critique of feminism, a continuous operation of revision on themselves and on others (De Lauretis 1993). Under the circumstances, if neither those subjects at the edge of the map, such as women travellers, were fully able to escape from the desire to collect and thus invent the otherness, we could certainly ask: is map-making always a matter of power? And if it is the case, what kind of power does it unleash?

In this respect, Brown and Staeheli (2003) argue that feminist geography is not a coherent paradigm, and in its turbulent relationship with power at least three approaches can be distinguished. The first one, distributive, studies how power circulates and disseminate in society. The second one is truly antagonist and oppositional as it supposes a dialectics between masculine and feminist spaces. The latter is said constitutive because it sees power as an ongoing process in which and through which subject and space are constituted.

Any conception of that power can give rise to different cartographies. They might constitute an operating table; or a space in which to outline the differences between masculine and feminist spatial ontology and epistemology; or they might be a space in flux in which the subject is formed and not already fixed, as the poststructuralist theories teach us. Because of this articulation between power and mapping, especially envigored in the postmodern elation affecting map studies, can we speak of a purely feminine cartography?

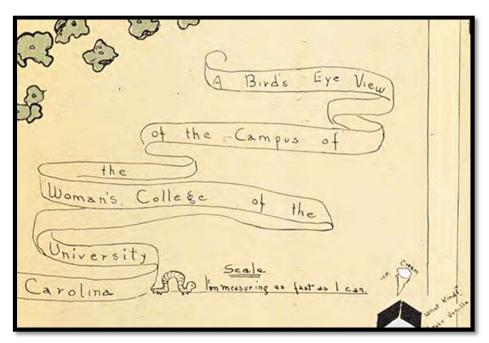
Perhaps no. Perhaps these types of maps are still waiting to be produced or maybe they will never be. In this regard, "the map that is not made...warrants as much attention as the map that is made" (Monmonnier 1982: 24). Perhaps, it depends on the way we intend what a map is and does, thus how we translate its occurring power. Perhaps, many will ask, it is better to think, to write figurally a map rather than draw and define its contours and positions once and for all. Or maybe we are wrong. Maybe, there is a feminist and female genealogy in cartography waiting to be recognized, an already existing topography that has not yet been duly told. Almost impossible or very difficult to find, it has been hidden in the archives for a long time, often behind signatures of male cartographers as well as in private collections. These maps, drawings, cloths made by women are housed in the major libraries of the world waiting to be scrutinized and brought to the mind of contemporary geographers and cartographers<sup>31</sup>. For instance, when I visited the Congress Library in Washington in 2011 for my Bachelor thesis, I became aware of an impressive number of maps produced or commissioned by women. One, in particular, intrigued me in the way subjectivity, corporealism and memories strike back in the arrangement of the map. There, I will just leave a fragment of that visual encounter.

In 1958, Emma Lee Aderholt created with her assistants a Bird's Eye View of the Campus of the Woman's College of the University of North Carolina. Here we have a snapshot of the university life of a white, middle-class woman who was reasonably able to access both resources and education. Indeed, the map reveals a profound sense of demystification of several cartographic stereotypes, starting from a derision of the fundamental operator of the map: the scale. It is replaced by a slow worm who exclaims "I'm measuring as fast as I can", a mockery of the typical academic thoroughness in measuring space. Nevertheless, geographer Farinelli (1992) once wrote that even if there is a term such as 'scale of values', we need always to choose: or the scale or the values. This is rightly what Emma Lee Aderholt decides to do, preferring the values to the scale. This approximate and sarcastic attitude is also found in the descriptions of female accommodations, represented by a series of houses that face the street (top right) and accompanied by the following description: "Many houses: some large some small".

Around the edges of the map, there are pictures of "before" and "after" showing how things have changed since the college was founded: from the time when women rode horses to reach the college at present in which they move by car, train, boat or plane. Within the edges of the map several stick figures are plotted, representing the female students living in the

<sup>&</sup>lt;sup>31</sup> At the Geography and Map Division of the Library of Congress in Washington are kept approximately 4.6 million maps and 70,000 atlases. But with patience and attention, one can discern maps, Atlas, posters created by female cartographers or otherwise properties of passionate women collectors. The same can be said for the Boston and New York public libraries. Alice C. Hudson, director of the department of the NY Library Geography, published a series of articles on European and American cartography, managing to track down hundreds of women engaged in cartographic productions, often neglected, and whose work has been hardly recognized.

campus. One, in particular, is lying on the grass accompanied by the caption "oh days That are no More!" (Field diary, August 2, 2011. Revised in 2016).



**Figure 5.** Emma Lee Aderholt 1958. Bird's Eye View of the Campus of the Woman's College of the University of North Carolina. Particular of the map. The map in its entirety is available here: <a href="https://www.loc.gov/item/awhbib000027/">https://www.loc.gov/item/awhbib000027/</a>

Eventually, measurement and control are abandoned, bringing intentionally attention to elusive details: the memories, nostalgia, feelings aroused by the contact with place. In short, events that recover the role of emotional and the affect in the production of geographical knowledge.

#### Postcolonial cartographies

"It is central to the efforts of many feminists to rethink the hegemonic maps of representation in order to move toward the postcolonial moment" have argued Blunt and Rose (1994: 14). However, the complex tactics of deconstructing and replacing 'the hegemonic maps of representations' leaves in the postmodern and cultural cartography uncertain and nonetheless open the question of how to move beyond a past and a present shaped by the violence of despotic visual regimes. Once discovered the disciplinarian face of the power in every corner of society, it is hard to keep energies to think and create new configurations. A nerve-racking task, perhaps less painful, becomes then to search for already

existing cartographies of a different sign than the authoritarian mapping that rules and controls, in the effort to keep imprinted as much as possible the strength and the power of those images before they are forgotten again, reabsorbed by the norm or shown in their ineffectiveness to undermine the system itself. Indeed, there are at least two typologies of images that such postmodern mapping recalls itself. On the one hand, there are visual or literary works aimed to deconstruct and reveal the effects that the violent grids of cartographic reason exert on individuals; on the other hand, as we saw earlier, not all cartographic practices may be considered authoritarian and tyrannical because, willingly or unwillingly, mapping is a dimension—a transposition—evoked to imagine and to tell the space around us. Nonetheless, it can be used by different actors for different purposes.

In the world of postcolonial narrative, the first aspect is dramatically returned in *Douloti* the Bountiful, a tragic story narrated by Mashweta Devi (1993), where a tribal Indian girl, forced to become a prostitute to pay off her father's debts, is found dead after bleeding on the political map of India, which is drawn in a clay in the courtyard by a local village schoolmaster to celebrate the Independence Day. The day after, the whole village of Bohri comes across the tremendous scenery where,

Filling the entire Indian peninsula from the oceans to the Himalayas, here lies bonded labour spread-eagled, kamiya-whore Douloti Nagesia's tormented corpse, putrefied with venereal disease, having vomited up all the blood in its desiccated lungs (1993: 94).

On the map drawn in the courtyard should be affixed the flag of the nation but Douloti's body prevents such eventuality. If, as Farinelli writes, the map keeps track only of that reality which is an obstacle to the path (in Iacoli 2014: 9), the body acts as a hindrance to the belief that India could be considered a Nation, a harmonic whole, since it excludes and expels—rather as parasites—tribal communities and, even more, subaltern women.

The most intense dilemma of postcolonial feminism in musing on the role of gender subordination in the exercise of colonial rule has lingered on whether or not to recover the voice of the subaltern woman—a voice that both the colonial master narrative as that nationalist and anti-colonial would have silenced. This is the thorny question raised by Spivak (1988) in the canonical *Can the Subaltern Speak*. Given the importance and notoriety of this critical reflection, I do not dwell again on its content. Rather, the waft of this question-judgment may direct the reader to wonder: are we perhaps continuing to ask if women and, especially, subaltern women, can map?

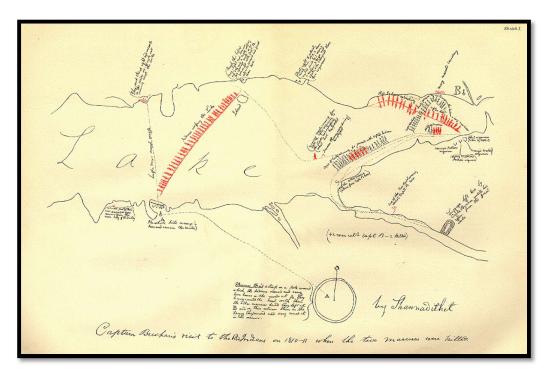
After all, maps have been the weapons of colonialism before and later of imperialism, since they have been used to legitimize the reality of the conquest. The cartographic logic, the desire to reduce the irreducibility of places into a grid, implies not only an epistemological violence but also and foremost material. Let's think, for example, of the Partition of British India in 1947, where the line drawn by the pen on the map determined the life and death of millions of people (Harley 1988). The tragic cartographic event is the evidence of the performative power of representation. Similarly, Edward Said (1993) argued that imperialism is basically an act of geographical violence by which there is virtually no corner of the world that has not been explored, traced on a map and finally brought back under the control of colonizers.

Under this light, the danger is not just that a map cannot fully capture the reality, the representational dilemma, but that it produces it according to its will. Here lies this alleged power of the map. The representations then do not only "represent" because a form of space does not change without touching every dimension of individuals' life.

We also saw, however, that the readings offered by radical critical theory are often too dialectical and abstract, less interested in focusing on single case-studies. This difference can be grasped in the reflections made by Edney. The cartographic historian has devoted many of his studies to the effects of British colonial rule over India (1993, 1997). When confronted with postcolonial criticism, the scholar begun to raise crucial questions. First of all, he argued that the European imperialistic vision pictured by Said and by several postcolonial authors of the 1990s is too monolithic. Likewise, the conception of the Foucauldian surveillance apparatus is too pessimistic (Edney 1997). Contrariwise, he argues that "European states and their empires could never be so totalizing. They could never be so effective" (ibid. 13). For instance, language problems meant that Europeans were relying upon indigenous guides; there was therefore a continuous negotiation between the knowledge of the conqueror and the conquered, mirror of their power relations. A similar complex perspective is propelled by the work of Barbara Mundy (1996) on Spanish colonial mapping. She shows how the maps received by the Spanish government in America reveal a complex and syncretic society. None of the maps are purely indigenous or European in form or content, but all entails hybridized representations.

In this respect, the study conducted by geographer Matthew Sparke is instrumental to signal some potentialities and aporias of a post-colonial cartography. Sparke proposes an insightful reading by adapting Spivak's reflections on the representation of the geo-graphic agency of subaltern women in India into the Canadian context (Spivak 1976, 1985 and 1988). By intersecting them with arguments by Brain Harley and Denis Wood, he advances the importance to consider the power relations implicated *in* and moving *through* maps. In the dusty national archives in Ottawa, the geographer finds a series of XIX century hand-drawn maps made by Shawnadithit. At the time when she starts to draw, she is the last representative of the Beothuk, the native community of the island then erased in favour of Newfoundland. Therefore, she is the colonial subject who draws four maps that introduce a direct link between bodies and places; bodies moving on the island, meeting and clashing with the settlers; dead bodies, killed and left behind by the British colonizers.

The map proposed below is, for instance, one that she drew in captivity few months before her death (on June 6, 1829) and it presents two scenes happened in two different times: the visit of the captain Buchan and the taking of Demasduit, her aunt, after re-named Mary March by colonizers (coloured in black as opposed to the red Indians).



**Figure 6.** "The taking of Mary March on the north side of the lake". Illustration of the taking of Demasduit (Mary March) on the Red Indian Lake, drawn by Shanawdithit during the winter of 1829.

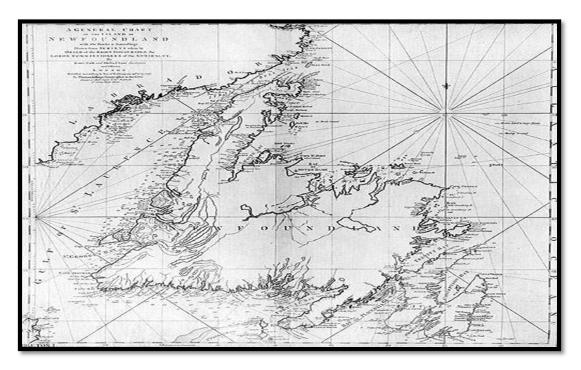


Figure 7. James Cook's 1775 map of Newfoundland http://www.visitnewfoundland.ca/maps/cookmap.html

From one hand, Shawnadithit is the embodied subject who uses maps to trace a corporeal choreography of movement, life and death, often representing the encounter between her people and the colonizers, as we said, or better the deadly effect the latter had on them. In terms of content, if we confront James Cook's map of Newfoundland with her map, we can easily notice the difference between what postcolonial feminists could call a 'disembodied map' to distinguish it from a 'haunted map'. Further, Graham Huggan (1989) would call Cook's image a 'grid map' and that of Shawnadithit a 'story map'. Indeed, we face a drawing haunted by the re-emergence of lost bodies, tortured and murdered by colonizers. Furthermore, it is important to notice that Cook's Newfoundland maps were published between 1765 and 1775, therefore 50 years before Shawnadithit's maps. There, specifically, the Euclidean cartography shows nothing but an empty space, loyal to the scientific idea of mapping as ejecting the bodies and the lived experience in favour of blank spaces (Sparke 1998b). Therefore, such emptiness is faithful to a geometrical structure, a standardized endeavour in Western cartography, but on a second look it is also functional to the erasure of the pre-colonial presence. Once Beothuk are erased from the map, the newness of New found land's space becomes unquestionable (Sparke 1998a,b). Hence, a real performative gesture takes place: an empty space is drawn and eventually it gets really because of the inhabitants' extermination.

On the other hand, Shawnadithit's map shows another cartographic mode. She uses the mental map to visualize memories happened in different moments and in different spaces; this means that she forces to enter the temporal frame in the map as we have seen at work in the cartouche of Aderholt's map (1958). This characteristic is to be underlined since the grid map has been often blamed to expel the possibility to reproduce diacronicity (Farinelli 2009; Massey 2005; Mondada 1987). In particular, Mondada (1987) assessed the impossibility for a subject on the map to occupy simultaneously two positions in space. Again, this reflection can possibly apply to the modern cartographic ideal and its various translations. But when different mapping modes are recognized, even different visions of the relationship between bodies, time and space can be claimed. This argument is, for example, very dear to Braidotti when she points out that: "a feminist critical position assumes the dislocation of the linearity of time and hence the necessity to inhabit different and even potentially contradictory time zones at the same time: a sort of trip through crono-tropia" (1994: 140).

However, we cannot dismiss the position of Shawnadithit as a subaltern woman. And, in this sense, all the density of the Spivak question acquires form and substance. Indeed, we don't know if she was forced to draw those maps or if she did it spontaneously. What we know is that her maps were always annotated by an anthropologist, William Epps Cormack, more worried as other Canadian historians to gather ethnological and strategical information rather than for the disappearance of the whole population (Sparke 1995). What we get, then, is an impossible perspective: what does this map tell us? Is a trace of a contested space, a memory map of a traumatic event? Or the supplement of the Canadian historical archive, a museum artefact mobilised by those who have the right to speak?

Sparke concludes that the geographical imaginations engraved on Shawnadithit maps can work as resistantial narrative devices able to tell the value of the memory, life, death, and the movement of bodies (Sparke 1998b). But while there is nothing prohibiting us to interpret them as resistantial images, they have been overall perceived and treated as exotic products to be exhibited in museums, or as evidences of the Indians' childish and coarse representational skills (see Lewis 1978), neutralizing in any case Shawnadithit's point of view. For this purpose, when re-thinking to his work a decade later, the Canadian geographer admits:

My argument was that they could be read instead as native mapping that returned the look of colonial surveillance and, as it were, anthropologized colonial history while redrawing the island's geography from an ab-original perspective (i.e. both native and moving away from 'original' European assertions of new-ness) (2010: 376).

The attention given by the author to colonial violence, dispossession and resistance let us to add another piece. It has been already said that map criticisms as a tool of (national, colonial, masculinist) power are part of a general atmosphere marked by a crisis of representation that leads or co-produces a radical critique of representationalism (the possibility that I can represent the real world as it is) with a consequent decentralization of privileged points of view. The time of emergence is also a time to emerge, so new marginal subjects enter the cartographic policy agenda. In terms of archival footprints, indigenous maps are instrumental in foregrounding such emerging points of view. Yet, shifting the focus more recently, the decolonization movement is one that particularly involves an attack on this system of geographical knowledge which is purely political and oriented by the desire to control the unknowable and the otherness. Now, in fact, it comes to reclaim, to rename again, the land in order to inhabit it: the dimension of power is turned back as something positive and productive when they appropriated to it. Or better, this is the second aspect of the link between knowledge and power as discussed by Deleuze and Foucault in a radio interview in 1972, and mostly overlooked. "It is because to speak on this subject, to force the institutionalised networks of information to listen, to produce names, to point the finger of accusation, to find targets, is the first step in the reversal of power and the initiation of new struggles against existing forms of power" (in Bouchald 1977: 5)<sup>32</sup>.

Translated in the map-making context, it is no longer at stake the revelation of the propagandistic and violent uses of the cartographic tool, as we have seen at work in previous sections, but it is now time to begin seeing what it was not possible to see before, the chance that a different knowledge, even oppositional, might be produced in conflictual moments.

For example, in Canada, Central America, South America begins a real mapping battle, so that the indigenous and native communities contest through their productions and spatial representations the ownership of a territory that was taken from them by colonizers. An example can be seen in the 2004 Indigenous Communities Mapping Initiative where 200 representatives of 24 countries met with the aim to re-map their lands according to the own toponymical and oral geographies of every community (Wood 2010). Concerning this, the consideration of Harley that "maps are pre-eminently a language of power, not of protest" (2001: 79) is somehow overturned and the map's authority is instead used against itself. Rebellious geographies allude, indeed, for alternative ways to map places; tactics that do not

<sup>32</sup> This discussion was recorded March 4, 1972; and it was published in a special issue of L'Arc (No. 49, pp. 3-10), dedicated to Gilles Deleuze.

always seek to challenge the ontological status of the map, but still reveal the policy and strategies of Western cartography. At this point, the issue is complex, because if the map is a medium that performs specific functions (to name, to sort, to classify, to place) and such functions are always read by cultural geographers as rethorical disguises, I return to ask: can the map break free from its power to define?

In this respect, geographer Bernard Nietschmann writes that "Maps are power. Either you map or you will be mapped" (1995: 39). On the same line, Farinelli suggests that "pretendere di nominare in maniera diversa lo spazio significa volere in realtà produrre carte diverse da quelle esistenti, cioè pretendere di stabilire sullo spazio stesso un diverso potere, un dominio di natura diverso da quello esistente" (Farinelli 1992: 114)33. Such a view is historically justified since the geometry of the scientific map hides in its lines a story of class struggle. The most neutral and objective map we might imagine, such as the physical one, is the result of an old and dusty conflict between 'aristocratic geographers' and 'bourgeois geographers', as Farinelli call them, or rather of a sophisticated departure from the political geography of the ever-changing boundaries to a geography of natural things, forever unmoved, thus not serving anymore the interests of elites. However, rightly because the nature of power is chameleonic, once the bourgeoisie takes the domain, the empty space of geometry becomes at turn a readable medium—a text—which simplifies the operations of those in charge of power. I have argued at the beginning of this chapter that this happens rightly because it facilitates the erasure of the producer who use the map as a tool to take action and to create a territorial area (Cosgrove 1999).

In such reading, my discomfort is that if the power is treated in a general and universal political sense is likely to be simply a slogan that schedules a Manichean view of the world, divided between the bad guys who hold it, and the good guys who do not have it and that, once obtained, become equally corrupted and evil. Whilst in a broader sense, we should accept the fact that "power is the ability to do work. Which is what maps do: they work" (Wood 1992:1).

<sup>&</sup>lt;sup>33</sup> Tr. Form orig. IT: "[c]laiming to nominate the space differently means to desire actually to produce different maps from the existing ones, for instance, claiming to establish in the same space a different power, a different domain from the existing one" (Farinelli 1992: 114).

In the case of the decolonial mapping, then, maps certainly exert power but what might distinguish them is that such power is exerted not as *potestas* (a power over) but as *potentia* (the power to), without for this producing subjection (Foucault and Deleuze 1972).

In hindsight, one should highlight the context in which such practices take shape, and the macro or micro vision that we want to take on them. In this respect, the dialectics of power/protest emerges when we compare the postcolonial mappings within the broader and putative context of Western imperial cartography. Following this approach, the look at the spatial knowledge and imagination of colonial and postcolonial subjects would return a lost perspective, disclosing several worlding cancelled by the Sovereign Western subject. This suggests opening the door to disputed, lived, subjective geographies operating inversely with respect to the heteronomous cartography that norms and neutralizes—through its conventions—the irreducibility of places and bodies. However, it is inevitable that at the micro level we must also consider the network regulating these counter-operations, wondering in the various communities, who is called to re-map and contest already existing cartographies and who, instead, remains excluded (Graham et al. 2013).

However, in light of these "discoveries", it is reasonable to understand why a considerable part of cultural geographers has attempted to deconstruct, challenge and ultimately abandon the figure/tool of the map and of the topography as a logical understanding of the world for the approximation of the real and the complicity with the power it entails. We commonly say that "hope is the last to die"; yet, considering the most influential work of Marxist, humanist and cultural geographers on map-making issues, it seems increasingly clear that the only way to give hope to geographers is that the Map should be the first to die.

#### And fell, even as a dead body map falls<sup>34</sup>

As we have tried to argue in the previous sections, cultural geographers have profoundly asked if it is possible to ethically and counter-politically inhabit the cartographic image, therefore addressing the violence of map-making as a specific and direct struggle over representation. Even if there have been some attempts to activate the space of livingness and emotionality of the cartographic trope, looking for possibilities and re-figurations of the map especially mobilized through aesthetical, literary and poetical figures, the geographical map

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<sup>&</sup>lt;sup>34</sup> This is an explicit reference to the famous sentence pronounced by Dante Alighieri in the closing lines of Inferno's Canto V in The Divine Commedy: "E caddi come corpo morto cade".

has been mostly gutted and trampled by the postmodern theory, becoming in more than one sense "dead, a concept in ruins, carpet bombed by the formidable arsenals of contemporary critical theory" (Prendergast 2000: IX). This way, Marxist, humanists and then cultural geographers have considered the ontology of mapping as inimical to their core agendas (Wheeler 1998). Perhaps, the "cartographic dictatorship" defined by Karl Ritter in the nineteenth century is a figure too evocative to remain caught in and to be simply and once at all disempowered. Above all, such *clash of civilizations* between geography and cartography has had at least the merit—and still attempts to prompt out and to restore against the cartographic dictation—the possibility of other worldviews (see Farinelli in Iacoli 2014: 5). This continuous game of erasures of past models in order to make space to new world configurations can be seen at work in the operative metaphor of the palimpsest. As Rabasa suggests,

the image of the palimpsest becomes an illuminative metaphor for understanding geography as a series of erasures and overwritings that have transformed the world. The imperfect erasures are, in turn, a source of hope for the reconstruction or reinvention of the world from native and non-Eurocentric points of view (1993: 181).

However, the problem of the palimpsest, as Doreen Massey (2005) rightly recognizes, is that it requires the elimination of something that was already there, thus a figure of the past, without entailing the dimension of synchronicity. Synchronicity or diatopics gives a look of what/who is present in the same domain but never enters the cartographic architecture, haunting the edge without having been replaced. The palimpsest, in this sense, is more a tool of excavation than a rhizomatous one; it does not open to possibilities of what cannot be yet accounted but it recovers the 'loose ends'. According to Massey instead, life ferments anyway out of the map where something can always happen, where events and the unexpected are generated. In a similar vein, Farinelli caustically admits that: "è finito il periodo della riduzione del mondo a tavole. Sembra strano dire questo oggi, perché mai come in questo momento le mappe sono diffuse, si producono in continuazione" (Farinelli 2014: 13)<sup>35</sup>.

In the Italian geographer's consideration a new model of the world is to be found in the globe which has supplanted the map. Not surprisingly, he writes: "chiamiamo modernità l'epoca della prevalenza della tavola o mappa sul globo, e postmodernità il rovesciamento di

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<sup>&</sup>lt;sup>35</sup> English translation from original Italian: "the epoch of the world reduced to maps is over. It seems strange to say this now, because never before maps are spreading, never before they are constantly produced" (Farinelli in Iacoli 2014: 13).

tale posizione" (2009: 58)<sup>36</sup>. He goes further on arguing that the imagery revolving around the globe is comparable to the description of the folly committed by Erasmus of Rotterdam, since both globe and madness recall themselves the anti-rationality and the illogic (Farinelli 2002). Contrary to the cartographic logic that cuts the world and orders it in pieces, situating and contextualizing places as locations, the globe would have neither beginning nor end, thus avoiding the capture of any paradigm. Here lies a profound dialectics, succinctly summarized in his words: "la mappa trasforma il mondo in una relazione tra un'immagine e uno spettatore immobili, la sfera (il globo) implica invece anche per chi guarda la necessità del moto, sicché la realtà è il prodotto della relazione tra due mobilissime entità" (Farinelli 2009: 43)<sup>37</sup>. From the map to the globe, from the stasis to the movement, from a deathful and dried representation to a living and frothy figure. Perhaps we should take a pause and wonder: is it really arguable such a smooth and linear metaphoric passage?

First of all, even the sphericity of the globe is something that we cannot directly and deeply perceive with our senses. It has been discovered and explained just like its twodimensionality. In other words, it is something we have learned and that has been handed down; we have not figured out it by ourselves (see Wood 1992). Secondly, the unrepresentability and illogicity of the globe is also questioned by Spivak in Death of a Discipline (2003). Therein, the scholar perceives in the visual proliferation of the globe a corresponding and clear economic domination, namely the imposition of the same system of exchange everywhere. The geopolitical imagination foregrounded by globalization would require the homogeneity and isotropy of the planet from an economic, political and cultural point of view (Mignolo 2000) just like the mapping processes promote. Spivak makes the discourse more complex and she ends up distinguishing between the globe and the planet, without articulating them in an oppositional way. On the other hand, she admits the possibility that they are not interchangeable but overwritten with each other:

The globe is in our computers. No one live there. It allows us to think that we can aim to control it. The planet is in the species of alterity, belonging to another system; and yet we inhabit it, on loan (Spivak 2003:72).

<sup>&</sup>lt;sup>36</sup> English Translation from orginal Italian: "we call modernity the era of the tabula or the map's prevalence on the globe, and postmodernity the overthrow of this position" (Farinelli 2009: 58).

<sup>&</sup>lt;sup>37</sup> Eng. Tr. From orig. IT: "Map transforms the world into a relationship between an image and a static viewer, the sphere (the globe) instead also implies the need for the viewer in motion, so that the reality is the product of the relationship between two highly mobile entities" (Farinelli 2009:43).

In this sense, her vision of the globe is not too far from the Western classical conception of the Greek Cosmos. Indeed, the cosmos is nothing but an attempt to normalize the universality, impersonating the whole that is the product of a partial and subjective gaze. The classical metaphysics seems soaked by the desire of having to look for (and actually create) an incessant correspondence between the moral order of society and the natural order (Cosgrove 2008a). Over time, as a result of the hegemonic Christian imagery, the cosmos is also accompanied by the figure of the Orbis Universalis, functional to the new economic circuit opened by the discovery of the Americas (Mignolo 2000). Therefore, despite the cosmic imagery recalls a close correspondence with the planet—the neutral and natural world for excellence—in truth is nothing more than a particular point of view about the world and its attempt to tame it (Cosgrove 2001). Under this light, the cosmos of the ancient Greeks is translated into the globe of the hyper-modern world. And here lies the trick. The cosmosglobe dyad must be shocked, Spivak says, by the silent and disturbing presence of the planet. The planetarity stands out as "dangerous supplement" which poses the challenge to decolonize our grip on the world, inviting us to know beyond the categories of Western thought. Learning from other worldings is the invitation launched by the Bengali intellectual, resuming the Heideggerian thought of mondité, namely to deconstruct the process that led the West to produce and consolidate itself as the Sovereign subject of the entire globe, filling it with his way of knowing, of his representations and values (Spivak 1999).

New world configurations and models ought to be find then, but it is more difficult to define them as antithetical or totally dropped out of map's thought. Therefore, shrugging off the angst of searching of the figures opposing antagonistically or that propose to overcome reified and absorbed conceptions of space cannot be only than a temporary and bankruptcy activity, since it is nonetheless then neutralized by subsequent criticism. We should not give up, however, and make our own the Olssonian motto: "No rest, no escape. GO ON, GO ON! The exploration in the taken-for granted must continue!" (1994: 115).

In the exploration of what we take for granted, what is left out in the attempt to look for a model that can give us back the turbulences and viscosities of life, is to ask if it really exists one and unique authentic way to approach the experience of reality. It seems rather for critical geographers that the concept of life acquires its value because it is built in opposition to the map. This implies the implicit systematization of a dialectical and exclusionist model which does not provide the possibility to experience the mapping as an authentic dimension of space which stays in resonance with (not replacing) others. Or one lives off the map or

one dies inside its coordinates. I am stressing this passage because I consider such dialectical choice heavily dependent on a constant confronting and propensity that geography has had (and still reserve) toward the representational thinking. Indeed, "representationalism takes the notion of separation as foundational. It separates the world into the ontologically disjunct domains of words and things, leaving itself with the dilemma of their linkage such that knowledge is possible" (Barad 2007: 137).

In this sense, we find ourselves entrapped in a dissonance between a Euclidean and geometrical representation of space that expels the bodies, and the lived and an embodied experience of subjects. If mapping means just representing without being represented, to watch without being seen, we need to ask each time if the map we are looking within and without, upside down and inside out can engage with the exercise of destroying the sense of coherence and totality while still capturing "an essence of actuality" (Abhourame and Ribeiro 2011: 41). Posing this question means un-mapping and mis-mapping cartographic practices, opening them to a real process of deconstruction that, in the intention of the postcolonial scholar Spivak, does not involve de-legitimization (in this case delegitimization of the cartographic logic) but the multiplication of points of views. In this regard, "if we are to avoid being imprisoned by the past, entangled in a narcissistic web of our own traditions, then we must actively criticise and debate the history of cartography we are still helping to write" (Harley 1986: 5). A (his)story in which "[p]laces will appear in all the richness and variety of their internal structure and interrelationships—but that might emerge—only if we learn to avoid forcing them inside the world of representation" (Guarrasi 2002: 6).

It is most likely obvious by now to the reader that once disarmed and lost in the dialectics of representation she or he would have believed in a world ultimately obsessed with self-destruction. Because it is in this abyss that a purely representational discourse leads. Not by accident, in medieval times, the term representation referred to a figure moulded and painted as it replaced the deceased during the funeral. Likewise, these mistreated maps, reduced as mere fetishes, inevitably converge to the realm of death and thus they end up digging their own grave. But death must have its place, as Roland Barthes argues in *La Chambre claire* (1981 [1980]: 35): "For Death, in a society, has to be somewhere; if it is no longer (or less than it was) in the religious domain, it must be elsewhere". However, how and where can we celebrate the funeral of a map?

Perhaps, at first, we need to disempower it. "When we cease to believe in a word, it no longer has the power. And when words lose their power, so do the institutions that are built upon them" (Olsson 1980: 12c). This aspect gives room to the last provocation, since I wonder if geographers have really been successful in this operation. Did they cease to believe in the word and in the image of the map? Have they buried it once and for all, obscuring their desire for mapping with their mappings of desire (Painter 2006)?

The question to be asked, as geographers, when one sees a cartographer faints and falls under the shots of the critical theory, is if a map can really die (even live or think); if they have really stopped believing in its power by neutralizing it; in short, if they have "smash[ed] this ready-made idol, slaying the ghost of cartographical reason in the process" (Olsson 2007: 192). Because if it is not the case, another justification is equally possible; that human geographers have simply decided to deviate from it, letting other disciplines to absorb, modify or even reify the ontology of maps, thus losing the option to concur in shaping and configuring the new cartographies of the present moment.

# Chapter Three Post(mortem) Cartographies

What if, after all, cartography and maps were not what we thought they were . . . or at least not only what we thought they were? [...] In this way: It may be possible to develop new cartographies and geographies ... by changing the way we think about the cartographies we have'. (Pickles 2004: 194)

Obviously, geographers can hope to meet this challenge only if they arise from the map's deathbed—to which they themselves contributed, and where they are still sitting, some sincerely contrite, some disinterested, some satisfied for having favoured the map's demise. (Boria 2013: 42)

### Exhausted cartography or inattentive geographies?

Does he exhaust the possible because he is himself exhausted, or is he exhausted because he has exhausted the possible? (Deleuze, 1995: 3)

We might reasonably think that the great moment of unveiling the cartographic gaze demanded a high expenditure of energies. After a prolonged effort, we know, it is demanded to rest, to linger into a transitional phase made of distension and even disposal of previous models and speculative ferments. Too many theoretical, epistemological and ontological cages as well as reductionist traps stand in the way when maps are treated in the guise of representational fetishes. The theory and representation of cartography proves to be too exhausting and exhausted for geographers to auspicably assess new directions and turns. And so, just when we assist to the most intense bombardment of geographic visualizations, here in the epoch in which mapping and its challenging metamorphosis are increasingly involving multiple referents, users and practices, the geographical gaze seems to be obfuscated and retires. Apparently, geographers become inattentive and distrait, perhaps disappointed to (re)engage anew with the burden of the cartographic reason, especially in its digital transposition, after having shredded it into pieces, unwittingly increasing its powerfulness and distortion by counterpoising it. Or, at least, until recently, there has been little interest among cultural geographers in contemporary cartographic theory and practices, as lamented

by the two epigraphs proposed above. "The result has been a closing down of constructive and open debate on both sides, and the emergence of 'cultures of indifference' on both sides" has argued John Pickles (1995: 51). Indeed, as I tried to highlight in the previous chapter, the motley criticism of the representational in geography has shown at turn its most crucial effects in the study of map-making. Not by chance, cartography, as an apparatus of knowledge, has struggled over time with the status of its science in a manner similar to that of the geographical discipline (Livingstone 1992; 2003). In the lack of a clearly structured internal/external debate, in the second chapter I preferred to give a rizhomatic overview, made of different scenarios staged by several postmodern encounters with the map. To get back to the point and make some order, I would briefly resume the two major figures that today end up to control the narrative of the 'cartographic reason' when the notion of representation is implicated in terms of language, medium and form (see Barford 2011). Ultimately maps seem to find themselves inescapabilty squashed and compressed between two walls. Their pulp is indeed gleaned by a scientist and techno-determinist discourse or by a deconstructionist one aimed to unpack their very ideological and political rhetoric through several spectra of analysis. As a result, the first manoeuvre does not really question the transparency and objectivity of the cartographic medium in conveying spatial relations, while the second approach drifts toward the other extremity, showing the opacity and the social construction of such representations appearing however sometimes too vehement and excessive in the way in which maps are treated and interpreted often through inconophobic and iconoclastic frameworks.

Turning to look at this pendulum, one might have the feeling that the first approach concerns closer map's technicians who need to draw upon a standardized and controlled methodology to create effective graphic visualizations. Whereas the second approach has been at length encouraged by historical geographers since the pictorial nature of classic maps lends itself toward a more textual interpretation by prioritizing terms such as discourse, power and symbolic order. Seen as such, claims of cartography's critical readers do not always converge with the ones of map producers. For instance, Brian Harley dissented from "what cartographers tell us maps are supposed to be—considering that—cartographers believe that they have to say this to remain credible but historians do not have that obligation" (1989:1). This way, issues of self-reflexivity, criticality and ethics involving directly cartographers beyond 'the credibility' they are thought to preserve are not usually considered in the argument made by several geographers 'against' them (i.e. Dematteis 1985, Farinelli 1992,

Harley 1989, Olsson 2007, Quaini 1978). More easily, we frequently find ourselves to retrace the critical moments of cartographic thinking through the faltering reading given by geographers. This dissonance, though, leads to explore deeper and rooted concerns. Preoccupations that return as traces, little shadows, at various stages of the research. What is worth asking, I think, is if a critical theory does really need only a phase of de(con)struction and rejection when the resulting effects are the desertification of affirmative projects. As the political geographer Herb contends, "there seems to be a tendency among critical theory informed geographers to simply deconstruct maps, rather than to construct them" (2009: 332, my italics). To return to the subject, we are aware that the deconstructionist gesture has often troubled philosophers but it is time to acknowledge that it may also reveal an unexpected creative power. For instance, Jacques Derrida, who is considered the embodiment of such thought, was at first stance particularly motivated to replace the term 'deconstruction' with that of 'destruction'. But just to avoid the perception of an annihilating and unproductive philosophical attitude, he preferred to maintain the first term<sup>38</sup>. However, as it has been noted in the first two chapters, the philosophical scope of deconstruction is often misleading in sociological circles. The Derridean manoeuvre is a disassembling process that leads to a deeper and more informed understanding of the construction itself because it can, as far as possible, bring to light those choices and options, but also those fractures, ruptures, deceptions and unspoken that every absolute language tends not to recognize and often to hide (Weber 1992).

Since there, the rhythmic dance between deconstruction and reconstruction has reverberated in the work of several philosophers, in particular of Seyla Benhabib's (1986). The philosopher argues that every *critical theory* should consist of two moments, the explanatory-diagnostic and the anticipatory-utopian. In the first stance, she recalls the idea of critique as immanent—"a non-criteriological inquiry, which allows its practitioners to criticize the opponents' arguments by showing their internal inconsistencies and contradictoriness" (1986:9) and de-fetishizing—"a procedure of showing that what appears as a given is in fact not a natural fact but a historically and socially formed reality" (ibid. 21). Whilst, the second moment, much more devoted to the Philosophy of Aesthetics

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<sup>&</sup>lt;sup>38</sup> Before being systematized in his famous work, *De la grammatologie* (1967), the deconstructionism comes to be presented in form of review in the French Journal *Critique* under the word "destruktion", an homage to the work of Martin Heidegger, *Being and Time* (1927). However, very soon Derrida realizes that: "in French 'destruction' too obviously implie[s] an annihilation or a negative reduction much closer perhaps to Nietzschean 'demolition' than to the Heideggerian interpretation or to the type of reading that I proposed" (1985: 1). For this reason, the philosopher chooses to keep the word deconstruction instead of destruction.

distinguishes Critical Theory from functionalist theories and preserves an interest in social transformation. According to Benhabib, the two tendencies work in parallel in philosophy until the fruitful re-joint rethought by Jurgen Habermas. As I attempted to prove in the two previous chapters, such interpretation works particularly well even in the speculation about the theories (and practices) of geographic and cartographic knowledge, especially when they are addressed by critical geographers. And considering closer and, more specifically, the debate on mapping, I have the feeling that the postmodern critique of mapmaking, even if in various manifestations, has separated, fenced and fossilized those moments. On the one hand, human geographers have been preoccupied to decree that cartography as science, and maps as its governing instruments are forms and tools of control in the service of power (on different scales and at various times), diagnosing case by case the validity of the Foucauldian 'power-knowledge' nexus. This is, certainly, one of the reasons among others which are leading today many human geographers to snub maps as a source of their analysis, preferring at most a deconstructionist approach to them. For real, as we have already seen, the seminal work of postmodern geographers, in the way they have figured cartography as a form of knowledge embodied to gain political power, has given rise to suspicion, mistrust if not indifference to the discipline. Unwrapped up in this manner, we could have a better sense of the huge scope of such detachment, if it is true that:

In cultural geography, maps are a "popular political antagonist"; yet, following Mitchell's (2005, p. 33) invitation to "scale down the rhetoric of the power of images", we may recognise that we perhaps want maps to be more powerful than they actually are (Rossetto 2013:81).

However, there are various reasons why any such considerations need to be cautious and extended. The contemporary cultural geographic inattentiveness to mapping (especially felt in Italy) that, only very recently is starting to be freed of previous rhetoric in other academic contexts, is to be sought also in other factors. I am not looking for 'causes' that may justify a present punctuated by micro and macro changes between the two disciplines, rather traces of conditions and constraints, contingent and context-dependent (when considering the very different schools of geography), which can lead to shed light on the contemporary status of indifference and separation between them. In this respect, in my informal interviews as well as in listening to the story of the material detachment of many geographers from cartography and, especially, from the alleged technological revolution triggered by contemporary GIS (Geographical Information Systems or Science), it can be

perceived both a sense of loss and victory. From one hand, the loss of technical capabilities that could facilitate certain works and allow scholars to critically create and use first-person database and data visualization's software without relying on the work of other professional figures (who, more often lacking of a critical theory formation, are also easily to criticize); on the other hand, the detachment from traditional tools related to the discipline has given the opportunity to practice a geography unbound from a rigid controlled methodology in order to explore new and other ways of conceiving and practicing the relationships between space, places, and subjectivity. Beyond the standard theoretical 'recital', material upheavals should be accounted as well. Nowadays, there are many universities that offer separate geography and GIScience degrees and others where both fields are disappearing. Architects, engineers, ITC specialists are more likely to use geographical information systems. However, it is also a matter of fact that we can find departments of Geography where cartography is quite alive, sometimes innovative and critical, especially in United States and in Canada where the two careers of the geographer and the GIS analyst may result to be more or less integrated (Perkins 2008)<sup>39</sup>. Overall, the majority of human geographers seems not to have any more professional and technical skills in order to contribute to the cartographic knowledge production. Such desolated picture has been recently framed by several geographers. For instance, Boria (2008; 2013), Dodge and Perkins (2008), and Martin (2000) have conducted quantitative research to examine the presence of maps in the most popular journals of Geography, evaluating a dramatic decrease in the production or discussion of cartographic visualizations in the last decade 40. A tendency in contrast with the sort of amateur geographic knowledge perceived outside the University:

On the street and in the pub, British geography is still about maps. This difference between our academic practice and everyday lay perceptions also reflects the gulf that has opened between school and university geography in the UK. 'Map skills' are still a central part of the National Curriculum, where pupils are taught spatial literacy, and

<sup>&</sup>lt;sup>39</sup> For real, a notable example of the polarization of the two positions can be found in California whereas the University of Santa Barbara results highly specialized in Geographical Information Systems while UCLA (University of California, Los Angeles) has diverged toward a more cultural and humanistic strand (see Guarrasi 2005, Minca 2001).

<sup>&</sup>lt;sup>40</sup> Data collected in the framework of this studies show that the number of maps in the *Annals of the Association of American Geographers* went from 23.7 per 100 pages in the years 1958-59 to 10.2 per 100 in 2008-09. Similarly, during the same fifty-year period, the *Transactions of the Institute of British Geographers* went from 29.3 maps per 100 pages to only 3.3 (Dodge and Perkins 2008, Martin 2005). Concerning the *Bollettino della Società Geografica Italiana* the average number of maps between 1993-94 and 2008-09 further reduced from 3.5 to 2.4 per 100 pages (Boria 2013).

where mapping is almost always assumed to be apolitical, neutral, and a scientific process (Dodge and Perkins, 2008: 1272).

However, if one centred the attention on words rather than images, we might have a different dimension of the phenomenon. Words related to the semantic field of map-making still occupy a significant place in the vocabulary of geographers, working more as a metaphorical device to acknowledge the geographer's speaking position. Indeed,

Explorations of the geography and culture of subjectivity, selfhood and the body frequently employ metaphors of the map and mapping. Indeed, the cultural and spatial turn in the social sciences and humanities has given mapping metaphors and practices a revitalized currency (Ryan 2000: 333).

The progressive sense of loss can then become a stimulus to bring to the fore certain issues and to retrieve former debates. In this respect, the analysis made by political geographer Herb (2009) for the *Journal of Political Geography* does not witness the same decline of maps publishing mourned by other geographers. If anything, he proposes to address the issue from another angle, arresting the trend of quantifying the presence of maps in geographic research, and rather discussing the typologies and qualities of cartographic images materially deployed with the intent to integrate them where possible. He wonders, retranslating a well-known Harleyian critique, "[w]hich ideas and concepts are not expressed or are neglected in maps in Political Geography?" (2009: 333). In sum, when geographers who may not be particularly interested in the cartographic practices are prodded, some interesting issues can come to the surface. As Heidegger would notice, "what is decisive is not to get out of the circle but to come into it the right way" (1927: 32: 195).

As discussed above, in the past three decades the right and most acclaimed way to address the burden of geographic representations has been condensed in the explanatory-diagnostic moment, where geography and consequently cartography have been at first unveiled not as "il progetto di un mondo perfetto, ma la storia della sua degenerazione" (Dematteis 1985: 44)<sup>41</sup>.

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<sup>&</sup>lt;sup>41</sup> My translation from the Italian original version: "not as the project toward a perfect world, but as the story of its degeneration" (Dematteis, 1985: 44).

### Leaving or rescuing the map?

When translating the second moment of the critical theory as discussed by Benhabib (1986) in geography we are asked to engage with the tropes of transformation, utopia and radical social change. The historical geographer Luciano Lago (2004) assumes that geographers themselves have destroyed the classic sense of utopia. He refers to the latters in terms of explorers and surveyors, freeing them from their contemporary professional status. According to Lago, there is nothing left to discover. Today, in fact, the idea of utopia is no longer bound to a place to get to, but to a social reality to realize. It is more about 'what to do' rather than 'where to go'. How so, then, mapping has been engaged by geographers after the tremendous critical and deconstructive approach encouraged in the 1990s?

At its most bold, for the moment we can limit to say that over the past decade a new generation of carto-geographers, who usually work at the intersection of social theory and media/software studies but also at the interface of literary theory and art history has been struggling to rework and refigure the place and working of that utopic and emancipatory moment that geographers considered impossible to achieve through mapping practices. I am of course exaggerating the term utopian here, since geographers—dealing more or less directly in territories—are still quite down-to-earth. The concern of these scholars in part arises from a recognition of the profound and deep-seated historical incapacity of much of the human geography to take seriously, and indeed to even acknowledge, already existing ethical and counter-political cartographic practices without however neglecting contemporary coercitive and violent cartographies. With this devotion, their attention now crosscuts the nexus power-resistance in digital mapping, trying simultaneously to acknowledge the supposed radical, alternative, sensitive, re-utopian social writings made by those subjects considered at the edge of the mapping discourse (invisible or mapped), already sketched in the previous chapter for the case of the postmodern and cultural cartography. It comes to indigenous, migrant, feminist, artistic, activist, and radical scholars who sketch the contours of a "critical cartography" (Crampton and Krygier 2006, Crampton 2009). A very intense, disperse and overlooked field to which I return, in its several ramifications and transpositions, over and over in this study. In so doing, once virtualized into the digital interface, the previous cartographic anxiety comes back in fashion but it can also be experienced and tamed into a cure, the therapy of mapping (Painter 2006).

At this point, the situation gets to be complicated and reversed again. The relocation and displacement of mapping practices into other cultures of knowledge are not only due to materialistic and technological mutations but they are also informed by a theoretical, societal, cultural and political shift. Those aspects go together and experience a mutual influence. Then, we just have to sit back, deepen our gaze and accept that, although the claims made at the beginning of the century around the death of the map (Wood 2003) or the map demise (Martin 2000), we cannot hide the massive production in the field of "map studies" (Dodge et al. 2009), "emergent cartographies" (Rossetto 2013) or "critical cartographic theory" (Crampton 2009, Pickles 2004), even if still strictly localized in few key figures and academic groups, mostly of Anglo-American locations<sup>42</sup>. They actually represent only a very small corner of the contemporary theoretical stage. Yet, the careful exploration of their approaches might give us back something different from a feeling of exhaustion of tropes, debates and challenges involving mapping. In truth, all these lines of thinking usually operate in the direction auspicated by Casti, whereas cartography "faced with the emergence of new spatial categories— is imagined—to rethink itself and revive what in recent times seemed bound to obsolete science, namely its inevitable link with geography" (2015: XIII).

As I write, the counterfactual doubt considered by Pickles in the opening lines resonates again: "[w]hat if, after all, cartography and maps were not what we thought they were . . . or at least not only what we thought they were?" (2004: 194). In re-reading it, I understand that the problem is not about leaving or rescuing the map—the exclusionary model that has accompanied geographers during the 80s and 90s—but to multiply the theoretical perspectives to re-address the existent and contingent cartographic production. Put differently, in the words of Dematteis, "preferisco interrogarmi su cosa è stata la geografia e cosa è realmente, per poi vedere se, accettandola così com'è (non come vorrebbero farci credere che sia) essa possa essere praticata in modo piacevole e istruttivo" (1985: 28)<sup>43</sup>.

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<sup>&</sup>lt;sup>42</sup> I am referring to the work of Jeremy Crampton, Matthew Wilson & Matthew Zook developed mostly in the Geography department at Kentucky University; a great contribution comes also from the reflections of John Pickles currently based at the University of North Carolina; then, in the years, the school of design led by Denis Wood (now independent scholar) & John Krygier has focused more on linguistic and semiotic issues related to critical map studies; another focus of attention on contemporary cartography has been offered by the Geography Department at University of Washington (Seattle) with Sarah Elwood and Matthew Sparke, and, finally, we should not forget the Canadian entourage with Nadine Schuurman and Agnieszka Leszczynski. As for the British academia, we could mention the work of Martin Dodge and Chris Perkins in Manchester as well as that of Rob Kitchin in Maynooth (among many others).

<sup>&</sup>lt;sup>43</sup> My translation from the Italian original version: "I prefer to question what geography was and what it really is, and then see if, by accepting it as it is (not as they would like us to believe it is) it can be practiced in a pleasant and instructive way" (Dematteis 1985: 2).

After replacing the term geography with that of cartography, a new challenge arises: how do we capture that point in which things stop to be seen in a certain way and ask for a change of frame?

As first step, it would be more helpful to understand from where both pessimistic and enthusiastic analyses around mapping come from. In other words, from where do geographers and cartographers speak? Did the way in which cartography dramatically changed in the last thirty years have a real repercussion in their work? In which paradigm and from which theoretical coordinates do we need to read the 'mapping' question, today? Here, I shall briefly refer to the most fundamental issues inherent in asking these questions, since such problems will come up time and again throughout the research. Indeed, if we return to think of the two previous chapters and confront them with the critical distinction proposed by Benhabib (1986), we could admit again that attention from geographers has lagged in the diagnostic moment—deconstructive, demystifying and de-mythologizing drawing upon the thought of Barthes (1981), Derrida (1967) and Foucault (1970; 1977) among others. However, the second transformative facet finds its philosophical referent in the work of Deleuze and Guattari (1988). The compelling lexicon they disclosed by speaking of rhizome, assemblage, diagram, mapping, virtuality, plans of consistency opposed to plans for the organization (see Deleuze and Guattari 1988; Deleuze 1996; Deleuze and Pernet 2007) or thanks to the refrain "to make the line and not the point" - in short - through their geo-philosophy, they have colonized more and more several disciplines. Indeed, Foucault had prophetically predicted this: "one day, perhaps, this century will be called Deleuzian" (1977: 165). At the same time, the transgression and the unfolded potentiality of their thought has somehow revitalized the practice of cartography, stimulating a new sensibility that animates scholars towards mapping practices (see Corner 1999; Crampton and Krygier 2006; Dodge et al. Kitchin; Pickles 2004). The dialectics injected by these two approaches needs to be rethought. Put differently, we may be misguided to see the map as that which is either fixed and exhausted or as such must be overcome. It would be more helpful to see it as an evolving social and cultural construction that has both merits and problems that must be conceptually and contextually reweighed. In this spirit, the distraction of geographers might become an insightful theoretical tool. Being inattentive, in seeking a new lifeblood of geographic discourses into other figures of thought and into other practices; in venturing strenuously to debunk our own concepts while connecting with those mobilized by other authors in other spaces, in other times, through other modalities...an invention, serendipitously, finally comes.

Rescuing the map: a threefold trajectory toward a post-representational cartography

With 'invention' I refer to the original meaning of the Latin invenio which defines the act of finding something. The act of finding something unexpectedly useful to rethink mapmaking in less transcendental and reified terms. The advent of the non-representational theory indeed, in looking with disdain to any politics of representation, especially if conveyed by spatial models (admonished to silence any critical thinking and to freeze the impredictable flux of life), if translated to map studies is likely to inflict the final blow to the cartographic field. Likewise, the chasm between cultural geography and the study of map-making appears to wide. Yet, if the murder of representation leads to a rejection of maps because they cannot be considered 'ethically appropriate' geographical tools, the diverse and multifarious philosophical manoeuvres indirectly mobilized by those authors against the geographical representation have unexpectedly helped to reinvigorate contemporary map studies by enriching its vocabulary in terms of process, performance and agency. Much of the work in outlining and gathering these newly tendencies is due to Rob Kitchin and Martin Dodge (2007; see also Dodge et al. 2009). The new approach, which has been jointly defined "postrepresentational", attempts to re-address the common objectified and transparent nature of the map in the new guise of ontogenetic practices, namely mapping, by reconsidering the overlap between epistemology and ontology. Accordingly, if the way in which we come to know objects (epistemology) constructs what we think they are (ontology), it is crucial to produce challenges to our own ways of thinking in order to configure 'the Being of the Map' from new insights but also to recognize in what present cartographies might be different from the past. At the forefront of this rethinking, we can find the de-ontologized cartography proposed by John Pickles (2004), to whom is due one of the first uses of the term postrepresentational. The geographer suggests to approach de-ontologization not only as a search of new forms and representations of cartography, but also as a new disposition in looking at already existing cartographies. As a result, what comes to the fore is that there is no longer an exclusive and generalizing defining interest—what is the map and what it represents because the new challenge is to develop a mode of analysis able to grasp what a map effectively does in multi-contextual practices; how it emerges and come to be recognized as

a map and the multiplicity of modalities through which it can be transformed, twisted and re-combined by its producers and users (Dodge et al. 2009).

Certainly, the post-representational (as the non-representational) could be seen as another fashioning label which eventually risks conflating very contradictory lines of thought and other empirical work on mapping; or to shed light, under the rhetoric of the novelty, previous considerations and studies that for different reasons have fallen by the wayside or have not been acknowledged in the mainstream geography. In this respect, Guarrasi would caustically argue that "la geografia altro non è che un gioco di spostamenti e di travestimenti" (2004: 10)44. On the other hand, although one can grasp diverse philosophical, social and cultural influences affecting those works (I also discuss this much more fully below), there are also many coincidental assonances and continuities waiting to be explored and connected, when possible, one to another. In the end, what concerns me here is trying to disentangle and discuss some tenets related to the post-representational turn in cultural cartographies with the aim to mobilize an effective theoretical corpus that could result interesting for cultural geographers to apply in the study of contemporary mapping practices. The move I am trying to make is indeed more theoretical than chronological rightly because most of the arguments addressed in contemporary discussions on mapping, GIS and Big Data<sup>45</sup> often retrieve previous debates, modes and metaphors circulating in the late '80s and during the 1990s, although reconsidered from new insights. 'Inventing' then concretizes itself within the original Latin meaning of *invenire*, namely to find fingerprints, neglected traces that help to flush out other theoretical and practical (re)turns.

First of all, the current research perspective suggests that the definition of post-representational needs to be disassembled into a threefold scenario, envisioned by three semantic gaits mobilised by the use of prefix "post". Specifically, the prefix works as the many "post" we are accustomed to see at work in cultural studies when we approach postmodern, postcolonial or poststructuralist perspectives. In this regard, the "post", epistemically and metaphorically approached, may encourage a move forward or *beyond* previous studies on representational cartographies, generally defined mimetic (as we have defined the first representational paradigm) or ideological-paranoid (as we have considered

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<sup>&</sup>lt;sup>44</sup> My translation from orig. IT: "geography is nothing but a game of displacements and disguises" (Guarrasi 2004: 10).

<sup>&</sup>lt;sup>45</sup> With the term Big Data, I refer to those datasets enabled to collect such a voluminous amount of data with extreme speed and with different characteristics to require specific technologies and analytical methods for the extraction of value.

the critique mobilized by non-representational theorists against the interpretative cultural approach over representation); however, it can also be materially figured as a going behind the logics and the social and cultural system underpinning the production of discourses and practices of contemporary mapping, recalling closely a deconstructionist approach, considering it as still having something instrumental to say. Concerning the first two meanings, the theoretical turn enabled by the post-representational enjoys an ambivalent position and certain consequences follow. What really matters in this shifting perspective is, from one hand, to make available new research tools in order to replace others, perceived as misused and exhausted (the post as beyond). However, the not always undisclosed attempt is rather to re-vision, to see with fresh eyes, a well-known existing wealth of knowledge (the post as behind). Finally, there is a third materialization in the use of the prefix. It is perhaps the most intuitive because it entails a chronological dimension, considering the shift from the classical historical cartography, hand drawn and analogic, to the digital mapping. In this regard, if the first two emerging definitions of the post-representational can be considered theoretical concerns that look, as we are going to see, at the critical and political dimension of the cartographies of the present (foregrounding a radical and sceptic attitude) or to a nonrepresentational approach toward mapping (forcing the cartographic language to extreme and transformative possibilities), the third one foregrounds the practical and material space in which such reflections take places. It is very difficult trying to mark the separation of these three layers. For this reason, beside the attempt to extricate them, is reasonable to find stains and spots of each approach into the others, considering a sort of consequential collapse.

In short, this concern sketches a modality able to find a point of encounter (or a beneficial clash) among several critical dispositions and provides, at the same time, to accrue the interest in the culture of mapping without turning it into another pathologic syndrome nor in a joyful and uncritical appreciation of such practices. In order to think through this, I want to tease out some threads of the complex game of looks between geographers and cartographers in the contemporary realm, occupied nowadays mostly by GIS specialists, to deeply understand the main tenets ruling the renewed interest in the 'worlding' enacted by the new spread of digital cartographic forms and habits. More profoundly, the scope of such relationality or coreflexivity is to set the coordinates of a dialogue between the explanatory-diagnostic approach on traditional cartography and the more transformative inclination now involved in contemporary map studies, concerning both aspects of production and consumption.

### After cartography: changing the skin or the bones of the map?

#3a. Maps are now fundamentally different.

#3b. But maps are still fundamentally the same.

(Zook et al. 2015, online)

If the reader remembers, we ended the previous chapter with the creepy figure of the death of the cartographer and the burial of the map. For instance, Wood (2003) specifically addresses the end of cartography as a normalized and institutionalized discipline in a positive way, opening now to a space occupied more broadly by a 'human map-making'. According to him, cartography was deemed to die because professional cartographers had not been able to listen what was fermenting out of their fence. At that point, "GIS and ESRI just rolled the corpse over the cliff" (Wood 2003: 6). In truth, the following year, Carter (2004) decided to reply to Wood's 'misdiagnosis' by underlying the fact that cartography was still a well flourishing discipline rightly because it had been partly poured into the realm of GIS, without neglecting the fact that mapping had been anyway already incorporated in other disciplines such as geology and meteorology. While Wood was provocatively excited by the fact that the 'cartographic' mapmaking was going to be replaced by an unbounded 'human' and 'universal' mapmaking, Carter clearly stated that, without any doubt, there would have been a future for the discipline. If cartography is not dead, however, could we still say that maps are crafted as the same pieces of paper scrutinized by cartographic historians?

In truth, they have been subjected to a huge transformation over the last forty years and what is worth arguing is if such material transition has equally affected the critical theory surrounding such practices. As we said before, there are several bodies of thought interested in charting such change of perspectives and, in order to understand each of them, is important to first acknowledge within which new horizon of practices they occur. However, I can just show this atmosphere through a personal memory:

It is March 22, 2016 and the University of Maynooth hosts the launch event of the Ordnance Survey Ireland Geographical Information Research. Ordnance Survey Ireland is the National Mapping Agency that finds, to speak, its Italian counterpart in the Istituto Geografico Militare and it has evolved from the Ordnance Survey Office which was established in 1824, later becoming a state body under the Ordnance Survey Ireland Act 2001. Under this Act, Ordnance Survey Ireland continued its mainstream public service function of creating and maintaining the definitive mapping records of the State and also to

provide mapping and related geographic information to the public and private sectors in support of social, economic, legislative, educational, security, business and administrative functions. It constitutes what in the jargon is called 'authoritative mapping', a standard and controlled data-gathering for decision-making. During the conference, many speakers reconstructed in a very rigorous way the transition from analogue to digital cartography. From the days when corporate cartographers used to do surveys to gather and update data of their maps, when they drew their maps and stored the data in the physical archives, to the transformation of the same maps into digital displays, until the latest and refined algorithmic revolution within which geographic visualizations are currently and more often automatically self-created, embodying movement and three-dimensional representations and suggesting, by anticipating, several actions to accomplish in space (Field diary. March 23, 2016. Revised).

Telling the story of how the map has changed its anatomy means raising crucial questions to the prefix 'post' engraved on the post-representational, the new turn affecting map studies. It is indeed a way to deeper understand if the mediation exerted by the digitalisation of the map artefact does really make geography rethink anew about its tools, its methods, its knowledge system, its ideological background and its ethical implications. At a first glance, the reading of multiple definitions of "digital", "virtual", "cyberspace" asks for a preliminary clarification. From a phenomenological point of view, indeed, analog and digital technologies are equivalent in the ways in which we approach them: both, in fact, affect our relationship with objects and the environment. Each technology, medium or device—for better or for worse—is the mean of production of reality and of attribution of sense. Then, each one has its own specificity which does not necessarily entail a neat difference. Moreover, McLuhan (1964) has already brilliantly noted that a specific medium becomes a salient and critical object of attention just when it is supplanted by others. Indeed, we can now talk about the alleged difference between analogue and digital media since we perceive the pervasiveness of the second. Yet, the issues here discussed are not only specifically of the digital, if we consider they allow us to consider in a new light also previous works on geographical cultural artefacts. In particular, this new digital virtual software lexicon could be used to discover new phenomena that we cannot yet see but also to highlight differently phenomena that we already know.

<sup>&</sup>lt;sup>46</sup> We might encounter those terms as synonyms in several works, even though there are often different and sometimes unclear nuances of meaning between them. For instance, de Souza e Silva (2006) argues that the cyberspace has been treated during the 1990s as "the information space that emerged from the connections of computers around the globe" (267); McKenzie speaks of a virtual geography as a mediatized realm, "the expanded terrain from which experience may be instantly drawn" (1994: VII). Pierre Lévy (1998), addressing the work of Deleuze, argues that the virtual has always been an enduring component of the human mind.

My feeling is that the digital slogan is apparently moving from an archaeological gesture that privileges the look in depth and exalts the figure of the diver to a geography which rides again in its pure sense of surface: a rhizome, a complex reticular and relational scheme or a network which intermittently demands for a mobilized gaze (Friedberg 1993) or a distant (Moretti 2013) and hyper reading (Hayles 2012). However, it is also true that we cannot proceed to highlight the common tendencies in the various fields of cartographic knowledge production without forgetting the different localities and 'time lags' within which certain mutations take place. The faltering narrative in which this discourse is embedded makes appropriate to find a series of historical landmarks in such path and to consider the various ways in which both Anglo-American and continental geographers have responded to such transformation. To have a better idea, we can begin by going back to 1983, when Jerome Dobson publishes "Automated Geography", an important starting of reflections around the application of informatics techniques to the realm of geography. According to Dobson, geographical computation is instrumental for geographers who seem to become more relevant to the eyes of decision-making centres, making geography a discipline more 'useful' than 'critical'. Put differently, Guarrasi considers the Automated Geography an advanced version of the functionalist paradigm (2004: 6), more interested in applying models than considering the contents and the social consequences of such analyses<sup>47</sup>. We might argue that when GIS is in the service of corporate power, professionals can lose the control of their own knowledge strategies. Regarding this aspect, in a provocative online essay entitled What would a floating sheep map? (Zook et al. 2015, online), a sort of new manifesto for map studies, such figures have been recently called 'coders' to distinguish them both from cartographers and from the critics (human geographers). For a coder, "[a]ll that matters is that it works, even if that eschews questions of why and how it works, and the ways it does work in the world" (Zook et al. 2015, online). Some of these issues such as hidden technocracy (Obermeyer 1995), power-knowledge relation (Pickles 1995) and possibilities and limits of representation (Guarrasi 1996) have occupied the critical geographical debate on geographic information systems over the past three decades with the same emphasis accorded to modern cartography.

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<sup>&</sup>lt;sup>47</sup> If we confront the last two reflections with what happened at the above cited Irish colloquium, I have the feeling that the tale of the technical and materials changes faced by professionals attending the Maynooth conference rarely afforded a critical reflection on the purpose and use of such technologies. Moreover, there were many software companies ready to sell their services for creating online databases. Somehow it lacked a critical geographical voice who could expose the problems regarding the collection of this data, the reason for this gathering and that would put more effectively the reasons for their social use and purposes.

At that time, as we have already discussed, the map has been firstly the victim of a prosopopoeial operation, making it animated and enlivened as if it had an internal power and consciousness (see Farinelli 1992, 2009; Wood 1992), to then justify its murder (Wood 2003). Nowadays, algorithms are entereing the same prosopopoeial recital. Their importance in the study of space has been stressed for example by Dodge & Kitchin (2005; 2011) and their silent proliferation and ubiquities have led, for instance, Stephen Graham to talk about specific "software-sorted geographies" (2005). In this new theoretical atmosphere, the algorithms that make digital cartographic operations possible "require as much attention as the misleading map projections so criticized by the cartographers of the 20th century" (Lévy 2015: 316). Acting as a discursive formation, the algorithm is featured now as a representation in post-structuralist terms when it is said that it is abstract but produces material effects on reality; now as an old-fashioned ancient *mimesis* when are underlined software's attempts to imitate nature's ontology and to re-produce its patterns (Fuller 2008).

In this respect, learning the question of the past involves posing questions to the postrepresentational contemporary atmosphere in light of our conceptual preoccupations in the present. However, it is important not to forget that our present is constellated by copresences, interferences and interfacings of multiple spaces, time, networks—and I would add imaginaries. This means that, although the specter of algorithm is haunting our spatial life, we cannot claim that is absorbing it entirely, thus we can still find and use paper maps (printed or hand-drawn), hybrid digital mapping (possible of creation by very different software but where the human operator/spectator is anyway central in the process of production). Similarly, I do not want to dismiss the fact that we have also entered the era of big data where a massive amount of information is now possible of being tracked (an operation called "data mining") and be visualized by several actors with different purposes (data visualization), often requiring a high expenditure of costs. Within the academy, one example can be offered by the work of Lev Manovich (2011; 2012; 2013; 2014) who seems is inspiring many geographers interested in the digital. He claims to stop seeing to small amounts of images produced by a few people, looking instead at them all, like in a panoramic overview, thanks to the use of specific software able to analyze user generated content. Not surprisingly, he has called the activity of visualization a "re-mapping", illustrating several methods such as exploratory, media and information visualization to reveal patterns in metadata or to display media collection (Manovich 2012). The tactic of re-mapping might find a first general justification: the almost hidden way in which software, images and

platforms are created trough digital technologies brings out the desire of mapping and visualising what is not visible, even after the postmodern legacy made us realize that it is something dangerous and totalizing, if not unachievable. However, the risk of neglecting the image zoom (a kind of close reading) to get solely an overall panorama could also be mistaken for a restatement of the "view from nowhere" or of "the God trick" (Haraway 1990). This trick, I would say, works in making connections between objects visible while obscuring and devaluating subjectivity and interpretation. In our case, given that geography is inextricably imbued with visuality and historically did the costs of this, we should not forget to ask what are the consequences of this all-encompassing visibility. Indeed, even if the softwaregenerated images analyzed and created by Manovich and his group are aesthetically fascinating, they could say very little if we do not interrogate them in the right way or, more specifically, if it is not fully explained why we are doing it. Thus, his famous article How to compare one million images (Manovich 2011) should also assume "why" to compare one million images, not to run the risk of being blamed of 'madness' or schizophrenia, as Mitchell (2016) has recently appointed the work of the visual theorist<sup>48</sup>. Beyond the criticism, the computational media studies invoked by Manovich seems to have a clear point of departure: "one thing is clear to me. The same data analysis methods that are used in culture industry to select and standardize content and communication can be also used to quantitatively research and theorize cultural effects of media analytics" (2016, online). Yet, as Wright (2008) explains, every process of data visualization is always partial and provisional, an experimental technique. For instance, by connecting images through specific algorithm process and without the support of critical analytical methods there is the risk to standardize relations that perhaps do not exist. Indubitably, data and image visualization might be persuasive not only for scholars so that they are more usually exploited by different actors, platforms and networks for different purposes. This aspect certainly raises questions about privacy, surveillance, and control. Seen in its criticality, we might perceive that the digital turn on

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<sup>&</sup>lt;sup>48</sup> During the conference "Understanding Visual Culture - Interdisciplinary Perspectives" held in Bologna on 21-22 April 2016, W. J. T. Mitchell has indeed addressed in his presentation "Method, Madness, Montage: Aby Warburg to a Beautiful Mind" most of his criticism to the "Manovich" school of thought. By reviewing a series of cases, he argued that several theorists, fictional characters, writers, artists who tried to comprehend (and perhaps invent) a totality through a visual array, they were historically shown to be affected by a schizophrenic attitude, manifesting into paranoid "discoveries" of patterns where none exist and in the frantic search of hidden meanings in insignificant clues. The effort to see a totality, in other words, seems to Mitchell that may have pathological as well as cognitive effects, encouraging forms of obsessive compulsive behavior and post-traumatic stress disorder.

mapping has not mutated the terms of debate, if anything it has accentuated them (Guarrasi 1996). At this point, to navigate the fruitful chaos of software geographies, one should not forget that there are at least two lines through which this contemporary 'deep cartography' could be analyzed. The first one opens to the realm of critical mapping, critical GIS and critical big data where the climate of suspicion and anxiety already matured around the modern cartography finds perhaps its most advanced systematization. In such perspective, in the use of new mapping technologies can be traced evidence that they support certain power relations, hence it is deeply questioned the nature of this power and its political and visual economy (Crampton 2003). It is a matter of fact that geo-visualizations generated by both GIS analysts and big data scientists can be used by international, national and private companies for surveillance and biopolitical purposes, by managing and controlling people's spatial behaviors, even though there is always the possibility to reverse them, to hijack them for counter-politics and democratic goals (see Chapter 5). In any case, they have been seen immersed in a power disciplining discourse. Moreover, their analysis can help us to unpack the space of digital cultural objects which is "a spatiality that is not only visible in many digital images, but is also the geometry through which they must be understood" (Rose 2015a: 3). But I return to argue that this is being ambiguous, because one thing is to expose and reveal the geometry of power (Massey 1993), that is the quintessence of the data; another is to admit that we really can do it entirely, that is to say to impose a new totalizing eye, and that we can stop only at this stage. As Massey had already explained for the dominant form of mapping, "the view from above":

Not all views from above are problematical – they are just another way of looking at the world. The problem only comes if you fall into thinking that that vertical distance lends you truth (2005: 107).

In other words, I then wonder if mapping, assemblage theory, network thinking can be thought as precarious and never quite comprehensive methodological tools. Can they be seen as 'something' to use provisionally to integrate and not simply to replace other critical search tools? In this direction, I think that the ethical and methodological moment go together and they urgently demand us to engage whit tools, theories, practices that can unfold a wide range of processes without falling at the same in a trap.

There is, however, a second theoretical line, much more indebted with phenomenological accounts, which seeks to seize the impact of such mapping technologies, especially those involved in mobile spatial media (ie. De Souza e Silva 2006; Leszczynski and Elwood 2015;

Wilmott 2016) by understanding how they are changing our way to relate, know, feel and practice space. In this second declination, power is not a priority in the researcher's agenda rather than the affectivity, sensing, performativity and process involved in mapping consumption. To have a clearer picture of where and how these two approaches emerge, first of all is important to understand the continuities and discontinuities related to the transition from the analogue cartography to the so called "cartography 2.0" (Crampton 2008) and even to a tridimensional or "augmented cartography" (Ourednik 2015), in order to discern if they really affect the bones of a theoretical rethinking in cartography or are just scraping its skin.

#### Maps, malgré tout...

Michael Frank Goodchild (1995: 41) claims that Geographical Information Systems brought cartography to a new life and gave it a new meaning, renovating the interest in issues of mapping, topology and spatial representations. Yet, as we have seen mentioned in the debate between Wood (2003) and Carter (2004), scholars are actually divided in picturing the relationship between GIS and map-making. For example, according to some geographers, the ontology of GIS was already in gestation in the Eratosthenes's map (Guarrasi 1996), although an attentive exploration of the modern spatial technology makes such romantic consideration a little ambitious. In truth, following the most part of specialists, one of the key representational feature of the GIS is, especially, the overlay. Seen from this light, we could retrace the idea of overlaying back to Louis Alexandre Berthier's hinged overlay maps (1781). To be fair, for other academics, we could be thinking of the automation as a crucial transformation of the map into a GIS. In this sense, we might begin telling the foundational story of such tool with the tabulation machine made by Herman Hollerith in 1891. In the occasion of the census, he applied punched cards to code the U.S. Bureau of Census 1890 population data (see Foresman 1998). Beyond the recital, in 1964 the time is ripe for Roger Tomlinson, an English geographer settled in the Canadian Department of Forestry and Rural Development, to realize the desire of the Canadian Minister of Agriculture, who wanted compiled an archive of thematic land use maps for the entire country (Tominslon 1988, Schuurman 2004). The geographer suggested to use a computerized system he was working on with his group that is today considered the first GIS, and where both the features of overlay and automation were present. The GIS science then initially grew as a truly academic

geographical knowledge, a geography—though—deeply informed by the quantitative revolution (Taylor 1990)<sup>49</sup>. However, the picture dramatically changes in 1981, when Scott Morehouse decides to leave the Harvard Lab to work for a private company in California, the ESRI, by increasingly expanding the complex web of actors interested in the manipulation of such technological system. Indeed, even if land use management and environmental projects were early applications of GIS and helped to start many GIS software companies (Dobson and Durfee 1998), the American Department of Defence was likewise willed to use strategically such technologies for missile-siting and air-defence strategies. Howbeit, an aspect not to be underestimated concerns surely the ethical issue in which the early (and not only) GIS workers are called to respond. In terms of social and political applications, critiques against geospatial technologies become more acute as greater is perceived their power. Such power of digital mapping is felt augmented because of the state of continuous transformation, proliferation and advancement of such technologies. As concerning GIS, according to some, spatial analysis is differentiated and more powerful than the traditional analogic mapping because it generates more information or knowledge that can be gleaned from maps or data alone (Schuurman 2004:4). In this sense, a GIS database can include information drown from many different maps and can also present different representations of the same information (Goodchild 1995: 40). This allows to make a larger amount of operations in the territory that may be more or less harmful depending on who manipulates such information. Moreover, as we argued before, spatial analysis involves an overlay thinking, the idea to overlap several layers of geographical information related to almost every aspect of spatial life. Indeed, there is no limit to the number and type of data that can be added into the GIS, once defined in the classes. The same possibility is not assessed for maps. The scale is constant for analogue maps, while constantly changing for GIS. In addition, the release of Google Maps and Google Earth in 2005 has certainly changed our way to look and use maps, now immersive, three-dimensional and constantly updated. Digital maps can now be integrated by images, sound and movement. In short, given this complex and heterogeneous panorama, we might wonder why—instead—Zook and other geographers provocatively contend that "Maps are now fundamentally different. (...) But maps are still fundamentally the same" (2015, online). For real, it would be tempting to assert that "new" digital mapping practices defy the modern cartographic logic and the immutable

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<sup>&</sup>lt;sup>49</sup> An effort to revolutionize spatial analysis was made also by the Harvard Laboratory in the 1970s.

Cartesian setting of space; but, true to form, they seem to suggest us that we must pay careful attention to the rhetoric of these approaches to see if they can really destabilize the mapping ontology or----in a more nuanced way and therefore more subtly-----they are still reproducing its logic. Yet, even in the guise of a digital screen, the map exerts an ambivalent power: "it let us to see too much and hence blind us to we cannot see" (Kurgan 2013: 21). Questions about what is included or excluded by the frame are crucial for underpinning the politics of representations. It is equally important to recognize, on the one hand, that the ontology of a digital map can be approached trough a navigational paradigm (Latour at al. 2010; Verhoeff 2012) that poses different questions and perspectives from a political approach to representation. It means that, seen as immersive and three-dimensional space, a map gives the illusion that all spatial information is available to us in order to act and not to simply contemplate it (Rose 2015a). In particular, following Latour (et al. 2010), the different understanding of maps not as mimetic but as navigational devices suggests to treat them as dashboards of calculation, allowing to navigate the user through very different sets of data, often updated and recombined. On the same breath, Verhoeff (2012) argues that the navigational paradigm inaugurated especially by digital (mobile) spatial media destabilizes the Cartesian space through which a normal map is constructed. However, we cannot dismiss that a third-dimensional space is still a mathematical space emerging from the application of isometric principles and projections. The paradox is that the history of cartography was mostly an attempt to transform the three-dimensional space into two-dimensional. And now, thanks to digital technologies, we finally have an immersive three-dimensional space which is recreated through the mediation of cartographic principles. On the same line of Latour and Verhoeff, Gillian Rose has recently argued that "instead of a printed paper map proffering the signs on its surface for attentive reading, in a Google map we move from map to satellite view, zoom in and scale back, look at a photo of a street and return" (2015a: 7; see also Latour 2010: 583), summarizing in this sentence most of the recent change informing digital map-making. Even here, I would argue, depending on what perspective we decide to take, we could resize the claim of novelty. Indeed, the nonlinearity expressed by Google Maps could be seen as the augmented feature of the printed map, or better of the Atlas. The user, in contrast to a single map, in the Atlas can browse pages in one direction or another by operating a continuous change of maps and scale while is surrounded at the same time by selected pictures of real places (de Spuches 2002). Undoubtedly, it is incomparable to the velocity and the utility exerted by Google Maps; this enacted performance of seeing and

doing certainly asks for a new and more complex way of theorization. Yet, this confrontation is a way to say that many of our experiences, and so that the creation of new technologies, are driven by a principle of recursion. Seen from this light, we might argue that in this passage from the printed map to the (online) digital mapping, the ontology of the map is perhaps not really defaced but, perhaps, its potentialities as well as its limits are augmented. Yet, it should be also well contextualized the change of perspective promoted by the navigational paradigm when it is said that the point of view would be now meaningless and replaced by the point of interest as argued again by Verhoeff (2012). Indeed, scholars as Harley (1988, 2001), Farinelli (1992) and Cosgrove (1999) among others have opened, as we know, an intense debate on the role of the point of view embodied and at the same time hidden by the map operator and the like. Furthermore, they conceived the study of cartography as a visual and knowledge system informed by power discourses. I am not so sure whether the question is really changing in the digital world or it is simply bypassed in other words, moving the attention from the creator to the user and from the ideology to the utility. However, I would say that, as a knowledge system, cartography in all its forms is both a model and tool. When we question it as a cultural and visual model of thought, the problematic of the point of view cannot disappear. In this sense, nobody forbids to continue to interpret maps as frames, sometimes shields, if not boundaries that limit our view (Verhoeff 2012) asking from where and by whom they are produced and how then they are put in circulation. While, of course, as a tool of orientation, the destination and the point of interest have always been the minimal meaning of the map, whose main utility remains to find a location. A feature, the latter, that today acts as the quintessence of mobile applications. In other words, I believe that only the context of the theories and practices on which we decide to focus can resolve this ambiguity since: "maps display information. They tell us where things are and how to get there. But a map also visually constructs a way of understanding a place and thus makes a deliberative argument" (Faigley et al. 2004: 388).

Another topic often resonating in the 'digital turn' debate is that the secrecy of modern cartography would be now challenged by the open visibility allowed by digital technologies' information tracking. Yet, data monitoring or surveillance systems still maintain the information they collect inaccessible to the audience (Kitchin and Dodge 2011). More broadly, the code is invisible and all the processes underpinning the creation of a map remain largely unseen or sub-visible for non-experts (Amoore 2016; Graham et al. 2013; Kitchin and Dodge 2011). In this sense, we might now better understand why some geographers, even

recognizing the proliferation and consequent transformation of mapping visualizations, argue that "maps are still fundamentally the same" (Zook et al. 2015, online). Yet, we might contend that maps are not the same of their digital transposition, but certainly we are often called upon to look at the latter with the baggage of 'cartographic' theories that were previously built. In short, the main hindrance is due to the fact that we persist to treat and analyze them in the most accustomed and familiar manner. In this regard, Italian geographer de Spuches (1996) has argued to consider analogue and virtual mapping as two different realms. As father and son, the map and the interface, can survive one to another only if they never meet (ibidem: 44). She suggests that: "se l'atlante moderno, espressione suprema della carta stampata, incontra il mondo digitale rischia nuovamente di essere fatto a brandelli. Ma a sua volta, se il mondo degli ipertesti finisce nelle mani dello stampatore, finisce certamente pietrificato e vanificato. Un atlante, composto da iper-carte, non può che rimanere virtuale" (ibidem: 44)<sup>50</sup>. Under this theoretical light, the virtual cartography reclaims its own ontology, refusing to be constantly confronted or equated with the 'authentic' analogue world of things, such as the materiality of printed maps. On the other hand, this approach abandons the chance to look at the effects that the hybridity and co-influence of these two meaningful worlds might produce.

# Behind the digital turn: the turbulences and viscosities of autonomous/automated human geographies

In the previous section we have mentioned and discussed some aspects related to the passage from traditional cartography to digital mapping concerning various actors, approaching the 'post' of the post-representational cartography more as an 'after', a chronological step, a jump in the virtual universe of geography. However, we have still little said, if not in a scattered way, about human geographers' response to the passage from cartography to digital spatial technologies and media, perhaps because, as John Pickles has recently reminded, "it was happening quickly, yet we seemed not to have good conceptual tools to deal with what was happening" (interview in Wilson and Crampton, 2015: 8). Usually, the work of GIS specialists, as well as it was for cartographers, is perceived by human

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<sup>&</sup>lt;sup>50</sup> Tr. from original Italian: "if the modern atlas, the supreme expression of the printed map, meets the digital world is again in danger of being torn into shreds. But, in turn, if the world of hypertext falls in the printer's hands, it ends certainly petrified and frustrated. An atlas, composed of hyper-maps, can only remain virtual" (de Spuches 1996: 44).

geographers as highly formal and technical, and it is deeply criticized because it tells us little of their social, cultural and political implications. Repercussions that arise more vividly when human geographers stand in the way. Indeed, radical, humanist and then cultural geographers have often opposed to quantitative and mathematical analyses for which the explosion of new GIS technologies, and the following emphasis on spatial analysis, led back for them the return of a positivist and Cartesian methodology (Lake 1993; Sui 1994). For others, the real problem was the implication and collaboration of such practitioners with corporate powers. The ethics of new geographic technologies is exemplified in the attack undertaken by radical geographer Neil Smith who contested the collaboration between GIS technicians and Bush's entourage during the First Gulf War (Smith 1992). In such blueprint, if the end of '80s was dominated by the Harley's discourse on the power of modern cartography in the Anglo-American domain and by Quaini and Dematteis's apprehension as concerning the Italian geography, the mid of 1990s adds a new specific 'digital' geographical floor where to discuss the utopian and dystopian possibilities of new mapping tools.

## 1993. The Hot Autumn of Friday Harbour

1993 is a crucial year where eventually American geographers and GIS specialists decide to meet. The conference is held at Friday Harbour<sup>51</sup> to confront and discuss their mutual work on questions of epistemology, ethics, data selection and access as well as their forms and modes of representation. It is a close confrontation, no holds barred, if is true that: "[t]he development and adoption of new information technologies, and the rise of new ways of doing things, do not occur without struggle" (Pickles 1995: 655). As reminded by Pickles, Friday Harbour is indeed crossed by an atmosphere of suspicion, where several scholars try to stake out positions rather than searching for a communal ground of encounter. The debate, however, is so heated and felt that two years after John Pickles is asked to publish a collection of essays, *Ground Truth* (1995), already promised in 1991 to Brian Harley. The work is internationally considered another building block in the articulation between critical theory and GIS. In particular, the core of the analyses revolves around a main issue, already circulating in the previous conference:

<sup>&</sup>lt;sup>51</sup> Thanks to the initiative held in Friday Harbour, the US National Center for Geographic Information and Analysis was pushed to dedicate one of its research initiatives to the issues now known as 'GIS and society', especially trough the so called Initiative 19 and then with the project Varenius (see Wilson and Crampton 2015).

Can we transform GIS and other imaging technologies to make them compatible with the premises and commitments of critical science? Or can we rethink our understanding of the new information and imaging systems in ways that will allow their productive potential to be deployed in new ways? (Pickles 1995: 646).

This is the critical question we are somehow accustomed to look into, in the way it brings back the problem of the politics of representation. In particular, Pickles asks: "how should people, space, and nature be represented? Who should have the right to speak on the nature of the representations that are created?" (1995: 640).

By no means, the issue of visualization is not merely re-proposed as a technical problem, the well-known model of accurate representation of the world (Farinelli 1992), but it is a stand for a "sustained interrogation of the ways in which the use of technology and its products reconfigure broader patterns of cultural, economic, or political relations, and how, in so doing, they contribute to the emergence of new geographies" (Pickles 1995: 658).

The anxiety and ferment underlined by Pickles respond more closely to the cultural representationalism we have already discussed in the first chapter. This crucial point is also evident from the collection Cartography and Geographic Information Systems edited by Eric Sheppard and Tom Poiker (1995) to debate around the Friday Harbour conference, where the authors point out that the core problematic for geographers is "whether the logic of GIS, as result of design decisions (...) privileges certain views of the world over others" (1995:23). In this respect, we should consider that, at that time, several geographers were influenced by spatial analysis theories explored during the 1980s by Peter Gould and Gunnar Olsson (1982) as well as by Brian Harley (1989), and they found themselves in charge of revealing with the same critical emphasis the dominant discourses underpinning the new geographic information system, considering both the political and phenomenological implications regarding those technologies. However, provocations and hostile criticism are not slow to arrive from GISers themselves. Openshaw (1995), for instance, blamed geographers for still 'living in the past', considering them incompetent as for not to have ever used this system, thus operating only an external and not expertise critique. In this huge gap, created and amplified over time, some geographers present at the conference have anyway tried to heal the wounds between the cartographic systems and the geographical discipline, aspiring to a democratization of the tool, to its participatory use. In this regard, Pickles comes to the conclusion that the only way to overcome the problem cannot be other than to open this system. "Oh, so what you're arguing is that people should participate!", is indeed the exclamation made by Openshaw to Pickles after his talk (Pickles in Wilson and Crampton

2015: 32). The idea to appropriating the technology in favour of marginalised community, hence to use the tool in an activist sense, comes then to be explored in the following years, involving geographers in community mapping projects concerning indigenous territorial claims, but also addressed to challenge urban policies (ie. Bryan 2011; Peluso 1995). Nancy Peluso (1995), for instance, has been one of earlier scholars to introduce the term "countermapping" to refer to her work with Indigenous Indonesian communities. She developed a series of maps to claim rights to natural resources and to contest existing state-run systems of management and control.

### 1993. The incubation of Cultural GIS in Italy

Curiously, 1993 is not only the battle-meeting year between human geographers and neo-cartographers within Anglo-American area, a decisive moment to foster the emergence of critical GIS. It is also a year marking the experimentation and the interest from the part of the Italian cultural geographers toward "new dimensions of geographical imagination" (Guarrasi, 1996: 3). Indeed, during the nineties comes to be constituted the research group on "Information systems and geographical research" that will expose the result of the experience at the "Fonder le lieu, instaurer l'espace: l'efficace des représentations géografiques" international colloquium held in Gibellina (Italy) in 1993. The previous year, in Palermo, the Association of Italian Geographers in collaboration with the Groupe International d'études sur le représentations en géographie had already tried to combine field research with the application of GIS<sup>52</sup>. However, the approach toward the new GIS technology by Italian and other European cultural geographers seems to take place at first in a more relaxed terrain, nevertheless serious and critic, than the one felt by their Anglo-Americans colleagues. This happens for several reasons, here outlined by Guarrasi:

In primo luogo perché esso promana dall'iniziativa di geografi di ispirazione umanistica, formatisi alla scuola della geografia culturale di Costantino Caldo e impegnati nello studio di oggetti culturali complessi come il patrimonio culturale e il paesaggio storico; in secondo luogo, perché fin dal primo momento di dibattito pubblico si sceglie di tenere a battesimo il nuovo gruppo affidando la relazione introduttiva a Franco Farinelli. Si tratta di una scelta di campo attiva e consapevole: si inizia, ponendo la ricerca sui GIS sotto le insegne della critica della ragione cartografica. Il serrato confronto teorico e metodologico che si avvia, non perde mai di vista altri due importanti obiettivi: la

<sup>&</sup>lt;sup>52</sup> The fruitful and critical collaboration between cultural geography and the theory of virtual mapping will find further applications and reflections in the trilogy of "Paesaggi virtuali" (Guarrasi and de Spuches 2002).

formazione professionale di una nuova leva di geografi italiani, che non debba necessariamente rimanere confinata entro il perimetro ristretto della ricerca accademica; il confronto con la più ampia comunità GIS, costituita da società e istituzioni impegnate nello sviluppo e nelle applicazioni dei GIS al territorio (Guarrasi 2004: 5)<sup>53</sup>.

Consequently, Italian geographers follow with great excitement what is fermenting beyond Europe and they take advantage of the debates already started around the topic (i.e.the famous essay by Dobson in 1983), to forestall and shape the scope of GIS under the auspices of cultural geography. Certainly, it would be misleading to use these events as a single footprint of a generalized attitude among Italian scholars. In fact, there is anyway a greater attention and skepticism among humanist geographers in the ways the automated geography could intersect with geographical research. The attempt, it seems to me, to appropriate the GIS for cultural purposes rather to simply discard it, takes place in a climate of despair and trepidation, worrying geographers on the effects and on the impact that new technologies might have on their work and on social life more broadly. Not by chance, the geographer Guarrasi (1996), who had been previously engaged in the debate on the cartographic reason, lays the ground in Italy for the debate on digital geographies, discussing with similar preoccupations a threefold scenario. In the first one, following the Italian geographer, the digital turn represents a real mutation of the geographic knowledge driven as an effect of the technological revolution. It may cause a disappearing of geography as a discipline, by replacing it with other expertise and mechanic systems; in the second future, the automated geography reveals itself simply as a scholar's technological prosthesis, a medium among others that geographers can use for their research; in the last scenario, it constitutes an essential feature of the geographer's activity and a way to take part to the change brought by digital technologies in contemporary society, where the boundaries between real and virtual are more nuanced and hybrid (Guarrasi 1996: 3). In this perspective, the game is played on the engulfing and absorptive capacity of these technologies over the professional work of the geographer. It beckons to more or less apocalyptic scenarios in

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<sup>&</sup>lt;sup>53</sup> Tr. from orig. IT: "primarily because it emanates from the initiative of humanistic inspired geographers, trained in Costantino Caldo's school of cultural geography and engaged in the study of complex cultural objects such as cultural heritage and the historical landscape; secondly, because from the first moment of public debate we choose to present the new group by giving the introductory talk to Franco Farinelli. It is a decisive choice, active and conscious: we begin by placing the research on GIS under the banners of the critique of cartographic reason. The starting clenched theoretical and methodological comparison never loses sight of two important objectives: the professional training of a new Italian geographers' lever, which should not necessarily be confined within the narrow scope of academic research; the comparison with the wider GIS community, made up of companies and institutions engaged in the development and application of GIS to the territory" (Guarrasi 2004: 5).

which the geographer is asked to act in advance, to anticipate prophetically the most radical repercussions in order to 'rescue' the discipline, and to accompany geography without strong jolts into new configurations. In returning to the issue after twenty years, we might open to a fourth scenario, where none of those aspects has been fully realized, rather coexist, depending on which geography we look at, thus avoiding to generalize the figure of the geographer *tout court*. In truth, whether it is quantitative revolution or the irruption of GIS, as it has been with the cultural turn or with the non-representational, we should accept the fact that we often have to do with very narrow academic cores that manage to have an eyesore impact and, for this, to spread their ideas. These new conjectures, however, have never an instant later. Who has been trained in a certain kind of paradigm hardly abandons his or her comfortable ground. Time is needed and often the challenges are taken up by the following generations.

### 2014. Leaves fall again. Re-visiting Friday Harbour

From 17 to 20 October 2014, a large group of human and physical geographers as well as GIS practitioners have decided to come together, after 21 years, in Friday Harbour laboratories with the aim of discussing the status of critical GIS. The chosen name for the workshop is "Revisiting Critical GIS" with the idea to re-vision the aspirations and the torments of the previous two decades of debate. The context, in some respects, has dramatically changed. Or rather, many of the predictions, but also of the wishes and the anxieties raised during the nineties, are now perceived as a material foothold. The convenors are in fact aware of moving within the hybrid and slippery territory of the geoweb (Elwood 2010) or new spatial media (Crampton 2010), dominated by a ubiquitous digital mapping that defines the phenomenological, social, political, economic coordinates through which to perceive and act on contemporary space. They are also aware that the associated concept of 'critique' into GIS, we have seen it has been central in the 1990s and tied to the deconstructionist philosophy, has now turned into a passe-partout word, although empty of meaning if it is not contextualised in the work of each scholar. From the comparison between the different souls of the American geography emerges in fact a new conceptualization of critique, with different weights and measures. On the one hand, it seems explicitly mobilized when referring to the use of qualitative methods with respect to the quantitative models; on the other hand, the critical work is seen committed to the social theory. It results in dealing with GIS and spatial analyses in order to provide answers to urgent issues: health, housing and the like. For others, the concept of critique remains still the intent of deconstructive postmodern geography (Crampton 2001), incorporating the evergreen issues on ethics, reflexivity and representation, now addressed and integrated into the framework of GIS thanks to the work of feminist carto-geographers (i.e. Schuurman 2004, Kwan 2008, Elwood 2008). Compared to the 1993 workshop, two different concepts, somehow absent in the previous debate, find a renovated lifeblood. First, it makes its way the idea of a 'Critical quantification' intended as the effort "to re-appropriate and refashion mathematical, statistical, and computational practices using theoretical insights stemming from a serious engagement with the methodological, ontological, and political commitments of social and cultural theory" (Thatcher et al. 2015: 5). The dialogue with the quantitative dampens the tones of the trenchant critique of previous years, built instead on the divide between quantitative and qualitative methodologies, an oppositional logic that led to the impossibility of dialogue between the two parties, both in the United States and in Italy (in this case despite the seam attempted in the late '90s). Secondly, the possibility of the new dialogue between a cultural and qualitative geography and a mathematical-methodological approach converges in the spread of the so-called "digital spatial humanities" (Drucker 2012), namely traditional humanistic disciplines that seek to re-think and re-read cultural and spatial representations through the support of media computation. An example is offered by the recent work of David J. Bodenhamer, Deep Maps and Spatial Narratives (2010), where the author, aware that the idea of humanistic space is very different from the Euclidean conception incorporated within the GIS, explains the concept of deep mapping and changes the terms of the dispute. He refers to a deep map as:

a detailed, multimedia depiction of a place and all that exists within it. It is not strictly tangible; it also includes emotion and meaning. A deep map is both a process and a product – a creative space that is visual, open, multi-layered, and ever changing. Where traditional maps serve as statements, deep maps serve as conversations (ibidem: 2).

If to change is the background, the terms of the debate are more less left unchanged. To be more precise, there are issues that come back in much the same form as they were presented during the 1993 workshop as that of cultural representation, evident in the approach considered by digital humanities in terms of deep mapping, issues that we will explore at length in the next chapter. However, the crux is now offered by the question of

social justice. It is in fact discussed the progress of GIS in terms of supporting social justice which might affect marginalized groups in urban and rural territories. Notions of coparticipation, digital empowerment and inclusiveness are now buzzwords and signal the geographic agenda with a question that constitutes the common thread of many interventions: "Who is missing? How would their presence alter not only our internal conversations but also the social roles of critical GIS?" (Thatcher et al. 2015: 4).

In sum, many of the issues dear to the postcolonial and feminist criticism become, now, a more explicit reasoning field. Finally, the reflection on the new GIS applications, and spatial technologies in general, requires participants to think through the kind of political economy in which these practices emerge. "A political economy of GIS should be forward looking, examining not only the historical paths that led to the present moment but also those paths opened and foreclosed toward possible futures" (Thatcher et al. 2015: 6). This effort should certainly be contextualized in the neoliberal perspective, in which key role is played by the way the ideology orients technology development and how technology, in turn, stabilizes the status quo.

### Reclaiming the skin: epidermic GIS and feminist epistemologies

The irruption made by female researchers into the world of critical GIS has certainly reinvigorated and radicalized the terms of the debate around the new mapping technologies with an emphasis and, above all, a practical engagement in mapping that were not present in previous works made by feminist geographers, in the sense that they were mostly theoretical and aimed to deconstruct heteronomous cartographic representations while looking for an alternative and utopian mapping scenarios in literary and poetic texts rather than in visual products, that is within the cartographic frame as such. In the realm of GIS, it is, instead, about scholars who practically use mapping tools in their research, thus they are constantly asked to reflect on the limits, pitfalls and possibilities of articulating feminist epistemologies—including issues of self-reflexivity, emotion and counter-politics—with the potentialities enacted by digital technology (see McLafferty and Tempalski 1995; Hanson, Kominiak, and Carlin 1997). As it was for the modern and geometric cartography, the geographical information system comes to be at first approached by feminist scientists as a re-proposition of a masculine form of controlled knowledge. In this vein, the trouble of inhabiting the cartographic gaze is transposed into a struggle field where alleged subaltern and marginalized subjects could reclaim the vision and power of modern techno-science to

make particular social claims. Specifically, very soon feminist scientists realize that GIS technologies can be torn and used to foster progressive politics and to participate in "earth-transforming challenges to the views of the masters", as outlined by Donna Haraway (1990) in her cyborg manifesto. Challenging the view of the masters, therefore trying to subvert and striate the centre of representation from within, primarily "involves making emotions, feelings, values, and ethics an integral aspect of geospatial practices. Only then will moral geospatial practices become possible, and only then can we hope that the use and application of GT will lead to a less violent and more just world" (Kwan 2007:23).

It is by no means an easy task. On the contrary, it condenses a series of paradoxical statements and behaviours that I have already discussed in the case of the postmodern feminist approach to cartography (Chapter 2). In particular, as I have already argued, the digital turn has not really changed the tone and the main problematics of the debate on the ontology and the epistemology of mapping, but it has rather intensified them, and the same can be said with regard to feminist GIS. In this sense, it is necessary to see the theoretical approach foregrounded by feminist scholars concretely at work in this field, being aware of the limited, or better 'ontologically different' application, they can have within the discipline of GIS. For instance, in her long-standing involvement with digital mapping, geographer Mei-Po Kwan has argued that "there are no readily available procedures in current GIS for representing gendered bodies, women's knowledges or desires" (2002: 651). This statement brings up a crucial issue for feminist geographers, mainly related to the quality of representation. In this vein, there is an overemphasis on how to distort the layered and geometrical space visualized by the GIS to accommodate the complex, bodily, epidermic and affective point of view demanded by a feminist spatial envisioning. Under this light, one of the main troubles to solve would resonate more or less like this: "[c]an technological vision hints at ways that the things many feminists have feared most can and must be refigured and put back to work for life and not death?" (Haraway1991: 4).

In tandem with this this persistent boundary making between life and death, encapsulated in this case by the more than suspected division between emotion and science, between lived space and geo-visualization, several feminist scientists have tried to put the skin on their transparent tools of analysis, to re-live and curve them following their desires and goals. This theoretical attitude results in the effort to re-configure geo-spatial technologies through some of the most important theoretical points of feminist, queer and postcolonial thought (in their

productive and dangerous remixing). Such tendency has been legion in the work of feminist GISers, even if it has not always been fully acknowledged by male colleagues.

There are at least two main potentially connected trends that have signalled the path of Feminist GIS so far. Firstly, we can find works that exploit georeferenced information to highlight inequalities and differences experienced by women in daily spatial practices (seen in their intersectionality with gender, class and race, sexuality and desire). In 2008, Mei Po Kwan discussed for instance the impact of anti-Muslim rhetoric on the life of American Muslim women in Columbus (Ohio). She collected data from their oral histories, field diaries and in depth interviews to then represent them in the GIS, visualizing the access and use of public spaces, the risky perception of the urban environment across several times and spaces. Likewise, Marie Cieri's (2003) study of queer tourism has highlighted how GIS can be used to explore the gendered and sexualized geographies of urban space.

The second strand concerns closely the issue of representation. Indeed, very often they have been underlined the limits and the constraints embedded in the geo-visualizations used to bring out a more complex and sensitive vision of space. For example, a project like the Harass Map, a crowdsourced mapping experiment which allows users to report instances of sexual harassment and assault aimed at or experienced by women in Egypt, turned to be inevitably the focus of a dual critical attention. On the one hand, it has been claimed by feminist practitioners as a fruitful example to underline the importance of mapping technologies at the service of women (Leszczynski and Elwood 2015). On the other hand, the Harass Map has been criticized for offering an ambiguous representation, because from one hand it attempts to 'empower' women but it ends up amplifying the similarly imperial techniques of objectifying them. Once scanned into the digital interface, Arab women are transformed into 'data bodies' (Puar 2007), or bodies materialized through numbers, algorithms, statistics, and data streams that are racialized and sexualized through the information they assemble (Grove 2015). The use of Harass Map as evidence of gendered sexual violence blurs how these categories are constructed and conflated, flattening their nuance into a calculative set of variables that can be mapped, ordered, and filtered into zones of security and insecurity. This is a crucial point that keeps several feminist geographers still detached from an engagement with mapping practices, even digital. This is why Mei Po Kwan points out that: "[t]he question is perhaps less one of the possibility of feminist GIS practices than one of how this potentiality can be realized" (2002: 656).

In this sense, one can struggle to look for alternative, not categorized, non-mathematical spatial visions or can accept the representational way enacted by such technologies as radically different but not for this less evaluable or disposable for the fact it makes actions possible, especially political, in space (see Chapter 5). Above all, cartography can be accepted rather than a feminist representation of space as a spatialisation of feminist issues. This way, we might think at the work of feminist geographers and their translation to the issue of mapping and technology as a way to imagine more vividly the mapping as a navigational practice (Braidotti 2014), but one very different from the interpretation proposed by Latour (2010) and Verhoeff (2012). The cartographic medium here remains a political device able to expose the power relations embed in Western societies. Under this light, "[t[he strength of GIS methods lies in helping the user/researcher to identify complex relationships across geographical scales" (Kwan 2002: 650).

In short, especially for those who try to make collapsing cartographic practices within a feminist agenda, at first stance, the map might appear as the reduction of the world into two dimensions (Guarrasi 1996: 6). This reductive space keeps missing and far uncharted the possibility and the consequent "aporia" to treat and hence re-think cartography itself as an entirely feminist epistemological and practical experiment. But in reality, "per coloro che non dimenticano che la mappa non è il mondo reale, aggiunge un grado di libertà. Obbliga e reduce solo coloro che confondono l'immagine con la realtà" (Guarrasi1996: 6)<sup>54</sup>.

This new degree of freedom might be opened when we will stop to ask only "what would a 'feminist' GIS look like—but when we will also start to wonder—how and for whom might it be used?" (Mc Lafferty 2002: 267). A freedom, for instance, embraced by Amy Propen (2009) when she proposes to understand the map not only through the ends of a god-trick discourse but also from the vantage point of producers' experience in the ways it allows us to understand maps as producing a very specific sort of agentive, local, embodied knowledge. In other words, we might say that GIS is an ambivalent instrument involved both to enact and exert a pan-spectre surveillance over people but also to achieve a political and participatory spatial knowledge, allowing counter mapping strategies for political organization and resistance.

<sup>&</sup>lt;sup>54</sup> Tr. from Orig. It: "for those who do not forget that the map is not the real world, it adds a degree of freedom. It obliges and reduces only those who confuse the image with reality" (Guarrasi 1996: 6).

We might now have a better clue that issues of reflexivity and criticality have been at length discussed by feminist scholars working with GIS, and they have fully responded and acknowledged the preoccupations mobilized by human geographers. As Mei-Po Kwan synthesizes, "they suggest that feminist GIS users/researchers need to acknowledge and deal with the limitations of GIS methods, the power relations GIS entails, the difficulty of practicing reflexivity, and the ethical or moral implications of the knowledge produced" (Kwan 2002: 648). Feminist and critical GISers who occupy, however, a very small corner of the GIScience, have instead proved that is possible to make explicit their position and point of view in the process of mapping construction, acknowledging the pregnant opaque character of the technology and wondering about how to give back the complexity and subjectivity of the object of their visualizations. More generally, though, after the attempts made by some human geographers to seek and set a dialogue with the new digital technologies and their practitioners, in the last two decades the gap between the 'apocalyptic' and 'integrated' scholars, as defined by Guarrasi (2004), in some respects has widened. As such, the fate of the two professional figures of the geographer and the GIS specialist has continued to be differentiated. More importantly, we have considered so far the GIS as the ultimate evolution of the map, overlapping very often the two terms. In truth, several geographers prefer to distinguish between a general theory of mapping, that we might also refer to map studies or critical cartography, from the science and practice informing geospatial technologies. Therefore, if in the previous sections we have focussed on GIS as a specific kind of technology dealing with spatial analysis, is now time to talk more broadly about what is referred as critical cartography. Even here, it comes to a school of thought manifested in certain niches of the Anglo-American geography that then spread out by engaging geographers of different schools and locations in a wider debate. This means that, despite the large body of critical theory on cartography possible to be accounted (\Chapter 2), in the historiography of this development there are not usually included scholars who actually carried on, when not anticipating, the same discourses in continental Europe. In this respect, due to the snug character of the community, it is possible to trace a founding act, the launch of a critical cartography group in 2006. In that year, ACME: An International E-Journal for Critical Geographies published a special issue devoted to 'Critical Cartographies', edited by Leila Harris and Mark Harrower. In the virtual platform, geography and cartography of the 21st century meet again and, this time, in the common denominator of

critical theory. Several scholars are in fact asked to take part in an overarching reflection on the fruitful intersections between critique and contemporary mapping, however not strictly bounded to GIS. In this regard, we might also recognize how the sense of critique is afforded in a narrower way compared to the 2014 conference of *Friday Harbour*. Indeed, the special issue on *ACME* can be considered the first attempt to systematize the new emerging current of critical cartography in a less technical-skilled and critical quantitative level as demanded indeed by GISscience. By way of example, in a note on the margin, Crampton and Krygier underline that:

[t]he terms critical GIS and critical cartography overlap but do not coincide. While they spring from the same critical philosophy described above, critical GIS refers to the social implications of geographic information systems, the hardware and software for interactive spatial data visualization and analysis, while critical cartography is a broader term referring to maps, mapping and mapmaking more generally (2006: 16).

In this way, they set critical cartography as the general theory of contemporary mapping practices. At the core, they claim to re-locate the theoretical work untethered by historical geographers, in particular Harley's critique of modern cartography, in the new time-space of contemporary mapping projects. To return to the topic, I would say that we are now fully aware that Harley has not been the only geographer to propose a critical reading on cartography, but he is still chosen by latecomers as a pivotal figure to approach and dismantle the contemporary mapping architecture. A great sense of responsibility toward the past is still evident on how those critical geographers discuss the critical opportunities and limitations offered by contemporary mapping, accepting that "some elements of the gulf between critical theory and mapping technologies and practice remain difficult to traverse, both theoretically and practically" (Harris and Harrower 2006: 2).

In my personal reading against the light, the resulting scheme is to engage with the full sense of critical theory as introduced by Benhahib, namely to discuss the social implications of contemporary mapping/GIS (the explanatory-diagnostic) with the aim to curve the power of mapping for purposes of social justice (the anticipatory-utopian). This is confirmed when the two guest editors affirm that:

Doing so would allow us to be reflexive in terms of how we choose to engage, or not, with cartographic possibilities, techniques, and technologies, including forcing us to consider their reformulation in ways that might be more consistent with alternative possibilities, political goals, or futures (Harris and Harrower 2006: 9).

In this vein, the same issues that we have seen at work in the field of critical and feminist GIS have been addressed in more general terms by critical cartographers, whose main difference in regard with the two above figures is that, most of the times, they are not cartographers at all. This is a crucial passage. Critical cartographers are indeed the 'critics' presented at the beginning by Zook (2015, online), geographers usually well informed by Marxist and radical analysis and trained also (more theoretically than practically) in the reading of geographical maps as well as in the production of GIS even if they are not necessarily inclined to use them in their studies. In short, practitioners of critical cartography participate in a way of deconstructing the cartographic knowledge that does not require to be part of the GIS industry. Therefore, for the exception of feminist GISers, the issue of reflexivity here is not discussed in relation to cartographic production but more in terms of consumption. In this sense, the boundary between reflexivity and reflection become more nuanced.

Reflection suggests a mirror image which affords the opportunity to engage in an observation or examination of our ways of doing, or observing our own practice, whereas reflexivity is more complex, involving thinking about our experiences and questioning our ways of doing (Hibbert et al. 2010: 15).

In this facet, Critical Cartography might seem to embrace more a 'reflective' attitude towards the position, the arguments and the modes through which researchers construct their analysis and claims. Moreover, the geographical reading of the cartographic enterprise does not necessarily coincide with the reflexive reading that cartographers or GISers or even coders (Zook et al. 2015, online) give on their ways of doing, thinking, producing and delivering their cartographic products to other institutions. With this awareness, the idea of a critical cartography has been then shaped in order to underline the new trajectory of a critically minded cartographic practice. More specifically, I wish to signal the fact that for these geographers, being critical about the cartographic enterprise does not mean only to recognize a renewed translation of its governmentalist and imperialist past when cartographers played anchoring power functions. It suggests also not to cease to question their own contribution even in current maps' analysis. Indeed, critical mapping does not work against the use of maps. Contrary to this, "Maps are active; they actively construct knowledge, they exercise power and they can be a powerful means of promoting social change" (Crampton & Krygier, 2006:15).

This means, especially for the sense sometimes shared by 'cartophobic' geographers, that critique should be more than a gesture of wholesale negation. The predictable ritual of rejection is rather replaced by the possibility of curving the mapping technology toward activist purposes. We may therefore consider the utopia rightly in the sense provided by Luciano Lago (2004), not as a place to reach, but as a social reality to realize. This attitude promotes projects earlier defined as counter mapping whose aim is "to re-present the world in ways that question or destabilize dominant representations, which are often imbued with various silences (especially on subaltern groups) and insensitive to the effects of oppression and violence" (Kwan 2002: 649).

Importantly, the recent trend for a more critical and reflexive cartography (Casti 2015, Crampton 2009, Pickles 2004) is closely related to the experts who are trained in geography schools. Yet, given that contemporary mapping is today driven outside familiar and comfortable geography's boundaries, it would be important to ask what should be the role of geographers in this "outer" mapping turn. In other words, how geographers or cartogeographers should engage with this outer or in-between cartography that has been termed "neo-cartography" (see Chapter 4 and 5)? To fully accomplish the mission, it is important at first to free cartography of the previous destructive rhetoric.

### Beyond cartography: destabilizing and troubling representations

So far I tried to articulate the nuanced meaning of the post-representational in the work of critical GIS, considering at first the implication of the 'post' in a chronological significance, that is as an aftermath of the traditional map, and seeing closely the difference and continuities between the ontology of map-making and that of the geographical information system; secondly I treated the 'post' as a going behind the logics of production and visualizations of contemporary digital mapping tools, by putting in the foreground specific questions and anxieties raised by human geographers and new cartographers like feminist GISers and critical map readers. In truth, they are very much indebted with previous debates

<sup>&</sup>lt;sup>55</sup> The term "neocartography" refers to: "many examples of new and innovative mapping produced outside the normal orbit of existing cartographers or map producers. The term neocartographers is being used to describe map makers who may not have come from traditional mapping backgrounds, and are frequently using open data and open source mapping tools. Another difference is in the blurring of boundaries between map producers and map consumers. The availability of data and tools allows neocartographers to make their own maps, show what they want, and often be the intended audience as well – that is to say they may make the maps for themselves, just because they can. There is a real need for a discipline to be established to study this essentially undisciplined field of neocartography." Source: <a href="http://neocartography.icaci.org/">http://neocartography.icaci.org/</a>. Futhermore, The International Cartographic Association (ICA) has recently established a Neocartography Commission.

and critical work on postmodern geography and its emphasis on the politics of representation. Without any doubt, the interest on power and ethics is not destined to disappear even in the current epoch. However, it is important to acknowledge that maps have radically changed the modes through which they are crafted and how they circulate, involving a massive and heterogeneous presence of new actors and referents. The abundance of such mapping practices will be particularly outlined in the following chapters, once the issue of transitivity will be finally sketched out. To prepare the ground for this theoretical passage, it is now essential to enrich the ways to address such autonomous and heteronomous mapping practices. Indeed, if the method of questioning remains univocally the same shaped during the anti-positivist era, we might feel to be paralyzed by the search of other ways of looking at the universe of mapping. This means that if attention is crystallized again and exclusively on the map as a kind of powerful mimetic representation and intended only as a purely locus of meaning to deconstruct, the risk is not to grasp what is fermenting beyond the familiar domain of the representational. Consequently, the possibility to produce argumentations for something that is not strictly related to the internal meaning of an image or its political application is entirely ruled out or not taken equally seriously. The violence of representation, what is to be included or foreclosed within the frame, is still a core issue. However, considering the limits of such approach is also important and instructive for the researcher. Specifically, the kind of reasoning unleashed by figuring a standard-alternative, in-out, power-resistance discourse is likely to lead to a dead end if not to an ontological cage if we do not accept the fact that maps, as photographs or texts, are configured in multiple but specific ways. It is no coincidence that several nomenclatures are available to speak about the different nuances of cartography: mapmaking, mapping, vernacular cartography (Gerlach 2010), psycho-geography (Debord 1958; De Certau 1984), way-finding, Geographical Information System, locative media and new spatial media (Crampton 2009), among the many other definitions that we might encounter once entered this convulsed path. The point I wish to make is that cartographic ontologies can be scrutinized differently but we cannot expect to make maps capable of everything without recognizing their affordances, instruction codes and frames. When the claims to overturn and disfigure a map are made, we get excited by the promise of new world's configurations, as for the case of feminist GIS and feminist geographers, yet consequently depressed because the alternative cartographic representation proposed is still too similar to the comfortable texture of a map or too far not to be possible to be claimed still as a map. In this sense, sooner or later, we end up surrendering to the

impossibility of being able to pour on a specific frame everything we think is related to other conceptions of space and time, such as the humanistic and geographical one. With regard to this aspect, I tried to argue that is certainly important to integrate the utopian and anticipatory moment with the diagnostic one (Benhabib 1986), therefore to address not only a "historical" question—under which socio-political and cultural circumstances 'things' such as maps are made meaningful—but also "transformative"; what might be possible to create once deconstructed several apparatuses disciplining our ways of seeing, living and acting in a cartographic world?

In this spirit, the second approach inevitably demands to explore new modalities of making maps, thus to constantly improve and re-configure already existing cartographic visualizations. In this regard, the question of representation is unavoidable. However, what this second question also considers, as I translate it, is to suspend for a moment the cultural representational and interpretative attitude in order to open to some destabilizing movements, ways of seeing differently the mapping culture we are already producing and consuming. The movement, as I conceive it, does not have to be necessarily that 'forward', but it could be also read more as a "shaking" in Deleuzian terms (Deleuze and Parnet 2007). This means that, as cultural geographers, we do not have to consider, as GIS specialists instead do, only the specific and continuous change of mapping technologies and output visualizations to state to what extent previous object-related affordances can be overcome. My effort, in fact, is to address what we already have under our eyes in a different way. See differently, think differently, namely multiply the points of view in respect of this topic, without forgetting the charge and the weight of previous debates but rather trying to make resonate one with the other. Or better, the theoretical posture to which I would like to turn is to use outer concepts in order to soil the geographical ones.

The first movement: oscillating between map-making and mapping

How we might begin to look differently at maps?

As Guarrasi asserts: "il primo passo è non credere in ciò che vediamo: ovvero, non confondere il prodotto con il processo da cui deriva" (1996: 6)<sup>56</sup>. In light of this consideration, the last significant nuance activated by the prefix 'post-' allows us to undermine the two critical flows governing contemporary cartography. They could be

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<sup>&</sup>lt;sup>56</sup> Tr. from orig. IT.: "[t]he first step is not believing in what we see: that is, avoid to confuse the product with the process from which it derives" (Guarrasi 1996:6).

channelled in a swing between map-making and mapping, that is the study of maps as cultural objects (inscriptions and material representations, namely products) or their analyses as processes, that is mapping.

At first stage, we might ask what it changes if we shift our attention from the object to the process. Primarily, we could challenge the definition of the Italian geographer and reverse his perspective. In this sense, I would suggest to treat the map, the object, as a process itself, as a result of an always emerging, relational, and contextual set of practices. Practices starting, as in the case of a professional cartographer, with the decisional process, the data collection, the drafting phase until the final production of the map. Maps, however, continue their work once they are published since they are crafted for several purposes and audiences and intended and used differently by them. The map consumer, as we are going to see in the next section, is not a passive viewer. In this sense, considering such processuality means to unfold every map "as always in a state of becoming; as always mapping; as simultaneously being produced and consumed, authored and read, designed and used, serving as representation and practice; as mutually constituting map/space in a dyadic relationship" (Dodge et al. 2009: 17). In other words, it could be misleading and reductive to put the focus only on maps' frames and it is important to stress the attention also in their contingent use. For these reasons, the movement (the shaking of the cultural object) becomes a way to examine the work that these geographical images do in practice.

Secondly, it means, as Guarrasi (1996) analytically suggests, not to confuse the agency of mapping with the materiality of the map. Exposing and unfolding the representational architecture of the map requires different questions from the ones concerning their procedural features. Indeed, the emphasis on the process and becoming of the map object or event-ness leads to a careful reflection on the interchangeable use of mapping and mapmaking. Perhaps, it fails to grasp the shade of meaning required by the two terms. As Denis Wood (1993) observes, mapping is a search and consequent creation of spatial relations, whereas the map-making results in the inscription of this relatedness pattern into an object. On the same line, Tim Ingold (2007a) argues that mapping is not cartography as such, a disciplinary discourse historically constructed, but concerns the visual articulation of individual's relationality along space and time. In order to have a better understanding of this distinction, we should refer to Rundstrom's memory of his 1989's field work in Alaska:

During the field work in 1989, one Inuk elder told me that he had drawn detailed maps of Hiquligiuaq from memory, but he smiled and said that long ago he had thrown them

away. It was the act of making them that was important [...] not the material objects themselves (1991: 165).

In this quote, it is masterfully underlined the non-univocal correlation between the map and the drawing process, where the latter becomes a sort of evocative act (see Mangani 2006). The problem gets to be complicated, indeed, once one wonders not only who is mapping what, but what kind of mapping is at stake and if the result of this activity could be seen as a map. A cartographic representation is certainly the product of a mapping activity but it has not to do only with this aspect; at the same time, not all mappings admit the construction of maps as artifacts, as the geographic knowledge proposed by Inuit suggests. Thus, mapping and map-making differ and even if post-representational authors rightly assert that "maps are practices – they are always mappings" (Kitchin 2007:5), is not the same to state that every mapping is or results into a map. Nevertheless, mapping has been variously designed by postrepresentational geographers as a "spatial practice enacted to solve relational problems (e.g. how best to create a spatial representation, how to understand a spatial distribution, how to get between A and B, and so on)" (Kitchin and Dodge 2007: 5). In this explanation, however, there is still too much emphasis on cognitive and behavioural aspects of mapping while the discursive and performative dimension, how such mapping trigger new situations and perform materially realities, might appear to be put on the background. The communicative dimension of the map, its evocative and emotional depth, - the energheia - or the political discourse and the apparatus within which it is created are, at a first glance, not considered. In short, the map is not read as a "a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions" (Foucault 1979: 56), namely as a dispositif. This theoretical void is what has been contested by several political and cultural geographers. They have admitted to share the ontogenetic passage encouraged by post-representational authors in terms of process, performance and agency but to be more dubious of putting in the background issues relating to the politics of spatial practices enacted by cartographic operations. Regarding this point, political geographer Hakli assesses:

I propose that instead of looking at what is depicted on maps, or the manner in which this ties with various power geometries of the social world, geographers should focus on the politics of those social and material practices that employ maps and mapping. Such an approach entails a thorough scrutiny of the actual social and material relations and institutions that mapping practices help to consolidate (in Herb 2009: 335).

To slacken the hold of the cognitivist strand implicitly embedded in the vision of mapping as a 'problem solving spatial practice', other geographers prefer not to deny the political dimension activated and consolidated by maps and to contextualize them in a broader discussion involving questions of socio-practical uses. To put it briefly, we know that Geography is stitched together through the crisis-crossing and interlacing of these discursive filaments as they fade in and out of focus. Ultimately, the different positions that are emerging as incommunicative and separated can be instead jointly related if we understand that the mistake made by previous studies on cartography has been rightly to separate maps, perceived as approximate and ideological representations of space, from their spatial practices (Del Casino and Hanna 2005).

This perspective suggests that every act of mapping is the product of a spatial practice. To better understand this aspect, we can return to the distinction proposed by Guarrasi (1996) when he admonishes not to overlap the internal representation of the map with the process of mapping. Space in fact can be represented in different ways and that of the geographical maps seems to be closed to the concept of "spatialization" as illustrated by Doreen Massey through the work of Bergson and Laclau: "space' is equivalent to representation which in turn is equivalent to ideological closure. For Laclau spatialisation is equivalent to hegemonisation: the production of an ideological closure, a picture of the essentially dislocated world as somehow coherent" (2005: 25). In this light, according to the majority of critical cultural geographers, maps and GIS are seen as ideal for analysing metric and bounded representations of space but they have limited utility for studying spatial practices. These scholars, however, neglect the fact that every mapping is anyway emergent from a spatial practice that may not be visible within the frame but that could be retraced by interrogating uses that are not strictly related to the internal representation of the map. Maps, indeed, are movable objects, imbued with meaning through a series of complex socio-cultural practices, disputed, intertextual and interrelated (Del Casino and Hanna 2005). Therefore, the chance to overcome the Cartesian divide between reality and representation resides in conceiving maps themselves as spaces. "Map spaces" is indeed the term suggested by Del Casino and Hanna (2005), where space can be intended as the agency of map configuration, a relational process where representation and practices cannot be disjointed. In this spirit,

these new ways of thinking about cartography opens up the debate on the ontology of maps, creating new post-representational and processual modes of understanding. In so doing it allows cartography to be reconceived in such a way that the technical and ideological aspects of mapping can be considered and practised together (Dodge et al. 2009: 9).

Hence, it is critical to recognize that what we refer as "space" is also built by mapping practices, so that the map is not simply a reflection of the world, but its continuous and each time divergent re-creation (Del Casino and Hanna 2005). Seen from this angle, understanding and articulating the logic of map production is no longer a matter exclusively immanent to the image but it becomes external to it. Therefore, the network through which maps are produced needs to be fairly traced and made visible in order to reveal the logic behind the regimes of representation constructed around it and to see also how such visualizations affect the way in which we perceive and act through them. This way, it remains also instrumental to explore such practices as included in several systems of representation crossed by lines of power which need to be revealed, deconstructed and challenged in a continuous game of breakups and remakes.

### The second movement: performative mapping

As we stated in Chapter 1, in the last two decades, terms as performance and performativity have entered the vocabulary of cultural geographers as a sort of totemic words, especially for those who confront with the chaotic space of non-representational theory. When considered for mapping practices, the issue of 'performative' may conduct toward very different considerations depending on the contested meaning of both performativity and performance (Gryson and Rose 1998). For real, a first use of the category 'performative mapping' has been proposed by Cosgrove and Martins (2000) in their famous "Millennial Geographics" essay with respect to the analyses of millennial urban performances in Rome and London, respectively the Jubilee and the Millennium Dome. The two events have been seen as mapping "in the sense that they are intended to measure, trace, and represent spatiotemporal concepts and connections" (Cosgrove and Martins 2000: 97). According to Cosgrove, such celebrations and hodologies (itineraries) are performative in the way they re-enact the potentialities of places, giving them new life by maintaining a symbolic connection with past and historical experiences, through the placing and narrative of a genius loci. Here, "the map itself becomes a discursive expression of an active and

participatory geographical imagination, and thus liberated to participate in the creative processes of place-making" (Cosgrove and Martins 2000: 107).

The British geographer, however, contests the idea to freeze the interest only in the representational character of the map, claiming "performative mapping [as] a creative intervention in making rather than representing space, generating knowledge and insight: 'the art of observing is combined with the art of inventing'" (Cosgrove and Martins 2000: 108).

The idea of performative here is linked to the one of the discursive where images, symbols, journeys are seen as producing material effects on reality. In addition, in the following lines of the text, the art of inventing finds a fruitful espousal with the invention of the art, intended as an artistic incursion to realize the potentiality of alternative mapping. Performative mapping thus implies both the concept of performativity and performance and it plays with their subtle nuance of meaning. In this respect, the first refers to the Austin's act of speech where what is said is produced, it manifests its effects in the factual world. Performance, instead, assumes the presence of a subject who can play and perform different roles throughout life (Goffman 1959). Cosgrove, in particular, relies performance to the aesthetic and artistic creativity.

Considering the first approach, one could admit that a spatial representation has a performative role as for it produces the effects it appoints, and it can be functional if it allows, for example just like the map, "to find their own place on earth" (Raffestin 1986: 27). However, the reiterative process of mapping consumption can temporarily naturalize the map as something fixed and immbolized in its meaning (Del Casino and Hanna 2005). Who is aligned with post-representational thinking discusses indeed the processes that lead individuals to recognize that a given arrangement of points, lines and areas constitutes a map; further, a performative approach on the map may explain how it acquires an ontological security rightly because the cartographic knowledge is repeated over and over (Kitchin 2011). Yet, if we embrace the theory of performativity as discussed by Judith Butler (1988, 1990) in relation to gender issues, we could argue that it would be enough to perform mapping practices differently, subverting or decontextualizing them, in order to change them. This is practically the concept of performance foregrounded in the second meaning, the idea to transform, to recite mapping practices differently from the familiar ones. The latter aspect opens also to the idea of map consumption. Indeed, the act of consuming maps, as noticed twenty years before by Guarrasi (1987), not only defines what they are but it offers also productive possibilities in the holes and leakages opened by the processuality of map-making.

This way, the Italian geographer raises beforehand the opportunity to read the map as an ongoing process, an action, emphasizing the key role of the reader/consumer who can in turn reinterpret the reality expressed by the map: "è la lettura che la completa. Senza la lettura il momento della rappresentazione non ha successo. Qui la realtà viene di nuovo rappresentata e vissuta attraverso un procedimento imprevedibile che riconduce i segni al loro destino autentico: orientare l'uomo nella sua azione nel mondo" (1987: 45)<sup>57</sup>.

Under this light, one of the core digits of the post-representational is to shift the focus from the producer to the consumer, namely the map reader or user. The flourishing of locative or new spatial media (Crampton 2009, Verhoeff 2012) has certainly allowed even more deeper to transform such user into an 'active co-author' (Crang 1992) of the mapping practice. The freedom created by the digital space for the reader to jump from place to place, to compare, contrast, or simply juxtapose different elements has radically changed the nature of mapping as well, or better it has elected the map as the favourite key of access to the informational space. Maps have become 'hypertexts' as noted by de Spuches (1996, 2002) and this aspect "marks a move away from a modernist concern for 'objects, positions, order and stability' towards a postmodern emphasis on 'processes, relations, chaos, and instability" (Gilbert, 1995:7). It is not surprising, at this point, that another meaning of the performative has taken hold in recent times thanks to the proliferation of the interface screening culture, collapsing in the interactivity enabled by digital technologies. Visual theorist Verhoeff, for instance, considers performativity as an outcome of the navigational aspect of mobile screens, claiming for a performative cartography as an "investigation of the performative potential of screening, as both exhibition - or better put, installation - and as interactive practice, through the concept and practice of navigation" (2012: 135). Instead of reiteration, performativity here becomes an interaction between users, maps and spaces. In such interplay, is to the navigator to decide the best itinerary presented by the already algorithmically choices configured inGoogle Maps, and as such to co-construct the space. However, if that of Google Maps can still be seen as a controlled movement, the creative act of the navigation becomes clearer when we consider mash-ups, crowd-sourced cartographies and even mapping practices associated with games that give back the idea of a social, active, ongoing and ludic cartography. In this sense, as Verhoeff states further, mapping "is performative in

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<sup>&</sup>lt;sup>57</sup> Tr. form orig. Italian: "the reading completes the map. Without reading the moment of the representation cannot happen. Here the reality is again represented and lived through an unpredictable process that leads signs to their authentic destiny: directing man toward his action in the world" (Guarrasi 1987: 45).

the sense that the practice of this form of screening constructs the spatiotemporal, as well as the experience of urban space in *collaboration* with the user, without whom the effect would simply not occur" (ibidem: 136, my italics).

Even in her consideration, as for Cosgrove, the value of performance is not dismissed. However, here it is correlated to creativity in the sense of making, without finding a univocal correlation with artistic interventions. To sum up, a performative approach to mapping unleashes a series of decisive statements; we move from the idea of the map as effecting the event within which it occurs to a reality that can be changed and reversed if its representation is performed differently; finally, the performance/performativity of digital mapping can be intended as a space that can be navigated as an augmented reality.

#### The third movement: the mediat(iz)ed object

In the last meaning of the post-representational, the map is not considered as a cultural artifact. The object is not something to be scrutinized nor investigated as evidence of a wider social, political and cultural reality therein condensed, as commonly understood by socialconstructivist geographers. The objectivity of the map is rather seen as a form of mediation as for the map is basically a medium for generating various types of actions on the space. Figured as media, "maps are to be seen not so much as means of recording reality but as instances of a mediatization that intervenes to shape it, an operator able to alter it" (Casti 2015: 6). This is possible, according to Casti, for the principle of self-reference, namely the ability of maps to make themselves accepted as such (by their mere existence) and to independently communicate the intentions of the cartographer. In this way, a map can work as the Deleuzian "abstract machine" in the way in which it is blind and dumb but make others see and talk about something. In fact, the prosopopoeial view that addresses maps as "system of signs endowed with life of their own" (Casti 2015: 159), runs the risk to make them equipped with an over encompassing internal power, by bringing into the background the question of who produce such maps and for what purposes without even admitting that because of their informational and operational nature, such cartographic visualizations may however be far from being treated as living and lived objects. One could object, indeed, that most of the time maps pass as an absolutely deadly and silent iconography, to which most observers might be indifferent. So, rather than an internal power of the map, we could think of a number of potentialities activated by the map user, as argued in the previous section,

depending on different functions, motivation and skills. Under this circumstance then, the map "once it has been set up, remains relatively independent from all that preceded it, and goes beyond the uses for which it was initially intended" (Casti 2015: 27). This way, we can better understand that maps do not have meaning or action on their own; they are part of an assemblage of people, discursive processes and material things. In a Latourian sense of cartography, we might consider that every social event is identified as a heterogeneous network of connections where actors and objects are constantly working to bring or dissolve their mutual links. In this sense, the constructive character of the map is not strictly tied to the subject but to the practices themselves "made possible by networks of elements that make up the inscription device – and the networks of elements within which that inscription device resides" (Law 2004: 21).

In particular, Bruno Latour defines an inscription device as an "item of apparatus or particular configuration of such items which can transform a material substance into a figure or a diagram which is directly usable by one of the members of the office space" (Latour 1987: 51). The French sociologist argues that we need to understand how a representation is produced or manufactured through many stages of inscription and, in particular, to question how those inscriptions are produced, transported and contested. The network dimension is also crucial and it adds another perspective on the life of maps, approaching them as functions and not only as images, as devices able to affect actualization (Corner 1999: 225). This functional aspect is also considered, even from another perspective, by Christian Jacob when he points out that:

An effective map is transparent because it is a signified without a signifier. It vanishes in the visual and intellectual operation that unfolds its content. The map spreads out the entire world before the eyes of those who know how to read it. The eye does not see; it constructs, it imagines space. The map is not an object but a function. Like a microscope, a telescope, or a scanner, it is a technical prosthesis that extends and refines the field of sensorial perception, or, rather, a place where ocular vision and the "mind's eye" coincide. As a mediation, an interface, it remains hidden. (2006 [1992]: 11).

What geographers are now demanded to unfold is how to make visible the mediation exerted by the map. As Verhoeff (2012) argues, if we move from the understanding of the map as a cultural artefact to see it as an interface, we can easily focus on both the process and the entity which is temporary and fictional (see also Rose 2015a). This determines also a passage from the vision of maps as objects to complex machines in which objects, devices, human actors, interfaces are harnessed and interconnected but also disjointed and dissolved

depending on the various contexts in which such machines operate. This interfacing of maps is truly Deleuzian in its character and it reminds me of an ironic image that Gunnar Olsson provides in *Abysmal* (2007:61):

He [Deleuze] rises from the table at the Bar de Mille Plateaux, folds his napkin, kisses his friend and whispers, 'Oh Felix, always remember that the mappa of a map is a screening screen, a mirror of memories too easily forgotten. Nothing but the bottomless surface-in-between. Therefore, every map is an interface, every labyrinth a folded abyss.

In the end, what is needed, perhaps, is a heuristic approach as argued by Casti "capable of holding together the outcomes of cartographer and geographic theories, the artistic hybridizations envisaged by historical cartography and the possibilities offered by digital technologies" (2015: XIV). It is not surprising, indeed, that faced with the abundantly heterogeneous theoretical production in cartography over the past thirty years, those who remain nonetheless fascinated by maps cannot help but find it difficult to determine a singular place from which to speak. As such, we face at least three postures and none of them can be considered fully satisfactory. We might discuss a renewed silence on mapping; we might grasp the advent of a new orthodoxy and paradigm or, eventually, we can pose continual attention – historical, ideological, affective, processual – to the material and theoretical places from which such cartographic knowledge is produced. The third move is that I particularly encourage and, in the wake of which, the second part of my research takes flight.

# II. The cartographic unexhaustion

Re-living mapping through visuality and aesthetics

Exhaustion may be the term that acutely defines, albeit enigmatically, the hesitant and unnecessary passage from catastrophe to creation. And in this context, it could also bring to mind the interchangeability of the "nothing is possible" and the "everything is possible". (Pàl Pelbart 2015: 122)



Figure 8 Joyce Kozloff. Targets, 2000.

## Chapter Four

## Displa(y)cing maps

Mapping contemporary modes of seeing and sensing

La scienza visuale che si va oggi sviluppando è nient'altro che uno di quegli indizi, quei sintomi del fatto che qualsiasi tentativo di interpretazione del funzionamento del mondo non può far altro che tentare di fare i conti con la rappresentazione cartografica. (Farinelli in Iacoli 2014:15)<sup>58</sup>

We would argue that a new and critical engagement with visual studies could usefully inform research into mapping...Surely dialogue between visual studies and cartography would yield richer and more complex insights into the nature of mapping. (Dodge et al. 2009: 224-5)

The thing is, when it comes to mapmaking there are no outsiders, no more than there are outsiders when it comes to speaking or writing [...]. These are birthrights of the members of our society, who acquire the ability to speak and make maps as they grow up in it. (Wood 2003: 6)

### A map caught in the net of the living

It is a sunny Sunday of October when I decide to take a walk in the city of Vienna, where for personal reasons I use to come back quite often. After a sustained twenty-minute walk, I reach the main square where is enthroned the Parliament building. In looking around, in a kind of touring gaze, I get lost in my thoughts, without noticing what is happening on the surface on which I move. I give a deeper look wherein my feet are handling on. I am not walking on the cobblestones of the square, but on the fixed lines of a map. The dream or the nightmare of a map 1:1 averted by many geographers and writers curiously seems to have realized. The large expanse of lines running through the square has neither a legend, a scale nor typonimies. Only lines, sinuous as the streets of the city, which in their intertwining go on delineating the urban topography. Suddenly, a girl approaches me to provide some markers. I can trace the path that takes me from home to work, mark my favourite places, those places where a special event occurred. In short, one might begin filling

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<sup>&</sup>lt;sup>58</sup> Eng. Tr. from Original It.: "The visual science that is being developed today is nothing more than one of those clues, those symptoms of the fact that any attempt to interpret the functioning of the world cannot help but groped to get to grips with the cartographic representation." (Farinelli in Iacoli 2014: 15)

those voids with the geography of everyday life. The map takes shape under your eyes as a true act of user completion. Here is emerging, in a playful but effective manner, the new rhetoric of participation. Listening to the murmur of the people gathered there—while walking on the surficial geometry soiled by the scribbles of an army of amateur and vernacular cartographers—I also realize how difficult it is to negotiate the lived spatiality with this blank map, deprived by references and landmarks which could be useful to follow for orientation. Cognitive spatial skills are now demanded that not everyone might be used to develop at a time when the mobile mapping applications such as Google Maps and related seem to think and plan the space for us, telling us where we are and where we should go. The proliferation of these tools is probably leading to an impoverishment, as many argue, of the people's ability to analyse the path they do. In my case, I do not even know the city very well, but only those areas I frequent most. Hence, I am profoundly disoriented, having no idea which part of the urban area my feet are touching. But as I continue to follow the lines, I realize that there is someone worse off than me. Someone who lives at the edge of the municipality, not shown therein, and who has therefore decided to use the pen to add that part of the urban space that has been foreclosed by the architecture of the map. The trap of representation is always at work! (field diary, 15 October 2015, revised in 2016)



Figure 9. Die Weltgrosste Wienkarte. Urban Performance.

This urban project looks to finally give space to a way of seeing and sensing the map which takes account of the movement and manipulation of multiple embodied subjects. It brings back to my mind Veronica della Dora (2009)'s reflections on the performative materiality of the atlas. She notices that it allows you to negotiate the physical and imaginative encounters with the space through practices of gazing, pointing, colouring, by opening to "a two-way conversation that is at once visual and tactile" (2009: 243). This small episode of a vernacular practice of mapping, which might seem trivial after the political and critical issues raised in the previous chapters, it is rather an image that can condense some of the theoretical

and practical directions that the contemporary literature on the map-making is taking on. More clearly, the triad of chapters that we are leaving behind has provided us with the necessary luggage to understand, or at least to have a clue of, how it was formed, institutionalized, and nonetheless criticized the language of maps in the court of geography, or better of that geography in cahoots with the critical theory. Hitherto, it would be well now understood that in much of the treated works, the critical attention by human and cultural geographers has mostly lagged in the production of corporate, and later, professional cartographers, thus engaging in a sort of reflexive and reflecting gaze. Map-makers and cartographers have been unmasked now as authors, then as technicians, but mostly as liars (Poncet 2015). After all, I would argue that, running sideways, only the postcolonial and feminist interlopers have more vividly sketched with their impertinent visual and literal interludes the coordinates of an elsewhere cartography, unleashing a mundane, even if critical, mapping practice that could involve any group or subject outside of professional map-makers. Over and above, if the 'Map' has been praised as the archetypal knowledge of the world (Farinelli 1992), it would be also time to understand the modes, the subjects and the spatialities through which 'the mapping world' comes to be moulded and made meaningful in the contemporary globalized society, or at least in the Western one. According to Wood (1992: 18), this theoretical posture requires a focus on the role maps play in everyday life; hence to catch the flow of mapping practices in "the net of the living". In this respect, he points out:

To admit it that knowledge of the map is knowledge of the world from which it emerges – as a casting from its mold, as a shoe from its last – isomorphic counter-image to everything in society that conspires to produce it. This, of course, would be to site the source of the map in a realm more diffuse than cartography, it would be to insist on a sociology of the map (Wood 1992: 18).

Accepting the solicitation, the second part of the study overtly engages with other ways to theorize and practice mapping which are somehow the result of a cross-pollination and ongoing interferences of various disciplines interested in the connections between the spatial and the cultural turn, thus overrunning traditional conceptual boundaries between geographic and cartographic fields that are still localizable. From an empirical standpoint, displacing mapping means also recognizing the plethora of mapping practices and geographic visualizations experienced and produced by different actors from common cartographers and GISers but it suggests also to render them without following only geographic and

cartographic theories and methods. Above all, the main challenge of this chapter and the following one is to contextualize the livingness and deadness of the map in the heterogeneous body of the so called "image theory" or "science of the image" (Bildwissenschaft), oscillating between the notions of visuality and aesthetics and their legacy. More specifically, once moved chronologically and theoretically from the various representational turns experienced in geography, I propose to read contemporary mapping practices by accepting some tenets of post-representational cartography but re-visioning and contextualizing them in the study and methodology of a visual geography. The affiliation and co-action of these two not-yet institutionalized bodies of knowledge imply an explanation of the raison d'être of such intradisciplinary approach. In the particular case of post-representational cartography, I have the feeling that important theoretical contributions of critical geographers and cartographers on the ontology, epistemology and ethics of map-making, as well as the problematics inherent in the use of the word 'representation', the question of the power imbued in political mapping and the shift from the map's conception as an artefact to mapping processes, practices and performances are actually more practically visible and viable from outside, or better at the edge of the discipline's apparatus. So far, indeed, we have unpacked and sliced the cartographic production, following the detours of the conceptual metaphor of the mirror how the geographer or the carto-geographer reflects on what she or he produces and feels as belonging to the hybrids boundaries of her or his discipline. However, we realized that a distinction between human geographers (radical, humanist, cultural) and map-makers (later GIS analysts and big data scientists) was ought to be. A distinction, perceived at times as sharp, sometimes as blurred and nuanced.

In the long run, I took the side of the geographer as I see myself a cultural geographer, and I focused more on how (even *ante-litteram*) cultural geographers have looked at themselves and motivated the change of the geographic thought in relation to the trope of the map. However, as Guarrasi (2004) contends, the transformation of the geographical thought is dramatically related to mutation of the geographical world itself—the object of our studies—and how it constantly affects our positioning and questions. This awareness implies, first of all, a change of posture: slanting or leaning out the window—an architectural or symbolic threshold—that stands between the world and the gaze (Belting 2008: 6).

What we are going to find out, indeed, in looking outside and at the edge of the geographical and cartographic frame (to see what is fermenting out of there) is that approaching the culture of mapping today means, above all, recognizing the obsessive interest in cartography

flourishing in not strictly geographic contexts. Such awareness, I return to argue, justifies an interdisciplinary work and a resulting composite methodology that may draw upon the theoretical luggage of the new cultural geography, visual culture studies (and visual methods) and post-representational cartographies, considering their overlaps and mutual concerns but also their irreducibility. Therefore, I am convinced of mobilizing a hybrid toolkit in order to understand the visuality and the aesthetics—as well as the proliferation and consequent transformation—of mapping epistemologies and practices.

Yet, if we wanted to linger a moment longer in the metaphorical universe of representational before moving on, is it crucial to remind again of the distinction between the cultural representational attitude and the non-representational one. I say this because we can continue scrutinizing their operative traces in the following approaches. As I have constantly underlined in the first part of the research, the cultural representationalism is a critical interpretative analysis devoted to the issue of the politics of representation, providing through a hermeneutic, deconstructive and discursive reading the proofs of the hidden powerrelations leading beneath an image. Not everything, though, happens within the frame, and in the last decade the geographical strand defined as non-representational, and that we could call to some extent even aesthetic (Rose 2014b), has somehow reinvigorated the terms of debate within the discipline of geography. Endemic to an era of post-signification, as we have explored in the first and third chapter, it deals closer with issues of performance, embodiment, emotionality, affectivity and materiality, opposing to interpretation the vertigo of the unexpected. Howbeit, I have also considered another non-representational current, less philosophical in its intent and deeply influenced by media studies and sociology. It focuses more on the material and technical rather than symbolic circulation of images. That is to say that now the emphasis is put on the dynamics, movements, circulation that involve and produce geographical objects. On the other hand, however, is also to see our representations in practice, emerging through the embodied use we make of them. This difference of intent has, in any case, provoked a sharp division between what I have already called the culturologic (or radical) attitude and the socio-methodological approach, disclosing, in part, a gap which often resonates in terms of mutual critiques and, in the worst prevision, of boundary-making (see Chapter 1). As we are going to explore, even in the contested space of the visual and aesthetic geography, the intense debates surrounding such positions do not diminish and urge more dialogue.

This brief summary motivates my decision to contextualize mapping practices within the hybrid connections of image theories and cultural geography. Indeed, the first chapter has clearly shown the ambiguity embedded in the use of terms such as representational, morethan representational, non-representational in the realm of geography and, specifically, of map studies. In other words, under the same nomenclature we find too many different critical gestures and theories, often contradictory and not self-evident in their use and meaning. Yet, if digging deeper our speculative dispositions, we accept that we are talking about different practices of looking instead, the issue can be rethought and revitalized.

Theory, indeed, is a word that comes from the Greek 'Theorein', meaning seeing. A semantic recall that demands, now more than ever, to focus on the visual character of mapping. Seemingly, geography is a discipline imbued with diverse performances of seeing but it has mostly translated the issue in the realm of textual representationalism. For the reasons outlined above, it is time, I think, to give back the other half of the story and to draw alternative conclusions. I strongly believe that is in the not systematized realm of the visual-and-aesthetical cultural geography, thus a geography that takes really seriously every kind of image (see Rose 2011; Soderstrom 2000), that maps (not the Map as a universal and totemic figure) can find a fertile ground where to be accepted and analysed for the work they do in society, for the modes through which they act as cultural practices.

Naturally, there is no space in this text to consider and discuss every mapping practice, not only because it would be too ambitious, but also because I would end up doing a tautological cartography of mapping, creating a network of relationships without questioning closely the quality and character of such relations. This is why I decided to translate more case-specific apprehensions in the next chapter, where I am going to discuss the visual culture of mapping practices in relation to the performance of migratory events occurring in the Mediterranean Sea. For the moment, it is of paramount importance to outline the main breaking and suturing points of an *hodology*, a desultory path, aimed to bring out the visual ferments underpinning contemporary mapping practices and projects. Therefore, here I want to explore the possibilities for this sort of partnership between cultural geography and visual cultural studies in the applied aftermath of post-representational turn primarily as a theoretical and methodological fervour, by presenting a debate of an emerging development

in the theoretical practice of a less recognized visual and aesthetic geography that brings even closer to the kinds of research in mapping.

In this breath, working on multiple fronts is a gesture demanded to displace and to decentre the alleged universalization (even metaphysical) that has affected and risks informing the work of many human geographers on cartographic theory. My unease is that when the aim of critical geographers becomes to drag the corpses of maps exclusively to the irredeemable violence of the so called "cartographic reason" (Farinelli 2009, Olsson 2007) or the "cartographic gaze" (Pickles 2004), we risk overlooking the fact that maps are images, with their own devices and audiences, and as such:

they are too diverse, they do too many things, they appear in too many places, they are embedded in so many different social practices. So focusing on one specific kind of image, defining its specificity and examining its particular effects, seems a crucial conceptual move (Rose 2015b:2).

Certainly, recalling the scattered genealogy of the critical cartography until the anxious and compulsive attitude reversed into the politics of Big Data, I consider urgent to be suspicious and alerted towards every totalizing manoeuvre and institution which tries to naturalize its power. Yet, I frankly believe that a researcher should be able to discern—paraphrasing Nietzsche (1888)—when is time to break the eternal idols, and when it is more appropriate to stop and listen, touching and brush them with a hammer used as a diapason. Thus, not with the intention to destroy but of listening and understanding what they have to say, conceal or show. In this regard, Jacques Derrida noticed that "all of Nietzsche's investigations... are coiled in the labyrinth of an ear" (1979:43).

Perhaps, to really re-enact our ability to listen, we need to make proliferating other points of view and put them in resonance with each other. Taken as such, those heterogeneous contemporary mapping practices and speculations require a tentatively work of understanding of their propagation and a differentiation of their uses and aims. In short, those cartographic experiments need to be contextualised within the discourse, practice and place (Rose 2012) that inform and alter them. In this sense, the effort is to read each time the map in the way in which Mitchell (2005) reads the image: a complex interplay between visuality, apparatus, institution, discourse, bodies and figurality. According to the visual theorist, the point is not to verify if an image corresponds to reality, the trap of representation, but to understand what kind of culture and phenomenological atmosphere emerges from the consumption and circulations of images in global societies. Under such

circumstances, does mapping have a future in the contemporary cultural geography? And if it does, what does mapping have to offer?

### Setting the plot: Visual culture, Aesthetics and Geography

The proposed question requires further explanations. The aim, I want to underline it, is not to replace shared and acclaimed views and methodologies on map-making, but to multiply and interlace them, to consider the contexts where they are useful, and to discern those scenarios where we need to ask other questions and recognize perhaps other genealogies.

In particular, by keeping the focal point on visuality and aesthetics, I would delineate two possible approaches marked by the study on mapping practices in cultural geography. In chapters 2 and 3, I have already started to sketch the literature on a sort of visual cartography where maps and geo-visualizations are regarded as technologies of power, visibility apparatuses enabled to looking at certain aspects of reality by hiding what cannot and should not be seen. For instance, Dematteis (1985), Farinelli (1992), Harley (2001), and Olsson (2007) have been wary of showing how cartography has historically played a pivotal role as the master narrative and iconology of modernity, as a weapon of imperialism, hence as a discursive formation disciplining the link between the academic practice and the political power. Certainly, this aspect has never lost confidence since the visual operational imagery poured into the map is still employed by a wide range of political actors to plan, order, and stabilise diverse power configurations (Opondo and Shapiro 2012). This kind of disembodied and objective—thus violent—cartography has been also the battleground for feminist geographers who, after having unmasked the male gaze (Rose 1993) or the "male chauvinism" (Cosgrove 2005) behind the discipline, have worked in the search for more ethical, subjective, and even paradoxical ways to unfold the space as a relational, embodied, political event (Massey 2005, Rose 1993), or have tried to compensate for the absence of women in the map-making process by transforming them in mapping subjects in neogeographies (Elwood 2008, Leszczynsky and Elwood 2014, Kwan 2008). This way, all these characters participated in the critical reflection of cartography as a discursive formation, a visibility apparatus and a technology of power, contributing in that sort of speculative mapphobia, previously named the "cartographic anxiety" (see Chapter 2). Drawing on such iconoclasm without being able to detach from it, we could argue that, in their own way, they

have acted as visual theorists. Indeed, making the power visible has been the mantra of several scholars of visual culture, as well. Some of them have usually expressed a sense of anxiety and apprehension in relation to images<sup>59</sup> and we can now certainly admit that the same fashion is not so alien to geographers in the way they have mis-treated maps in the last three decades (see Chapter 1, 2 and 3). Yet, if the reader remembers, I left also some traces of artistic works and performances about mapping, treating them as a sort of anticipatory images of theories and speculative ferments to discuss in the following sections and chapters. Additionally, there are also "experimental geographies" (Last 2012, Thompson and Plegen 2008) engaging directly scholars to renew with an aesthetic vein their interest in mapping and space through creative practices, whether it comes to counter-mapping, alternative mapping, geo-political mapping or more sensuous and cinematic cartographies. The interwoven of these two research modes, a deconstructive and investigative one, and a creative and potentially transformative other, could suggest to relive the interest in mapping by elaborating rather than an un-affected, tedious and technical cartographic epistemology and methodology, a fresh twisted and chaotic strategy to explore the universe of contemporary mapping practices. In so doing, the dialogue across several academic and non-academic fields becomes a starting point aimed, rather to only criticise a standard and powerful cartography, to see how transformations and modifications of an instrument—the map—which commonsensical belongs to the disciplinary baggage of geographers can turn it into an incubator of reflections, actions, and connections to fully traverse and negotiate.

To make clearer the problematics unleashed respectively by a visual and an aesthetical approach, we must give a brief mention to the most important theoretical points that bring into play the two bodies of work of visual culture and aesthetics (and, more specifically, of a political and radical aesthetics). Afterward, I will try to translate them in the theoretical practices of cultural geographers. This operation is justified because different trajectories, and often not entirely mappable, push certain concepts, methods and practices to be mutually and parallel taken out of context of an outer discipline and transposed in its own. This implies visualising the geography of visual culture and the visual culture of geography in a double track where just at the moment in which the train of the spatial turn runs towards visual arts and visual culture, the train of the visual/aesthetical turn crosses the land of cultural geography. Even more paradoxical is considering that geographers have found themselves

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<sup>&</sup>lt;sup>59</sup> I refer to the concept of scopic regime in Jay (1988) that I am going to discuss in the following lines, but especially to the way to approach iconology as iconoclasm in Mitchell (1994; 2005).

unwittingly in the spotlight as a result of the spatial turn. In fact, it was properly the massive work of "vernacular" geographers such as Lefebvre, Foucault, Derrida, and Deleuze to bring anew the attention on space, spatiality, place and cartography (Guarrasi 2002)<sup>60</sup>. And it is not a mystery that it comes to thinkers who resist to any attempt of academic territorialisation and whose work certainly feed art historians as well. In this reasoning, I could be thinking of Stuart Hall's consideration:

What people very often point out is that once you lift a term from its moorings, it proliferates. Rather than looking less useful, it's somehow everywhere; everyone uses it, and a sort of confusion surrounds the term. Therefore, there is nothing to do but to go in and tease out how you want to use it and how you don't want to use it (1999, online).

In the same breath, the visual and the aesthetic are elastic in their overlapping. Each of these terms multiplies and blurs its meanings to each operation of intra and inter-disciplinary translation and, certainly, they can appear all at once within a single discourse. Anyhow, I propose a distinction which draws on a different disposition that might inform aesthetics and visual studies when showing their effects in social sciences. Therefore, I want to strategically distinguish and then re-converge them in reference to the geographical discourse. In some respects, I am drawing on the concept of "violent theory" as advocated by Baudrillard: "a theory that prevents things touching each other […] which makes again a distinction on what was previously confused" (2007: 29).

This approach is not an enclosure, not even a dialectic operation. It leads instead to explore a third way, a third reading on the proliferation of contemporary mapping practices which does not fall banally into the trap of exposing how much are new, open and alternative these visual, aesthetic, and mundane manoeuvres on cartography. Indeed, as Roberts recognizes: "counter-cultures' of mapping—or rather mapping cultures that deviate in some way from the Cartesian model of cartographic rationality—are not exactly new or, indeed,

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<sup>&</sup>lt;sup>60</sup> For instance, Foucault (1986: 22) refers to "the epoch of space" where "our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein". Deleuze and Guattari (1988; 1991) unleashed the forces of geo-philosophy, claiming the reasons of space and distancing themselves from the historicizing of thought, which in their view dominated at least two centuries of European culture, from Hegel to Heidegger. They understood space not as a mere background but as an active component of historical phenomena, as the modulation of life itself. Henri Lefebvre (1974) has proposed a triadic understanding of space, distinguishing between spatial practices as the modalities through which society produces, shapes and uses its own space; the representations of space (for example those of scientists, planners, urban planners, social engineers) conceptualized by dominant actors in any society, inconsistent with the spaces of representation (for as the space directly experienced through images and symbols associated with it, and therefore the space of the inhabitants and users).

necessarily that 'emergent'" (2012: 10). More fairly, such emergence needs to be historically contextualized and connected to other studies which can help emphasizing the relational and performative value of those operations. Eventually, I am conscious that I am trying to merge several layers of analysis; hence this operation demands at least an unstable and precarious organizations of the sections. In other words, when I am talking of a visual and an aesthetic approach that I wish to consider as a twisted strategy to interrogate contemporary mapping practices, I am aware such terms need a foothold, a blunt contextualization. Such contextualization will be, however, constantly framed through the (partial) translation experienced in the field of cultural geography.

### The grammatology and graphology of vision

When one decides to accept the call to the images, namely to explore "what pictures want" (Mitchell 1994)<sup>61</sup>, he or she is inevitably confronted with so many theories and practices of the vision that certainly this humble research, at risk of collapsing, cannot fully exhibit and retain among its words' space. This is why I will put my attention only on a few historical overflights, giving a brief reconnaissance on the grammatology of images that, from my point of view, may resonate with the social and cultural graphic life of the maps. Speaking of vision, visual and visuality means to sink our nails in the semantic body of visual culture, a much-debated term, whose genealogy and investigative field are constantly being reconsidered by those theorists who share its projectuality and event horizon.

As two important Italian scholars of the alleged field write:

Studiare le immagini e la visione assumendo come punto di riferimento questo concetto [cultura visuale] significa prendere in esame tutti gli aspetti formali, materiali, tecnologici e sociali che contribuiscono a situare determinate immagini e determinati atti di visione in un contesto culturale ben preciso (Pinotti and Somaini 2016: XIV)62.

Accordingly, we understand that the body of visual culture, enhancing all the forms and relationships that return the image to its context of production and consumption, can be

<sup>&</sup>lt;sup>61</sup> Visual Theorist W. J. T. Mitchell (1994) distinguishes between image and picture, considering the first as what appears through the picture but survives its deterioration, and interpreting the picture as the support, the material medium through which the image appears.

<sup>62</sup> Eng. Tr. From original Italian: "Studying images and vision by taking this concept [visual culture] as a reference point means taking into consideration all the formal, material, technological, and social aspects that contribute in situating certain images and certain acts of vision within a specific cultural context (Pinotti and Somaini 2016: XIV).

considered inherently geographic. Space is not only the polyphonic and polymorphic range through which, as we are going to explore, images become and mean but, at another level, it also signals the importance of location in the constant translation and meaning-making of the term visual culture itself. In fact, the cultural vision of the images is nowadays the research subject of several disciplines that, depending on the place and the 'visual' legacy in which their methodology has been shaped, have taken different nomenclatures. Thusly, we can refer to the Anglo-American *Visual Cultural Studies*, to the German *Bildwissenschaft* or to the French *Philosophie de l'image*, among many others. Each of those body of work sets a particular strategy of "showing the seeing" (Mitchell 2002).

For instance, if we confront the ways in which the term 'look' has been theorized, we could find ourselves immersed in a cauldron of semantic opportunities and modi operandi through which the visual culture, or rather the visual cultures of the present moment find and create their own theoretical space. Bryson (1983), for example, reflected at length on the distinction in meaning between the "gaze", implying a fixed and focused observation on the image, and the mobile and erratic nature endowed by the "glance"; Mieke Bal (1991) has then returned to this dyad an ontological depth in psychoanalytical terms, seeing in the gaze the look that norms the otherness, and in the glance, the thoughtful look which questions the meaning of the image through a sort of epiphanic gesture. And yet, The French regard, deriving from the verb regarder subsumes the dual meaning of "to guard" and "to take care", thereby the ocular violence of control and the ethics of protection, a kind of paradoxical gesture to negotiate in the visual scenery. Finally, the German Blick, as Belting (in Coglitore 2008) reminds us, is the only term available to define the look on images in German-speaking countries. Yet, as the Art Historian (2008: 5) further claims, the looks and the images cannot be discussed separately as it is difficult to discern where the look finishes and the image begins. The gaze is in fact more a productive than a passive operator, and to some extent defines the arrangement, the plot in which to capture or reject the images surrounding us. This arrangement, the scope of the vision, is none other than that "visuality" mentioned by art historian Hal Foster<sup>63</sup> when he sets out the agenda of contemporary visual studies by proposing a new methodological declination to explore the technologies and the power relations disciplining our gaze on things. "Why vision and visuality, why these terms?" he demands (1988: IX), beckoning the discussion on the visual to a spectrum of different

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<sup>&</sup>lt;sup>63</sup> Mirzoeff (2006) has actually noticed that the term was coined by the historian Thomas Carlyle in his work *On Heroes* (1841).

questions we should pose when we look at images, by asking: "how we see, how we are able, allowed, or made to see, and how we see this seeing and the unseeing therein" (1988: IX). This modality does not simply imply a cognitive study of vision, rather an analysis of the visuality understood both as a social (and cultural) construction of vision (Jenks 1995) and as a visual construction of society (Mitchell 1995). This word pun does not mean only that any society creates and moulds its own way of seeing and of images creation, but we can imagine a litmus test in which they settle all possible practices of seeing to be detected, investigated or to be constructed anew. In this regard, it is well known that art historian Martin Jay (1988) introduced, borrowing from Metz (1977), the term "scopic regime" to indicate the diverse and "competing ocular fields" arranged in a epoch. In the specific case mentioned by Jay—the modern period—he tries to distinguish at least three visual regimes: the Cartesian rationalism, faithful to the principles of perspective; the empiricism of Baconian matrix emerging in a parallel way in the Dutch culture; finally, the baroque optical regime that would leave many of its traces in the postmodernity due to "opacity, unreadability, undecipherability of the reality it depicts" (Jay 1988: 35).

After sketched those passe-partout words, which I consider particularly important to analyse the contemporary visual architectures of the map trope, I think it is important to insist on the fact that much of what today can be traced back to the court of visual culture would probably be almost unthinkable without the pioneering works as those by Walter Benjamin, Sigmund Freud, Erwin Panofsky, Alois Reigl, and Aby Warburg, among the many others who set the entries and departures through which the visual culture has been formed and crossed by. If their suggestions are symptoms, pathos formel of future visual cultures, it is also true that many scholars have also tried to trace genealogically the first uses of the term "visual culture" in other kind of research. It is usually found in the work of Marshall McLuhan (1964) and of the two art historians Michael Baxandall (1972) and Svetlana Alpers (1983), the latter two referred to the visual and artistic experiences of historical societies respectively of the 1400 and the 1600. Such works are interested in retracing the styles of vision, the period-eye, of a certain epoch, thus finding a match between the political, economic, and cultural characteristics of a peculiar society and their manifestation in artistic currents. But it is especially the work of Alpers to show breaking points with the formalist and iconological tradition of the '70s, in its attempt to rethink the history of art as a broader cultural and material history of images, media and arranged gazes (Pinotti and Somaini 2016).

Yet, going backwards in the time line, in 1924 the word "visuelle Kultur" has already made its entry in The Invisible Man by Béla Balázs to designate the new turn of the visual inaugurated by cinema, a witchcraft able to visually and immediately display the penetration of the spirit in everyday matters of life (1924 [2008]: 129). Those were also the years in which the artist Laszlo Moholy-Nagy (1925) reflected on the concept of "optical culture" and "culture of vision" in reference to contemporary visual practices. Thereby, in the constant oscillation between past and present, we can notice that the work of the twenties and thirties were animated by a new excitement and a new apprehension towards the visual revolution brought by cinematic images, and for that required an analysis of the present; while the works of the '80s that were committed with the concept of visual culture, especially in the field of art history, were mainly focused on the past artistic practices with the aim to recover the history of art with a new sensitivity. In 1996, with a wealth of ideas, images, and very dense speculation, the time is perhaps appropriate to discuss, praise or criticize a blunt object such as that of visual culture. In the number 77 of the October, Journal of Visual Culture, an entire space is devoted to "The Visual Culture questionnaire", involving some of the most important figures of the moment to foster the emergence of the new current of thought. The debate arises within the history of art where different critical postures towards the word and the 'thing' called visual culture are sketched. Visual culture is now treated as a discipline, now as a department, now as a fashionable term and eventually as a revolutionary line of thought, a "fractious post-structuralist attention to visual representation" (Holly 1996: 40). Each scholar shows a different attitude, ranging from the alarmism to the indifference, passing through more subdued and even smug positions. Most of the suspects accumulated in 1996 are then regurgitated with a hint of poison the following year, when Art Historian Rosalind Krauss, who co-edited the October magazine since 1976, angrily responds during an interview to firmly "hate visual culture" (1997:1). She argues that: "[l]ike cultural studies, visual culture is aimed at what we could call pejoratively, abusively, deskilling. Part of that project is to attack the very idea of disciplines which are bound to knowing how to do something, certain skills" (Ibid.).

We can try to guess from where her intolerance rouses. In the context of art history, it acquires greater importance the question of connoisseurship, as the ability to recognize the influence of certain currents and the style of artists in the artwork taken under scrutiny<sup>64</sup>. The

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<sup>&</sup>lt;sup>64</sup> This aspect has been treated at length by Rogoff (1998) and reconsidered by Rose (2012).

rupture imposed by the visual turn suggest images not to be treated as 'masterpiece' and 'created by geniuses' as the ideal of the "l'art pour l'art" would command. A visual approach seems detrimentally justify the demolition of the elite of art historians, encouraging any scholar who has not necessarily got such a formation to interpret images. They are called by Holly "amphibians", smuggler-thinkers, "comfortable taking a variety of perspectives and organising them into new combinations in order to think better about the objects they are studying" (2005: 192). In fact, the artistic practices soon become just one of the possible trajectories of visual studies. The visual culture portrayed by Krauss is then "deskilling" because it claims to go outside the tracks of tradition, to foster the critique on the image by deploying a hybrid arsenal of theories, figures of thought, without strictly focusing the attention on artistic objects. However, such a picture does not take into account the differences in methodology and questions that are experienced in several faculties, universities, and countries. There is indeed a very sharp divergence in the way the issue of vision and the notion of image are treated for instance by the German Bildwissenschaft and the Anglo-American Visual Cultural Studies. A difference that, perhaps, in the course of these years, could have calmed down Krauss's criticism. In the first, in fact, it is not perceived nor advanced a real breaking point with the history of art. Additionally, such artistic legacy is very profound even in the work of French visual theorists so that contemporary and past artistic works often remain their focus of attention. In German visual culture, for instance, Gottfried Boehm's BildKritik is aimed to work towards an iconology that is also an ontology of images, able to explain their irreducible difference from the text and the word. "How do images create meaning?—is Bohem's crucial rumination—This question serves as my guide, and although the interaction with the observers is always considered in light of the conditions of each context, initially, the visible emphasis was certainly placed on the side of the artefact" (Boehm and Mitchell 2009: 106). According to the art historian, the understanding and the articulation of the image-producing logic is, however, inherent to the images themselves. This approach looks at the interior of the representation and is inexorably linked to images' occurrence in the devices that regulate their expositive strategies. In this sense, the intense philosophical and anthropological disquisition on images as representations is accompanied by an explicit reference to its manifestation and materialization through the technological support. In short, the attempt is to unveil the nature of representation as always being a presentation. The effort, here, is to understand what is an image, how it produces meaning, and becomes a material presence: the artefact.

The issue is subtly different in Visual Culture Studies. Considering the debate of 1996, there we find a more explicit association with Cultural Studies and the School of Birmingham, whose interest in the images becomes a real political practice of linguistic demolition, artistic elitism's collapse in favour of an increasing attention towards popular culture products and the effects images produce on the audience. In this respect, Sturken and Cartwright pinpoint: "[w]hen we say that an image speaks to us, we might also say that we recognize ourselves within the cultural group or audience imagined by the image. Just as viewers create meaning from images, images also construct audiences" (2009: 45).

Compared to the German *Bild Kritic*, in Visual Cultural Studies the proliferation and visual avalanche that is perceived as ubiquitous in the society of the spectacle, in the sphere of advertisement, and in digital networking, involves primarily the reading of images as texts to be decoded by the viewer (Hall 1997; Pinotti and Somaini 2016). As we recalled in Chapter 1, the battle over representation strengthens the tools of the structuralist semiotics before and of the poststructuralist theory later, with the aim to grasp the ever-situated nature, that is constructed, ideological and political of the images produced, circulating and consumed in several societies. In the light of this positions, the study of visual cultural may seem to embrace everything, even if from another perspective, as Mitchell explains:

(visual culture studies) is not limited to the study of images or media, but extends to everyday practices of seeing and showing, especially those that we take to be immediate or unmediated. It is less concerned with the meaning of images than with their lives and loves (2002: 170).

In sum, rather than an academic field, visual culture studies comes to be often presented as a set of heterogeneous tactics, a living methodology (Smith 2011) aimed to analyse and discuss not only (or not anymore) the systems of art but also the pervasiveness of images in everyday life. It is not an object of study but a particular way of seeing the seeing of society. If we tried combining these different but not irreducible positions, then we might conclude that addressing the reality of images through a visual and cultural sensitivity would mean:

porre l'accento sulla dimensione culturale – e quindi costruita, artefatta, tecnicamente determinata, socialmente, ideologicamente e affettivamente situata, storicamente variabile – delle immagini e della visione, adottando un punto di vista che differisce, pur senza sottovalutarne l'importanza, da quelle prospettive di ricerca che studiano

immagini e visione in termini preculturali e sovrastorici (Pinotti and Somaini 2016: XV)65.

Yet, our investigation cannot be still closed down. There is, indeed, an overreached aspect on this substantial definition. At the opening, we placed emphasis on the fact that the location—the context—plays a distinctive role in the constitution and in the emergence of objects and theories. Nonetheless, this aspect is again emphasized on the quote above. But space cannot be simply reduced to a geo-referenced point, it is also and foremost a matter of relation, even unsettling and dispersed in the maze of networks. When we posit our attention on the spatial dimension of the images, it must be admitted that Boehm's reading on the image intensification process is very impressive and important, but it should be equally stressed the idea that images are intended to move: once placed in a network, they can change medium, device, audience and creators, hence also the attributed meanings can be modified, enriched or impoverished by new semantic codes.

In short, if they are unstable, the spatiality is not only shown by images themselves but it is also what constitutes and redefines them at every moment: a game of continuous or missed relationships that can accelerate or slow down their intensity, accruing or diminishing their values. This disposition spells out to the "visual economy" of the image world. A term coined by Deborah Poole to refer "not what specific images mean but, rather, how images accrue value" in a networked system "through the social processes of accumulation, possession, circulation, and exchange" (1997: 9).

However, the main problematic arises in the way in which circulation is usually conceived as entangling a series of "processes that transmit meanings, rather than as constitutive acts in themselves" (Lee and Li Puma 2002: 192). In fact, according to Lee and Li Puma (2002), the circulation is a cultural phenomenon on its own terms with its interpretative communities and ruling codes. In the attempt of not lingering just in the interior of the image but also to retrace or follow as far as possible the journey and the possible metamorphosis of the image, the current iconsphere can be unpacked in new ways. Not merely in the guise of visual culture but also of an entangled visual economy, thus considering a correlative emphasis on:

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<sup>&</sup>lt;sup>65</sup> Eng. Tr. From Orig. It (full quote): "Studying the 'visual culture' of a given context means emphasizing the cultural dimension - and then constructed, artificial, technically determined, socially, emotionally and ideologically situated, historically variable – of image and vision, by adopting a point of view which differs, without underestimating the importance, from the perspectives of research studying images and movies in precultural and supra-historical terms" (Pinotti and Somanini 2016: XV).

a geographically-dispersed network of both flows and pausepoints [which] means engaging with images in different forms travelling around the network, materialising in specific places, in specific social contexts, being bought and gifted and archived, trashed and altered, with the work of interpretation and/or feeling happening at every point (Rose 2015b: 2).

Therefore, it is time to consider dealing with images which appear capable of changing (even autonomously) and of formulating an all-embracing visual and sensory sphere where temporal and spatial parameters can be altered at will, since: "[v]ectors of movement, of information flow, traverse any and every sphere of the world" (McKenzie 1994: IX). In particular, McKenzie (1994) argues that the question of the circulation is not peculiar to a specific discipline. More importantly for my discourse, approaching images via their circulation and labor through networks (Rose et al. 2014; Rose 2015a) does not exclude a work on cultural meanings. Indeed, meanings are produced and represented both by objects themselves and through their movements, acceleration and braking. In other words, I am not considering this shift as devaluating cultural theory, rather it would be much more understandable to assert that the representational work is now displaced from the fetish attachment to the artifact towards a dispersive and sometimes murky set of processes waiting to be explored and re-sensed.

#### For a visual geography?

If the heated debate of 1996 October Journal and what followed can be considered a turning point in the precarious systematization of the field of visual culture, we could find an equivalent visual geography's impetus behind the discussion opened in the number 2 of 2003 Antipode Journal. Dedicated to the exploration of the geographical visuality, the conversation involved a narrow entourage of British geographers interested in transposing the parallel ferment of visual culture in their discipline. The kernel of their discussion turns against the visual gaits and gestures engraved in the work of human geographers, even if their look remains overwhelmingly subjective in their considerations. Honestly, in reading the various articles of the special issue, not entirely discordant positions emerge, but certainly of a different cutting than the inherently visual of 1996. In the first debate, in fact, faced within the history of art, the strongest core lays in defining the investigative scope of visual culture, giving body to largely theoretical, anthropological, and materialistic issues and neglecting more sociological and methodological concerns. On the contrary, we could say that the

sociological reading of images inaugurated in geographical circles pushes on musing the most appropriate methods aimed to bring out the many "disciplinary visualities" (Rose 2003) that inform geographic research and teaching, namely the arrangements in which:

the plethora of visual images [are] used by geographers when producing, interpreting and disseminating geographical work: all those maps, videos, sketches, photographs, slides, diagrams, graphs and so on that fill textbooks, lecture halls, seminars, conference presentations and—to a much lesser degree—published papers and books (2003: 213).

Rose gives utterance to a system of the objects arranged in a laboratory of Latourian reminiscence (Latour 1987), and on the ways in which objects are used and disseminated through the geographic work with an explicit purpose: to make conventional, thus not further susceptible to criticism, geographical practices, so that becomes unnecessary to uncover the power relations at work even in the most trivial use of materials (such as slides). The geographer brings out her commitment with the contemporary visual culture studies, where the semiotic and discursive analyses give a hard time to a purely formalist tradition and demand to question, in terms of reflexivity, not only the role of those researched but of the researcher herself.

In the same interchange, Felix Driver (2003: 227) insists on the point that geography is a peculiar visual discipline with a long history and such "visuality" cannot be seen just as the product of the recent cultural theory. In fact, that the visual is almost an inherent feature, and, perhaps, for this invisible to geographers, is demonstrated by the massive amount of work dedicated to the territory, landscape, urban and nowadays artistic practices accompanied using mediums such as maps, diagrams, and photographs (Rossetto 2011). In this sense, if we suspended for a moment the critical reading of images as signs, metaphors, and texts to look at the history of their mediums and technologies (in short, at their mediology), we could realize that, in fact, the geographical discipline cannot be imagined out of a relationship with images and their devices. We can harsh back to the 18th century, where we find the introduction of the embossed image on the maps, made possible by shaded hatching; as well as the 19th century sees the entry of the incision before and then of photography, and continues with the coloured thematic maps, then three dimensional geovisualizations up to over the past decades where we are ceaselessly surrounded by the plethora of animated, interactive, and virtual geographic visualizations. However, what one should admit is that recognizing to geography an innate interest in the imaginative and iconic dimension does not mean that its approach to images can be considered 'visual' in the sense

outlined in the previous paragraph. In truth, over time, so many ways of practising and understanding the visual dimension of geography have been engrossed that some, inevitably, have imposed on others. For this reason, we could trace a different visual interest of geography through time, chasing different paradigms and philosophical suggestions.

The map and the landscape have formed, for example, a fertile ground in which artistgeographers have engaged in developing languages and techniques to capture what they wanted to see in the territory (Driver 2003). Long before the cultural turn, the landscape, however, was still seen as just "the visible aspect of the territory" (Vecchio 2009), assuming that the act of vision was neutral and equal for each subject. The difference was in things, in the physical landscape, not in the way and the position from which they were watched. Such a-problematic nature of the landscape gaze solidified with the advent of photography, which, more than any other technological means, was perceived as capable of fulfilling the alleged certainty of representation that in the same period was deemed to be attained with cartography's mathematical calculation. In that moment, a deep dialectic aroused between the subjectivity of representation—evident in the pictorial landscape—and the certainty of representation guaranteed by the aerial images. There is also to say that the landscape, as noted by Farinelli (1991: 575-77), has had a long gestation in the guise of geographical and scientific category since its favourite medium has been mostly the painting which handed it over the "aesthetic realm of appearance". He refers to Carl Gustav Carus's romantic definition of landscape as "a certain state of mind", thus a feeling, a relationship between two distinct but related emotional impressions, coming and going from the subject to the natural atmosphere and vice versa. It is with Alexander von Humboldt, and thanks to its analysis on the invention of photography presented on Lettre sur le daguerreotype (1839), that the concept of landscape has instead diverted from an aesthetic concept to a scientific concept (Vecchio 2009). As further noted by Franco Farinelli (1991), it has passed from the pictorial and poetic medium to the geological description of the world, charging a totally new meaning in terms of the history of knowledge. Since there, its construction, its ontological and visual unfolding, will be the subject of numerous studies leading to a confrontation between several disciplines—geography, anthropology, aesthetics, philosophy—from whence disparate and divergent visions and approaches at turn ramify. However, only after the post-positivist critique, the landscape starts to be read as a social, political, and cultural construction. This means attention shifted anew from what is seen in the landscape to the ways in which we see landscape. Beyond the very strong link between visuality and landscapemaking, condensed in an exemplary manner by Cosgrove (1984) belief that landscape is a "cultural image, a pictorial way of representing, structuring or symbolizing surroundings ... a social and cultural product, a way of seeing projected onto the land" (Cosgrove 1984: 1, 269), it is a matter of fact that most of the experiments and reflections which might recall a visual attitude have involved closely cartographic products, and especially old-crafted maps. As such, in taking the significance of this history and these practices into account, in terms of production, as we have repeatedly noted, academic geographers were not the real crafters of the cartographic design, while they took a leading role in the interpretation and disfiguration of the cartographic image (see Chapter 2). A challenge, that of the unveiling the power inherent in the map, which now calls for further annotations. I say this because there are scholars who, interested in tracing the image history of mapping practices, have not uprooted their attention exclusively on the distorting and annihilating effects of the 'map' image. To try to better articulate this statement, I would say that power has been translated rather as the potential capacity of the map to do something for the human agent. For instance, Mangani argues that the primary function of the maps is due to their ability to move the emotion, the energhéia (2006: 40). Such affectivity was not a consequence of the mediated link between the map and the territory. The medieval maps were far from representing property relations, they did not represent locations but loci, narratives arising from the places and symbols represented on the map. For this reason, the scholar accentuates the point that: "il rapporto della mappa non è storicamente con il territorio, ma con le narrazioni (o le trattazioni) connesse al territorio" (2006: 17)66.

It is certainly a very interesting and important consideration because it allows us to recover other kinds of cartographic visual regimes, those ways of seeing and acting on and through maps that the dialectical Marxist reading on mapping has basically kept aside. An even more important aspect is due to the fact that this approach looks closely at the images but still being strongly anchored to their representational textualism. In this way, we should give more attention to the fact that in a cartographic form of knowledge, it is difficult to separate the ontology of images from that of the word, as Boehm's *BildKritic* is indeed aimed to do. Guarrasi (1988), for instance, argues that cartography is a language both verbal and iconic, even though geography has been subjected to the supremacy of the word, by treating the image always as a fetish, as something to be wary of; it seems there is no escape because

<sup>&</sup>lt;sup>66</sup>Eng. Tr. From Orig. It: "the relationship that the map entertains is not historically with the territory, but with the narrations (or treaties) connected to the territory" (Mangani 2006: 17).

the 'evil' lies both in the transparency and obstruction exerted by the analytical and informational language of geometry (endowed by the map) than in the ideological subjectivity of the pictographic language (shown in the landscape). In general, I am also personally convinced that the visual dimension is not releasable from the other senses, as Mitchell rightly reckons with the idea of "mixed media" (2002) or when Bal spells out that "vision in itself is inherently synaesthetic" (2003: 40). The imposition of a sensorial sphere over another depends mostly on the peculiarity of questions that the researcher asks and on the salience, if not fashion, experienced by geographers in specific periods. Along the same line of thought, Cosgrove suggests that:

the map is by no means the only medium through which geo-graphical knowledge is conveyed. Written narrative and description hold as significant a place as cartographic representation in the history of geo-graphical practice: the graphic can be textual as much as it can be pictorial. (2008:8).

The problematics of the image are then translated by the geographers involved in the cultural turn as competing with the verbal dimension, often giving rise, as we have repeatedly argued, to iconoclastic and iconophobic tendencies, especially innerved in the frame of the map. The triumph of verbalizations over iconization can be neatly breath at the beginning of the new millennium where a decisive engagement with the sphere of aurality (Sui 2000) strengthens "the laboratory of the ear" of Nietzschean remembrance. The "prolonged melee with the cartographic reason" (Guarrasi 2006) and the deconstruction of the looks governing the different rural and urban landscapes of Western and postcolonial societies (i.e. Blunt and Rose 1994; Cosgrove 1984; Farinelli 1992; Rose 1993), now give grounds to the emergence of other benchmarks such as dialogism, relationality, listening, and creative writing. Henceforth, the cultural turn has a very strong weight in neglecting purely visual interpretations on the images, by participating in a kind of apprehension and suspicion of everything that cannot be fully captured by the human verbal language. In such blueprint, despite the pre-eminence on the narratives and biographies, it does not mean that the visual object domain ceases to attract the attention of cultural and humanist geographers both as a source of study and as a research method. Yet, as now will be clearer to the reader, the question of the images is addressed through the lens of the crisis of representation, which is now sustained by the social constructionist approach now by the phenomenological one. Consciously or not, they offer new meaning and utterance to the ways images should be questioned inside and outside the discipline but preferring most of the times semiotic and

textual analyses. Not surprisingly, if we consider at least the Italian panorama, even visual culture makes its entry through literary studies, involving prior of art historians' interest, perched to defend their disciplinary boundaries, comparative literature's scholars (see Cometa 2004; Rossetto 2011). They are, in fact, more suited to trespass the new cultural ferments taking place across the Alps, and to translate them in their own disciplinary fields. In Italy, in particular, the speculative instructions for the understanding of images, even the cartographic ones, take mostly as models of reflection the work of Panofsky, Eco, De Certau, and Merleau-Ponty who might be often in tune, even if sometimes largely overlooked, with the semiotic and discursive constructionist approach (Hall 1997), that clearly emerges in the 2003 *Antipode Journal's* British geography conversation.

Afterwards, the years ranging from 2009 to 2012 seem to re-live the visual debate on geography in the light of a new question, that of materiality. Once again, the new critical phenomenology takes hold from the world of art criticism and media studies, where materiality is not confined exclusively to the performative character of images, the idea they can have a clear influence and grip on reality. Here, now is made an appeal to the things themselves, re-covering Heidegger (1927) apprehension for the matter. In a similar vein, geographers Anderson and Wylie pinpoint that the matter of things is "variously turbulent, interrogative, and excessive, [it] is perpetually beyond itself" (2009: 332).

In short, eschewing from epistemology, the new vibrant materialism (Bennett 2009) is devoted to an object-oriented ontology which discards the centrality of subjectivity promoted by psychoanalysis, hermeneutics to the Foucauldian thought (Joselit at al., 2015). This other theoretical and post-human gesture asks to re-think the reality of objects from a not human perspective, considering an animate materiality, whose agency emerges through networks and assemblages. Materiality is then addressed as the field of materials (raw materials, tools, equipment, but even bodies and organisms) through which the field of visibility is constructed and speaks for itself. A full-blown interrogation of this topic is approached in cultural geography again by Rose, this time in the company of Tolia Kelly (2012) in a book resulting from a conference held in *The Royal Institute for British Architects*, in London, between 9th-11th July, 2009.

Therein, the idea to approach contemporary visual cultures in their materiality, gives the floor to a more specific engagement with issues of technology, urban design, and everyday visualities, opening to a broader field of discussion with sociologists, art theorists and visual culture scholars. In this other declination, visible means material because only through

materials an image can emerge and be exposed to the sight. However, since materials are inherently different and the result of several crafting activities, they can give rise to equally diverse ecologies. This is one of the reasons why in the opening pages of the book, Rose and Tolia-Kelly claim that: "[t]hrough practical technologies there is a continuing mobilisation of communicative aesthetics which refigure our encounters with space, form, time, grammars of meaning and their habitual interpretation" (Rose and Tolia Kelly 2012: 1-2).

In sum, the materiality of the medium, just like the picture of Mitchell (1994), declines the logic of the image, its meaning and its destination. However, Italian geographers seem mostly deaf of this debate, appraising more significant contributions in the other meaning of materialism that harks back to Marx and Althusser's thought, if we contextualize economic relations that determine (in the case of the former) or influence (in the case of the second) the relationship with objects. The coaction between materiality and visuality is rather more explicitly considered by continental geographers, in addition to Anglo-Americans colleagues, once transposed into the virtual world.

The digital space, as we have seen in the previous chapter, has been deliberately and sometimes naively treated by the first analyses of human geographers as a dematerialized (hence unreal and dangerous) horizon, apart from a few exceptions (i.e. de Spuches 1996, 2002; Lévy 1998). In the last decade, however, the issue has been revitalized through the contributions of Science and Technologies Studies (STS)<sup>67</sup> which intimates to explore the material conditions through which virtual geographies take shape (Kinsley 2014, Kitchin and Dodge 2011). Above all, it should be clearer now that only referring to the materiality we can better consider the issues of image manipulation, transmission, and reproduction. Each image, even digital, is programmed to change and disappear, since it is bound to the physicality and deterioration of media (Pinotti and Somaini 2016).

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<sup>&</sup>lt;sup>67</sup> Science and Technology Studies is a recent interdisciplinary field that examines the creation, development, and consequences of science and technology in their cultural, historical, and social contexts. Two works can be considered influential in shaping this new field: *Social Shaping of Technology* (MacKenzie and Wajcman, 1985) and *The Social Construction of Technological Systems* (Bijker, Hughes et al., 1987).

## Or for geographic visualities?

In the light of these manifold and often asynchronized debates, how can we possibly talk about a univocal visual geography? And if would persist on it, what should be its singular field of research? Firstly, the main Geography's uneasiness might be that of being cosseted both by visual culture theories and social methodologies perhaps finding itself disoriented in asking what should be their own. In this regard, Schlottmann and Miggelbrink argue that:

In contrast to the 'fundamental visual disciplines' such as philosophy, psychology, cognition studies, communications science and art history, which explicitly study the typology, use and functions of images, geography has so far produced practically no systematic attempts to develop a visual theory. Geography is primarily a discipline that uses images (2009:1).

Not to fold back in the clouds of rhetoric surrounding the interpretation, we may mitigate this veiled attack for two reasons. First, looking at the contribution of qualitative GIS, there are plenty of manuals which explicitly study "the typology, use and functions of images" such as maps, infographics or geo-visualizations. Secondly, I believe that there has been more than a phase in which geographers, often mingling as adherents of critical theory, have reflected in a purely theoretical way on the images and their ontology, and here again I could call up the work of the humanist and critical geographers. In the following generation, it remains something more than a feeling, but a certainty, the work constantly done by Gillian Rose, raising fundamental questions about the politics of spatial representation. In this sense, even once afforded more practical and empiric questions, she has repeatedly brought them into the terrestrial ground of power. As Rose (with Tolia-Kelly 2012) puts it, practice is indeed what humans do with things and, in terms of visuality, it concerns the ways they make things visible in specific ways or not; but it is also about the subjectivities shaped by the relations between their practices and the visual objects. Such exploration of praxis touches a crucial point on the proposed arrangement of a visual geography. According to Rose (2003), a careful empirical work can allow to recognize the different modalities through which the visual can be translated in the discipline. Perhaps, the real knot to unravel is to ask to what extent geography should just discuss the ways its visual regime is constructed from and within the discipline to wonder instead when can it decentralize, lean, and thus reveal, the spatiality of visuality encountered in everyday spatial practices. In this second nuance, visual culture theorists are instrumental in unveiling the co-existence of different visual regimes. We could nonetheless refer to Mirzoeff's notion of intervisuality as "the simultaneous display and interaction of a variety of modes of visuality" (2002a: 3).

The 2003 Antipode's debate, contrary to that of 2009, seems however to be exclusively focused on the first aspect. Scholars ask how to teach geography, what role the visual methods (slides, presentations, use of images in the texts) have in the construction of the geographical discourse. The same variation is found in the most recent Italian works dedicated to the link between human geography and the visual, intensively informed by their filtering through Social Sciences (Bignante 2011; Dematteis et al. 2012). The refrain is seemingly rehashed by Bignante when she points out that:

La spinta al ripensamento del rapporto tra la produzione dello spazio e la sua rappresentazione, in particolare attraverso la ricerca di nuove forme di testo e testualità, ha così portato all'ultimo decennio alla nascita di un dibattito sulla necessità di un visual turn nella geografia culturale, inteso come presa d'atto dell'opportunità di sperimentare nuove modalità di utilizzo delle rappresentazioni visive *nell'*attività del geografo, a sostegno e completamento (e non in sostituzione) di quelle già in uso (Bignante 2011: XV)<sup>68</sup>.

The consideration of the Italian geographer works on confirming that geography is a discipline that essentially uses images; a discipline that has to look at the images as they are used in the work of geographers themselves. It underscores, thus, an incessant appeal to reflexivity with the consequent need to focus on methods. However, since geography is not only a disciplinary apparatus but also an epistemic medium, a catalyst of relationships, the visual matter of spatial relations can be discovered in other fields. In the multifaceted terrain of visual culture, a geographical thought can therefore provide important contributions in highlighting the essential role of space in the construction of the vision. A clue that this could be a right path to follow is revealed by the increasingly search for geographic metaphors and concepts in visual culture studies because of the spatial turn. This sort of revolution could be also explained since Art History has maintained a legacy mostly shaped by an obsessive "archival impulse" (Foster 2004) with its vertical, linear and temporal conception. In the last two decades, however, the analytical dimension of the archive has come to be enhanced, if not replaced, by a synoptic and spatial vision. Regarding this, the visual theorist Irit Rogoff

<sup>&</sup>lt;sup>68</sup> Eng. Tr. From orig. It: "The drive in rethinking the relationship between the production of space and its representation, in particular by seeking new forms of text and textuality, has thus led to the emergence in the last decade of a debate on the need for a visual turn in cultural geography, understood as taking note of the opportunity to experiment with new ways of using visual representations in the work of geographer, to support and supplement (and not to replace) those already in use (Bignante 2011: XV).

(2000) maintains a core geographical emphasis in her work without never considering geography as a discipline but rather as a "system of classification, a mode of location, a site of collective national, cultural, linguistic and topographic histories" (2000: 8). Or if we give a look to the inter-disciplinary research of Giuliana Bruno (2002, 2008), professor of Visual and Environmental Studies at Harvard, she has shaped her work around the concept of a "cultural cartography" meaning clear for a Deleuzian influence rather than mentioning or engaging with the history of cartography as faced by geographers. Or again, Didi-Huberman (2011), the most influential French art historian of the last three decades, has made the Atlas his central method of images' investigation. His work can be enlightening. It has very little to do with a geographical atlas since it involves a dematerialization of the geographical map by proposing its re-semantization in a collage. In fact, it is actually inspired by the eclectic work of Aby Warburg and it is aimed to oppose the structure of the archive before discussed. The spatialisation allows finding connections between images, texts, artists, philosophers who do not apparently have any relationship between each other with the aim to unfold and reveal forensically how certain tropes survive from image to image. However, this coincidence between the map and the collage is not alien even to geographers after the cultural turn. Making a comparison, one could say that the art world has turned the collage a well-known avant-garde practice—into the map, whereas geography has quite often revived the maps in the form of collage and montage (see de Spuches 2012; Doel 2007; Rose et al. 2009) as a specific counter-point and a possible displacement of the monological and monovocal structures of representation. That the grammar of geography is innerved in the common knowledge beyond pointing to a peculiar disciplinary and scientific apparatus was nonetheless considered by geographer Quaini (1978: 73):

Non possiamo dimenticare che la geografia, oltre che sapere scolastico e scientifico (secondo i canoni della scienza ufficiale o istituzionale), è anche sapere sociale, incorporato nelle pratiche sociali e nel lavoro, è anche cultura di massa o, al polo opposto della società, sapere elaboratissimo in mano a poche élites e prodotto in larga misura al di fuori della scienza ufficiale<sup>69</sup>.

Put differently, we could say that sharing a common geographical grammar does not mean sharing the same analysis's intent. Yet, this connection should not be neglected as far

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<sup>&</sup>lt;sup>69</sup>Eng. Tr. From orig. It.: "We cannot dismiss that geography, beyond its academic and scientific knowledge (according the official or institutional science), it is also social knowledge, embedded in social practices and work, it is also mass culture or, at the opposite pole of society, a very elaborate knowledge in the hands of a few elites and produced largely outside of mainstream science (Quaini 1978: 73).

as those works should be treated as symptomatic of ferments and concerns related to humanities in the whole; other times they can recall other legacies but offering for this reason a different insight to the same instruments used in geography. The possible combinations between visual culture and geography become then very fascinating for some and disturbing for others. However, they can pose again the "already known" geography from new angles. For this reason, I believe that the two movements of the geographical gaze, the reflective look and the look geared toward the outside, they are not mutually exclusive. It does not make sense to speak anymore of mirrors or windows, but we could interpellate the process of strabismus, an ocular practice which can afford to look here and there simultaneously. It is thanks to this new dual angle that we can understand that the geographical works on the visual consequentially become visual works on geography. In this sense, geography should be more inclined to think about the spatiality, therefore the relationality, involved in the interaction between image and creators (when you can go back to them), images themselves (considering their medium and devices) and their consumers. Such interaction is a work to be made in different kinds of spaces, not last the spaces of display (Rose 2003). Moreover, we can admit that there are really several, more or less systematized modes through which the visual products can be approached by scholars, but if we have to remain faithful, for convenience, to the differentiation between the socio-methodological and the culturological one we could argue that, similarly, images, reproduced in different media, with different materials and in different contexts, can be scrutinized through visual methodologies or can be creatively manipulated or implicitly interpreted with less concern about approved methods of knowing. Indeed, even with overlapping themes and practices, I would argue that the matter of the visual is nowadays captured in two ways by human geographers. On the one hand, in the need to systematise a visual methodology-concerned geography (Schlottmann and Miggelbrin 2009); on the other, it remains beneath the ground of a sort of visualaesthetical and creative geography. Trying to understand, at least briefly, how the two streams operate and co-operate, proves important to me to situate the "map" question in the use of contemporary practices.

Typically, there are two impasses. The first is that the question of methods—to be used 'to explain' the work that images do—separates a sociological approach from an a cultural one. Put differently, as a result of the practice turn in social sciences, there is currently a greater demand for empirical studies and ethnographic research that is usually alien to art historians, critical theorists, and philosophers. Or maybe, we could better explain this passage

by saying that every theory is hooked to a modus operandi, but the methodological question is not made explicit in cultural criticism's work as it is rather blatantly enucleated in all its steps in a sociological research (Rose 2012). The second caveat is that, on the other hand, a visual cultural approach risks treating images as dematerialized images, as purely loci of meanings (Rose 2010). For instance, the iconic (Boehm 2007) and the pictorial (Mitchell 1994) turns have pushed to scrape the secret life of images often considering it to be inherent to the image itself, with little consideration about their visual economies (Poole 1997) and especially about empiric and ethnographic fieldwork. Eventually, the latter may unfold the space where and through which images are created and the effect that they produce on the viewer or the audience (Rose 2012). This is one of the reasons why pictures, images, objects, whether they are products of artistic or nonartistic creation, should be considered a critical object of analysis for a geographically-oriented visual perspective. To put some order, we could say that the way in which geographers look at the images do not seem very different from those that Douglas Harper (1988, 2000) defined as the four visual search modes. The first, scientific, it aims at using images as data, information, documents, by providing evidence of the socio-cultural places. The second, defined narrative, puts its emphasis on the ethnographic value of the images. The third, reflective, implies the involvement of the participants in the production, use and comment of the images' meaning-making. The last, phenomenological, focuses on evocative images, the Barthesian punctum. The third, in particular, has become legion in the field of social visual methods, bypassing the idea that the collective and participatory dimension involved in the discussion of the images, i.e. the group photo-elicitation<sup>70</sup>, can return a more authentic (as it were not constructed by the researcher alone) interpretation of what audiences think and sensically pour in the images. While I would say, in a purely generic title, the first and the last method are the most common that one may encounter in the work of cultural geographers. They are not, however, exclusive modes but they can be integrated with each other. The methodology, as Bignante (2011) writes, makes its entry in several ways: you can draw information from images or with images. You can carry out research on the images or through the images. Obviously, those different perspectives should establish a dialogue rather than reject beaten approaches in the field of visual culture. Consequently, they do not necessarily have to replace other types of analysis,

<sup>&</sup>lt;sup>70</sup> One of the first uses of the term appeared in the work of Collier (1957), a photo-researcher who used the camera to document the housing of his study's subjects. The research questioned the environmental basis of psychological stress. More generally, photo research methods began with the environmental sciences and visual anthropology.

rather expand or provide other perspectives on the life of the images. More profoundly, what is most important to underscore is that the seriousness and the density of these debates have to become more than a stimulus. We must therefore consider not only the ways in which the ephemeral space of visual geography is configured but it is also time to wonder "how geography ought to be visual" (Ryan 2003: 236), in the wake of what happened in the 1996 debate on the visual culture.

### Everybody watches but nobody feels

In the critical terms of how to show its unique way of seeing, geography should first stop hiding or being ashamed of drawing upon its aesthetic dimension. It is enough clear that the visual approach, once sociologically translated, demands methods. Whereas, when we enter the realm of aesthetics such concern seems to diminish. Aesthetics is more likely to present itself as a counter-narrative of an excessive scientism. Moreover, the images would not only serve to transmit information but they are evocative and poetic, they can arouse emotions, arguments and discussions on the part of those who have produced and consumed them. Hans Belting (2001), for instance, urges the need for an anthropology of images, abetting the body as the first medium to deal with them, a sounding board, an imagination factory that cannot be overlooked in the visual analysis. "The way they [images] do their conceptual work—further argues Hawkins—is as much about them being felt on the pulse or them being in the body, as much as comprehended cognitively" (2015: 9). If I had to define this theoretical disposition (paradoxically) as a method, drawing from those offered by Harper (1988), this would be, with due caution, the phenomenological. However, we could also bring it within the sphere of interest of the non-representational, considering the work of those authors who commonly place their emphasis upon what goes beyond and behind the sphere of the visible and the sayable, bringing into play the perceptive, bodily, and sensorial dimension occurring in the encounter with images, often following the derailment at the unexpected rather than the logical linearity of interpretation. Since this approach relies on a subjective and intimate feeling of vision, defining the event horizon enacted by aesthetical dispositions becomes impossible. In fact, to avoid further misunderstandings, we should underline that an aesthetical endeavour attracts a vast entourage of scholars and it has many theoretical lines which have diachronically and diatopically alternated. The attitude I keep is then the same that guided the exploration of the field of visual culture. Therefore, there is no intent to probe the various genealogies of aesthetics but to highlight those movements of thought which have influenced explicitly or implicitly the work of cultural geographers. Once again, then, we deal with processes of translation and with their subsequent creative traitors.

Firstly, we might begin by saying that the "aesthesia" is commonly defined as the ability to feel and perceive,

a medical term we might appropriate to describe an affective state of response, a heightening of awareness, which is a counter to the widespread assumption of anaesthetization in the face of information overload-though this anaesthetization also occurs (Grace 2013: 16).

In this light, Aesthetics, as the study of perception, embraces "the everyday being in the world" with a marked association "with the senses, experiences and expression" (ibid. 13). In the phenomenological sense, a general aesthesis is then tied with everyone's creative capacity and skills extended. However, we should not overlook the fact that Aesthetics, as a discipline, appeals to a branch of philosophy which developed in the eighteenth century as the study of natural and artistic beauty, finding one of its first systematization in the treaty of Aesthetica published in 1750 by the German philosopher Alexander Gottlieb Baumgarten. The contemporary aesthetics, once overcome the paradigms of beauty and the sublime of previous centuries, and continuing its alliance with phenomenology, is nowadays felt to feed the fractures interposed along different research styles, which are condensed mostly in the approaches pursued by the American analytic aesthetics and the continental one. The first continues in focusing its attention upon the living conditions of art; the second has reactualized the aesthetic approach as a study of perception and of the historical dynamic of its transformations, not necessarily choosing the art world as its favourite field of investigation. Even a visual culture's research can therefore be aesthetic in the double sense of choosing the art domain as object of study or/and to query the images through the several theories of perception.

In recent years, it has also taken more attention a political and radical branch of aesthetics, concerned with issues of visibility, power, and senses. A first modern exploration of the concept is found in Benjamin's work (1934) and went on with the reflections made by Rancière (2006), some of which will be explored during the paragraph in reference to the geographic work. In particular, Benjamin (1934) argued that the deadness of the image's aura was the sign of a new art emancipation from its perceived ritualism to embrace a new political praxis. It was an actual fulfilling prophecy, if we consider the words decanted more than

seventy years later by Mieke Bal, encouraging specific activist apprehensions for the current moment: "[b]ecoming visible here is a way to materialize aesthetics in ways that involve experience, movement, and social change" (2011: 15).

On the same line of thinking, new terms and action fields have been proposed such as that of Bourriaud's "relational aesthetics" (2002) and of Ardenne's "contextual aesthetics" (2002), among others radical, political, feminist, postcolonial aesthetics which are making their entry even in geography and more broadly in social sciences. Bourriaud, conceiving art as "a state of encounter" and a "social interstice", has shifted the attention from the representational qualities of the artwork to see rather the artistic practices as performing "places that produce a specific sociability" (2002: 61), showing an interest that can be shared by several social geographers. Ardenne, focusing particularly on the artistic creation in urban areas, has stressed the point that "art is a partnership with reality" (2002: 235) and is mixed with social activism, finding an explicit purpose to present art as it was always political. The risk, though, is to overlook that even if various forms of power could be always exposed by the work of artists, "it does not mean that there is always such a thing as politics" (Rancière 2006: 35) in their work. On the other hand, searching only for those projects where artists and artworks are aimed to deconstruct and challenge norms and political systems, by raising questions and criticism around them, may create a hierarchy while obscuring the possibility to approach with equal seriousness other typologies of artistic and not-artistic practices. This is often reproached by some visual culture studies' scholars who prefer privileging objects and practices ranging from mass culture to everyday life (Rose 2012). Nevertheless, these vernacular visual cultures are micro-aestheticized as well, making piffling any discourse around the boundary between art and non-art. Interestingly, it is rather more in the political aesthetical meaning than in the visual and methodological one, that the world of contemporary art—including performance, installation art, video art, visual arts, geo-locative media art, new genre public Art among others—is currently thought by a dense group of social and cultural geographers as a "laboratory" of spatial practices—both poetical and political—and often provisional and collaborative. Indeed, as Hawkins and Straughan claim: "attending to aesthetics is not to ignore issues of politics and ethics, but rather we can recognize aesthetics as a force through which issues of capitalism, neoliberal agendas, inequality and exclusion have been brought to fore" (2015: 25).

Now, since aesthetics and art history are disciplines with their own legacy and historiography, one could rightly argue that the aesthetics of geography should be addressed

in another terrain. Tolia-Kelly, for instance, proposes to distinguish between art and visual culture in order to "respect the integrity of disciplinary art and practice" (2012: 134) from geography. However, the question might be now complicated by the fact that for some geographers the interest might be not only geared towards the practices of art, sensing, and feeling but also towards the theories and philosophical debates which inform such discourses. In other words, it might be not only addressed to visual methodologies but also toward image's theories. Two books with very similar titles such as the previously quoted "Geographical Aesthetics" (Hawkins and Straughan 2015) and "Geo-estetique" (Quiros and Imhoff 2014) can give us a better sense of the deep attention. They signal a strong coincidence between the philosophical realm of aesthetics and that of artistic practices, since the latter has taken cleanly and critically on society and on current political issues. The attraction experienced toward the art world, presumably, is due to the fact that art is perceived as being an aural and serious technique able to: "make objects 'unfamiliar', to make forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged" (Shaklovsky 1965: 12).

In the Italian scene, the horizon embraced by the geo-aesthetics it does not seem to arouse a correlated artistic engagement, although the term "geo-estetica" is recorded in the more than decennial production of Mario Neve (2004, 2008, 2015, 2016) and explicitly devoted to map-making. His work, however, deviates from the current Anglo-American interest on the political anesthetization of creativity. The research is rather embraced as an historical analysis addressed toward cartographers' explorative sensorial practices of the New World, in the attempt to trace, from a semiotic point of view, the history of maps as sensoria communia, cognitive means by which to derive the perception, feeling, and domestication of unknown places from the part of surveyors. In this respect, here there is not a correlation of terms between aesthetics and artistic creativity, unlike the aesthetical of geography intended in Anglo-American areas; and neither of time, since the gaze dives more specifically on the phenomenology of historical cartography. Generally speaking, the scattered works that I presented may hamper the presumption that there is a trend of geography that can be defined aesthetic or visual in a univocal way. There are, indeed, a series of papers, articles, theoretical and practical commitments that have increasingly involved geographers over time in developing different aesthetic and visual attitudes, whether they like it or not to recognize. And so, as in the past it was very difficult to separate the figure of the geographer from the aesthete, as it was essentially indissoluble the link between map-making and art, if we look at

the panorama of contemporary studies, this direct link is no longer instinctively and instantly perceived, and it has seduced and continues seducing only a radical and whimsical niche of humanist geographers. Therefore, in a sort of compensation, the aesthetical 'innate' predisposition is recently brought to the foreground in those conferences, books, articles addressing the issue (see Hawkins 2014; Marston and De Leeuw 2013; Tolia-Kelly 2012). These works are, however, also evidences that the engagement with the art has more likely found a much more fertile testing ground in the Anglo-Saxon geo-cultural circuits rather than in the practices of continental geographers. In particular, if I have to consider my own place of enunciation, I would argue that in Italy, creative practices are used by geographers more for teaching purpose rather than for their specific research. Moreover, reflections on those experiments very hardly meet the dissemination of results through publications. Then, I wonder, under which material and imaginative circumstances is it possible to re-appropriate the figure of the geographer as a "loving artist" (Olsson 1980), always inside himself and outside society, if her creative activity is most of the times kept hidden and perceived of secondary importance?

Particularly, Gunnar Olsson (1987) departs from the idea that creativity is creation of the new while socialization is persevering of the old. This connection between geography, creativity and art should be also an indicator of the fact that the aesthetic attitude has been translated into the practices of geographers merely in its most conservative sense: as a solipsistic dialogue with art. In fact, the view is much broader and varied, demanding a further focus on this aspect in the following section.

# Geo-artistic entanglements

The "art-worlds" are the creative fabrics involving anew several social scientists with artistic themes, practices, and methods. In fact, since geography and art have a strong partnership, I am 'snapshotting' this marriage, probably in contrast to other trends in visual studies, not only because it is offered as an incubator of potentialities to challenge, renew or transform some conservative and traditional approaches in the discipline of geography. We should admit indeed that artists can be just ontological as everyone else. Rather, exploring the art domain from the geographical perspective make us acknowledging that, therein, mapping, landscape-making, and urban practices emerge as a considerable focus of attention for geographers and cartographers in the company of artists, writers, theorists of Cultural

Studies and Visual Culture. This reservoir of encounters may offer a counterpoint to the current grain of thinking and complaint made by cartographers that maps are snubbed or somehow annihilated in visual geographic research (Boria 2013; Dodge et al. 2009; Marin 2000). Moreover, mapping projects are mushrooming in artistic contexts, even beyond geography, and often with political and programmatic outcomes; nevertheless, they especially involve a wide range of visual and audio-visual materials, representing a precious opportunity for a visual-oriented geographic research. At this point, if it were granted me the possibility of generalizing, I would say that an aesthetical approach can be translated in contemporary cultural geography as a field of poetical experimentation where the poiesis is often unfolded as a political doing. Aesthetics is not seen as an ideology to be decoded, as it is more likely to be addressed the power and performance of the visual, rather as a source of potential (Hawkins and Straughan 2015). In other words, it is nurtured by a conception of art more inclined to be a political vocation and a practice of transformation that usually (not always) transcends material questions about the market system from which this 'radicality' is produced. The aim is indeed to address material and political issues of society more broadly. This interest towards artistic practices could be contextualized within what Rancière (2006) defines "the aesthetic regime of the arts", that is precisely the regime that separates art from the context of its contingence: "history, interpretation, patrimony, the museum, the pervasiveness of reproduction" and "strictly identifies art in the singular and frees it from any specific rule" (2006: 23).

Even if the political aesthetization of artistic practices might be seen a current domain in some branches of cultural geography<sup>71</sup>, especially from Anglo-Saxon derivation, the aesthetical attitude works here especially as a modality to envision the matter of the world through diffusing sensibilities which can recoil an alternative approach to what usually a scientific work demands. The atmosphere can be summarised by Hawkins, when she outlines that "art encounters emerge as thoroughly creative encounters, obliging us to be aware of the possibilities they present for experiencing and thinking the world differently" (2014:12).

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<sup>&</sup>lt;sup>71</sup> That the relationship between art and geography is enjoying a new and very recent lifeblood might be evidenced from the several conferences organized as well as from the launched journals in the last couple of years. In 2013, it has been organized in Lyon a conference entitled "Art and geography: aesthetics and practices of spatial knowledge"; in 2015, an explicit session devoted to "Art and geography" made its appearance in the 5th EUGEO conference organized in Budapest; in 2016, at the Conference of Irish Geographers, again an "art and geography" session has seen the light. Furthermore, in 2015, a new journal, *Geo-Humanities*, which explicitly demands geographers a commitment to artistic practices, theories, and methods has been launched from an initiative of the Association of American Geographers. It has been inaugurated in a related conference held in Barcelona (19-22 October 2016) always devoted to art, humanities and geography.

In this sense, contemporary art theory is felt as providing new tools to twist, curve and transform geographical practice. Hence, more and more cultural geographers might be compelled to use creative methods for their fieldwork so that art, rather than being treated as a source of study, could become the method through which the research takes shape. Whether these interactions are driven and justified by the cultural and economic system in which they are produced or are rather imagined to drift the academic machine into other and outsider ways of thinking—namely of inhabiting society—the result is that, if the gaze is focused and the ear is tuned for good, it is possible to discover creative projects which are involving cultural geographers along with artists, art historians, filmmakers, or presenting geographers as artists and performers themselves. This opens to a great stage of contamination including artists in residence in university geography departments, shared community arts projects in urban areas, collaboration on GIS-based art projects, and curatorial activities involving directly cultural geographers (Tolia-Kelly 2012).

For several reasons, different typologies of encounter between geography and art may not be seen as networks made by regular and linear connections but rather as a kind of knitting that makes knots and tangles grow, now prepared now unravelled by diverse theoretical movements and gestures. Geographers can approach art in several ways, indeed. For instance, as an effect of the cultural turn, they have extensively embraced films, artworks, and artistic performances (and also novels and poems) as their sources of study. These kinds of artworks are especially mobilised for their appealing capacity to make visible the politics of representation (and the representation of politics) of places and subjectivities, revealing usually how they are informed and can envision different power relations (i.e. Cosgrove 1984; Farinelli 2002; Rose 2003; Ryan 2003). In this manner, historical, economic, and social conditions are seen as reflected and shaping the artwork. This is often discussed in the way it presupposes a fixed and contemplative gaze and a dominated object which can be dissected in all its inherent components (see Rose 2015a). This criticism, if generalized, is likely not to recognize those works where cultural artefacts have been already seen as constitutive of society that they say to represent and as constituents of the way of understanding the cultural values. Indeed, as Rogoff points out: "images in the field of vision therefore constitute us rather than being subjected to historical readings by us" (2000: 9).

Nonetheless, there are also cultural and social geographers who are more willed to consider the spatial dimension of the artistic phenomena, shifting especially the focus from the traditional art site of knowledge production to the social site—the urban space—where

artistic interventions are flourishing (Hawkins 2014). In this setting, it is easy to play ambivalently with notions of commons, community, property, and ownership (Loftus 2009, Rose 1997). Therein, more often artistic incursions are regarded and idealised as alternative ways of socialisation. Yet, I consider they are much more interesting for the fact that they do to surface the contradictions of the city, revealing for example who has the right to decide how to represent, negotiate and use public space (Deutsche 1996). Other scholars have manifested a sensuous and corporeal disposition in their engagement with the art matter, sensing and re-processing the suggestions arising from artistic practices for the purposes of their research (Hawkins 2013; Sturghen and Hawkins 2015). This phenomenological attitude towards artistic practices and objects has demanded also to search for new approaches to describe art encounters "as in process, always producing: world in progress, knowledge in the making, subjectivities to come" (Hawkins 2014: 10). Admittedly, the emphasis on creativity has reshaped the way in which several geographers think today about their work. More so, it cannot be overlooked the fact that several geographers consider or re-discover themselves at heart artists in line with recent gyrations of 'practicing theory through art' (ie. Cresswell 2012; Sachs-Olson 2016; Yusoff 2006). Those funambulist researchers are crossing the precarious, today even imperceptible, wire between theory and practice, providing some very interesting insights. In this way, they confute "that often, very little is about the geographer practising or doing the visual [or the aesthetic]" (Tolia Kelly 2012: 136).

In any case, we cannot generalise and frictions need to come out. There are scholars who, without 'completing' the process of assimilation, more neatly collaborate with artists in a work of back and forth, where a contamination can be also replaced by a strategic retreat. In fact, despite similarities and empathies, also differences should be addressed. Many of them are listed by Marston and de Leeuw (2013) and Tolia Kelly (2012)<sup>72</sup>, even if I would argue that there is still a little focus to notice that privileged trajectories and asymmetries are at stake within and across disciplines. This should make us reflecting how far the grammars and methods of each academic field can really and practically benefit, enrich, and being polluted from this encounter. For instance, to remedy the risk of overlapping (not intertwined) voices, the emphasis has been recently placed on the practice of dialogism and mutual experimentation that surely offer interesting outcomes (see Hawkins 2014; Lorimer and

<sup>&</sup>lt;sup>72</sup> For example, they point out that the work of geographers, even when it concerns images, does not circulate in the peculiar sites of art knowledge such as museums, galleries and exhibitions, but mainly "textually" through journals and books, conferences and seminars.

Foster 2007). Still, if a discipline turns to be more attractive than another, the interaction may mutate anyway into a one-way fagocitation (hence a fetishization) of practices and concepts. Once we open to a more corpuscular and rough vision compared to an exclusively enthusiastic approach, it would also be interesting to gather stories where the geo-art connection fails or does not work as it was expected. Is not a way to be pessimistic, since the art of failure—as claimed by Judith Halberstam—"offer more creative, more cooperative, more surprising ways of being in the world" (2011:3).

In concluding, in both sides, the meshwork between art and geography, sutured then not only by virtual and actual dialogues but also by doings (Hawkins 2011) can open to a huge realm of productive possibilities in which also friction, misunderstandings and irreducibilities should be addressed as equally important. In these cracks, we might begin to think more precisely about who uses creative processes and methods and why; how the encounters between geographers and artists or art objects are materially negotiated; finally, what sort of space they negotiate. This could mean to open a window for the entry of more reflexive and ongoing visual methodologies in order to explore the realm of artistic geographies as well as of hybrid and everyday mapping practices.

#### Geo-Aesthetical cartographies

After this preamble, the time is ripe to delineate the contours of a geo-aesthetical cartography to see the sort of operations it presupposes by linking it with current apprehensions and critique arising when considering a visual-methodological approach. Engaging with the creation of a space where "the political may become possible" (Armstrong 2000: 10), aesthetical cartographies could be fictitiously distinguished from the sort of visual cartographies sketched so far, whose goal has been twofold; firstly, the unmasking of the visual machinery and the ideological implication of cartography as a political practice, namely the disfiguration of the map (Chapter 2); secondly the claim for attention of methodologies to unfold a wider range of contemporary mapping performances, including the artistic ones. The direction where this discussion is taking us allows me saying that if a visual cartography might be considered an investigative, deconstructive, sometimes destructive tool, aesthetical cartographies could offer patterns of spatial creation and transformation. This means that, herein, mapping practices are used to create rather than destroying; to set the rhythm of a narration instead of annihilating it; to open to possibilities instead of being deconstructed as

powerful and violent means in the hands of power. Nonetheless, they experience several criticalities that need to be discerned and discussed.

Foremost, to dispel possible controversy, we might consider the aesthetics both as object and as method. As an object, it could be more easily translated as the art object; as a method, however, it transcends the artistic quality of the artefact and it might be transposed as an approach into mapping practices that might produce a frantic investigation of "the potential of meaning inherent in everything silent" (Rancière 2006: 37). The consequence is an explosion of modes of speech and levels of meaning, opening to a site where to reformulate new strategies and, why not, even alternatives to Cartesian maps and borders.

In the first connotation that I am going to discuss here, as a laboratory of artistic experimentation, the map is capable of revealing eclectic ways of encounter. Nonetheless, even geographers and cartographers have participated in this atmosphere in the guise of collaborators, curators and artists<sup>73</sup>. In this sense, there are several works of geographers and cartographers interested in the creative use of maps and mapping in their research as a mutual understanding of both geography and art (Amilhat Szary and Mekdjian 2015; Cartwright, Gartner & Lehn 2009; Cosgrove 1999; Driver, Nash & Prendergast 2002; Hawkins 2014; Nash 2004; Pinder 2005; Till 2010; Wood 2010). Here, in the realm of aesthetic cartographies, it comes often to experimental projects that seek to interact tools, theories, and experiences that draw a horizon of common interest to more areas with a claim for political and programmatic outcomes. We could have a better sense by reading this abstract from the project "Mapping Spectral Traces" where cultural geographer Karen Till explains:

these scholarly, creative, and activist projects attempt to sketch out the complex pathways of political struggle and social trauma, joy and pain, mourning and memory, and invite us to engage our sense memory so that we may begin to understand our world through what Jill Bennett describes as "empathic vision" (2010: 11).

Mapping Spectral Traces is just an example of a collaborative project that brings together geographers, anthropologists and artists with the aim to map the ephemerality of things such as memories, trauma, violence much in vogue in the affective turn whose social sciences are currently deeply invested. Insofar maps, drawings, audio-visual devices can be extensively

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<sup>&</sup>lt;sup>73</sup> I can remind "Power of Maps" organized in 1992 at the Smithsonian by Denis Wood; "Mappa Mundi Universalis", the artwork created by geographer Gunnar Olsson at the Biennale of Uppsala in 2000; the cocurated "Mapping Manchester" by Dodge and Perkins in 2009-2010. Again, "Whose map is it?" an Iniva project involving geographers and artists, and seeing Harriet Hawkins as curator.

used, mapping comes to be also understood as a walking along or as a journey in which emotions, affection, bodily sensations are assessed as spatial incubators through which envision the matter of the world. It may be noteworthy that, once mapping becomes the artistic template within which to experiment this empathic vision, an implicit dialogue with the cartographic system of knowledge is set as well. Indeed, the quoted project is intended "to allow participants to explore multi-sensual aesthetic forms, alternative narratives, and activist topographies that delve into terrains not usually observable on Cartesian maps" (Till 2010: 12).

Therefore, such creative cartographies emerge presenting themselves as an alternative, interdisciplinary and critical response to these same questions of mapping and power exposed by visual cartographies. Those maps-menders are experienced as a sort of counternarratives to the scientific and disembodied cartographic ideal (Edney 1993). Indeed, scholars and amateurs who usually enter this provisional critical route try unwittingly or not to understand what function and dysfunction, epistemological possibilities or aporia can affect the map beyond the Map, when it is not anymore conceived as a technology of power (Harley 2001) but it is re-appropriated in unpredictable ways by those who feel they occupy a vernacular and amateur position. Therefore, the emphasis is focussed on those works where the geometry of power is dismissed, bodies strike back, geopolitics and intimate places act as a singularity and fixed maps eventually crumble. Still, the dialogue is just a starting point, since there is not a real attempt to criticize the scientific cartography, rather to transform the aura of the map into dispersed and engaged material spatial practices of reflections, actions and connections.

Leafing through the catalogue of the exhibition, in fact, the aesthetical mapping has little or nothing to do with the geographical conventions that we would attribute to maps. They are instead turned into deep mappings, performances, installations, sculptures, and paintings. In this way, a particular conjuncture and re-mixability of images, performance, materials, bodies push the map far away from her neatly conception of a fixed object opening rather to see its instability, mutability and ephemerality. And perhaps, they can make us even thinking of what is not a map, leaving stunned by sense of the fundamental unmappability of human feelings. Recalling this aspect, Till further insists on arguing:

when the viewer desires to find presences that cannot be represented in Cartesian space, then the practice of mapping might allow us to orient ourselves to the unexplored potentialities of space, time, affect, spirit, and materiality in the pursuit of social justice. (2010: 10).

Another example of the trajectory intended by an aesthetical cartography could be provided by an experimental and participatory mapping workshop held in Grenoble, titled *Crossing Maps* (2013), involving, this time, asylum-seekers, artists and geographers (Amilhat–Szary and Mekdjian 2015) as part of the *antiAtlas of Borders* collective<sup>74</sup>. After collecting various testimonies among refugees, the geographers have shown that maps prove important in communicative situation where people cannot speak the same language. They become a way to tell their journey: places where they used to live, countries across which they moved, frontiers and borders that stopped them until the temporary arrival to Grenoble, where again maps become essential means to orientate them in the daily activities.

What might be interested to notice is that those who normally would be in the position of informants and witnesses become now cartographers and creators of their own paths, revealing how personal experience and spatial expression intersect with broader social and political changes and circumstances. The maps created do not require specific accuracy and skills; they are rather mental and emotional maps which try to assign and attach, through a negotiated and participated symbology, feelings into places. In this respect, they are perceived by the authors again as alternative modes of mapping rather than the 'authoritative mapping', the standard and controlled data-gathering for decision-making. Indeed, despite exposing borders as physical lines and countries as empty spaces, they trace the invisibility of powerless subjects and places, their crossings and peculiar personal events. However, geographers do not participate in this initiative contributing with their own maps, but in a way they build and instruct attendees on the rules of the game, limiting their own role to interpret what has been produced by other subjects. In other words, the geographer "listens" to the witness through the traces that he or she leaves into the map, thus highlighting the different and unequal position between the two figures. Againts the two geographers, they may in fact be addressed the same criticism I discussed for the anthropologist William Epps Cormack, protector of Shawnadithit, excited by the possibility of gathering ethnological and strategical information

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<sup>&</sup>lt;sup>74</sup> Anti-Atlas of Border is a collective of researchers (especially political geographers), activists and artists born with the aim to provide a dynamic and critical analysis of the border regimes constructed in Europe through trans-disciplinary methods. As a results of two years of workshops and seminars (2011-2013), several exhibitions/conferences have been organized in Aix-en-Provence (2013), Grenoble (2013), Rome (2014), and Brussels (2016). Their manifesto as well as their journal and conferences' proceedings can be found at: <a href="http://www.antiatlas.net/en/">http://www.antiatlas.net/en/</a>.

from her maps. So, although these maps, made of paper, stitched, coloured, carved are presented as a participatory mapping and an alternative to the scientific and standard cartographic methodology, certainly it remains fragile the line that separates the willing to speak "nearby" the migrant participants, and to talking instead on behalf of them. However, I cannot limit to flatten and so easily overlap the two situations. In fact, in Crossing Maps the ideological and political intent is very different. Firstly, the experiment is particularly interesting because it explains, step by step, the manner in which participants and the audience have been involved, what were the purposes of the project and, more importantly, the frictions experienced by participants and organizers (see Amilhat-Szary and Mekdjian 2015, online). In this sense, the creative intent and the methodology are equally taken into account and the inner voices of the vernacular cartographers involved are sometimes accounted in a dialogic way. Secondly, those maps were exhibited along with other installation consisting of texts, audio-visual and choreographic works in order to enhance a political goal, to involve the public audience in the discussion of the difficulties encountered by migrants to obtain hospitality and asylum. In this case, such maps, although exhibited in a museum like those of Shawnadithit, have less an exhibitive and exoticing intent and more a political-activist outcome.

The flow of spaces is equally interesting and, in looking at the spatialities of this project, we can distinguish at least three sites. There is the first space shaped by the encounter between scholars (geographers), participants (migrants) and artists. Then there is the space produced by these maps, sculptures, drawings, videos, and finally the space of the exhibition in which they circulate, in order to be consumed by the eye of the viewer. As Mekdjian and Amilhat–Szary (2015, online) recognize: "the exhibitions provided moments of reflection on the aesthetic, political and didactical status of the 'Crossing Maps' project. The diversity of places where the project was presented and exhibited made it possible to reach a large and varied audience".

In concluding, these two projects make clearer the intentions and the effects entailed in the decision to produce a research work on mapping by following an artistic approach. Firstly, they are conceived as a political work in which the aesthetic becomes a field of potentialities and tensions aimed to explore the criticalities of society, in line with the aesthetical imagery sketched above. Secondly, the political outcome is also performed by the search for a wider audience than the academic one; a goal that can be achieved when an exhibition, for example, is organized.

## Artistic cartographies

In the previous section, I have illustrated some projects involving the aesthetic of mapping as they are 'designed' at the interface with the discipline of geography. Since the latter quite often solicits the help and the collaboration of artists, this last section is pretty dedicated to them. It is not possible to provide here a full account of all the mapping practices experimented and created by contemporary artists. The result is that an endless bibliography is opened to us. For this reason, I'll provide only a personal and fragmented guidance on the different mapping that are experienced in the artistic meshwork, (a journey which has been actually started even before this chapter), wherein geographical maps are transformed by the use, appropriation, creation and sometimes contestation made through artistic practices. Moreover, it is important to notice that these artworks 'at their expense' become more closely a sort of meta-maps for scholars (both cartographers and geographers) pushed in reflecting, by comparison, on how this tool is used (or not) in their discipline and what kind of horizon can extend or shrink. In this case, the boundary between what the artist wants to do with a map and what the geographer believes that the artist is doing is likely to be crumbled, probably to the benefit of the researcher. The risk is to end up speaking about and over artists. From another angle, however, it is also true that the meaning of the object of art usually demands 'desperately' to be completed or invented by the viewer, opening inevitably to diverse interpretations. This exploration results compelling especially when standard methods are abandoned in favour of creative approaches. In this regard, we can find several exhibitions, catalogues and books proving how artists and curators themselves are interested in maps, geopolitics, and more broadly in the connections between the individual and the environment (Plegen and Thompson 2008; Harmon 2004, 2009). Watson (2009) tried to list at least 24 exhibitions from 1977 to 2009 with a particular account of aboriginal art. Moreover, in the last years, the number has continued growing dramatically inasmuch as it ought to consider not only single artists working with/on maps, but also exhibitions which have taken mapping as a central theme declined in different ways (and not only maps but also atlases, globes, landscapes, territory, borderscapes). In addition, as I mentioned before, there are collaborative projects involving academics, artists and curators or even geographers and cartographers as artists and curators. More broadly, beyond the collaboration with geographers, counter-mapping and cinematic cartographies feed the imagination of numerous creative subjects and cultural workers. At this point, let us imagine a big screen where the manifold artistic practices involving the map as their spurious referent take turns one after the other. We can watch artists creating maps of memories or mental states such as emotional spaces, futuristic and utopian visions. An example can be offered by the series of utopian maps realized by artist and cartographer Laura Canali, whose work will be further analysed in the following chapter. For instance, L'Isola che non c'è 75[Fig. 10] is the visual transposition of Thomas More's Utopia, located by the artist in a world's projection seen from the Artic. The close relationship between the map and the story, the diagram and the plot is returned by another of her work, "Il filo del tempo 1" <sup>76</sup>[Fig. 11]. In the chaos of geometric signs, tangled lines, and sinuous dancing figures, created by the lines of the map, the artist tries to portray her life as a doodle, a jumble of lines representing the deepest traumas of her intimacy. Others may engage with the creation of nomadic and moving mapping, escaping the static and systematic view that a traditional map imposes. Zylinska's work is instrumental in this case. In i-Earth (2013)<sup>77</sup>, she produces a gif animation through four eye-bird views of natural landscape made with children's diorama kit, digitally photographed and then processed in motion in order that "the viewer has to become actively involved in the process of seeing by moving her head, blinking or even looking away from the dizziness of this pseudo-sublime, one we associate with the sometimes frustrating graphic culture of the early Internet" (2014, online).

Futhermore, maps can also be torn, burnt, dissected and rendered unreadable and unworkable as we have already seen in the work of Ana Mendes, *Map Series* (see Chapter Two). We could call them degenerate cartographies that can also play on the absence of names, places, scale and legends, leading to a short-circuit of the cartographic representation as a modern but still pervasive source of certainty.

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<sup>&</sup>lt;sup>75</sup> The work has been presented in Rome at Galleria Angelica, between 6<sup>th</sup> and 8<sup>th</sup> of July 2016, to celebrate the five hundred years since the first edition of Thomas More's Utopia. I attended the event on July, 8 with the artist who explained to me the various processes and choices of ideation, production and final location of the work.

<sup>&</sup>lt;sup>76</sup> The work has been exposed from June, 14 to July, 26, 2016 at the Chiostro del Bramante in Rome. There were totally six works, made of rolled aluminium, three of which dedicated to geo-poetics and the other three to the matter of time, emotion and traumas. I have also visited the exhibition in the company of the artist, who gave me an account of her life, leafing through the lines of the map she produced.

<sup>&</sup>lt;sup>77</sup> Since it is a work in motion, I think it might be better accessible here: http://www.joannazylinska.net/iearth/

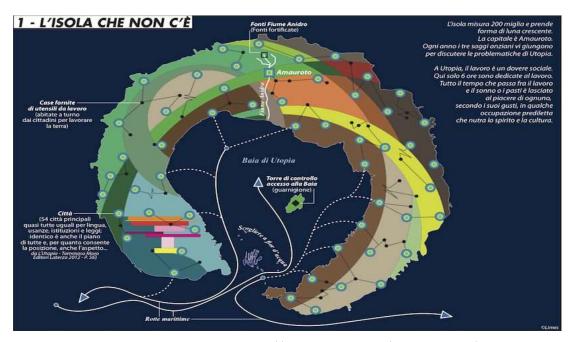


Figure 10. Laura Canali, L'isola che non c'è. http://www.limesonline.com/lisola-che-non-ce/51654

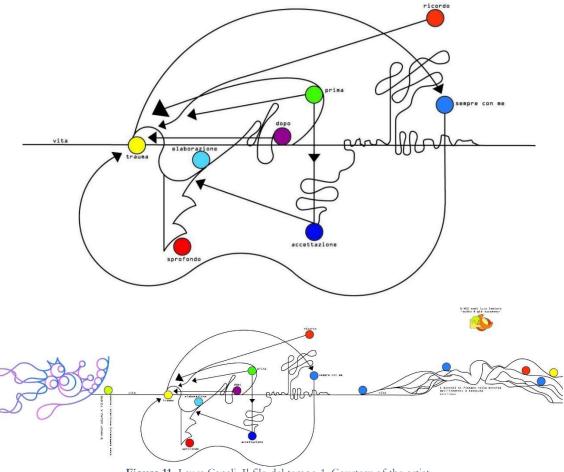


Figure 11. Laura Canali, Il filo del tempo 1. Courtesy of the artist.

Further, there are those experiments which do not necessarily take the form of an exhibition, such as the psycho-geographical drifts and other walking exercises. During the

1950s, the Situationists sought to radically transform urban space by subverting cartography as part of a project of political resistance. With the invention of the derive (Debord 1958), a new way of experiencing space in the city, they redefined the urban environment using a performative approach. The idea was to get lost in the connective urban fabric, deconstructing and at the same time transforming the ability to move around and experience the daily life by following subjective and sensorial 'rules' rather than suggested by the architecture and the official topography of the city. The Situationist critique has later been revised by Michel de Certeau, celebrating the idea of urban counter-mapping as an artistic art form. In his Practice of Everyday Life (1984), he describes the way individuals unconsciously navigate through the city. De Certeau argues that instead of using maps as representations that institutions seek to impose on ordinary people, the walker should form her own strategies in approaching the environment, and therefore refuse the means and rules imposed by others. However, geographer Pinder (2005) observes that the survival of psychogeography in the realm of contemporary artistic interventions not often implies the resistential endeavour proposed instead by those authors. Rather, recent experiments are involving artists and academics scattered in different cities of the world and taking very different trajectories that have mostly to do with the way in which citizens, individuals, and groups of different targets experience the city, negotiate public spaces, react to disorientation and respond to these challenges. The scene is therefore very wide and goes further extending when including those practitioners who define themselves as "radical" or "autonomous" cartographers and those who use maps in a "unhomely" way, challenging its conventions and rules or searching for more effective and ethical ways to engage with space. The contemporary psychogeography is also driven by GPS, geocatching and software. Such technologies are not only used to explore the physical urban experience while performing a sort of hybrid space. The digital also becomes the space in which these virtual drifts are practiced, where it is no longer the city plan but the algorithm to provide a sense of oppression and defiance.

In other words, when we enter the realm of contemporary art a linear discourse cannot be afforded. Indeed, as I noticed at the beginning, the growth and pervasiveness of the "mapping paradigm" provides concurrently heterogeneity and homologation giving a feeling of approaching the unexhausted possibilities of creative cartographies. Above all, those cartographies call to different traditions depending on their different practitioners. It may also require different and composite methodologies to unleash their ecology, since research

can be focused on dwelling on the meaning and the representation of these works, as I did in this case, or a non-representational approach can be preferred, by proceeding in looking at the production and circulation of the artworks and how are they experienced by the viewers. Further, the choice of material and the medium may also influence the significance of the work and similarly allowing different interaction and fruition; likewise, how the space is constructed, practiced and performed becomes a nerve centre to understand how the field of vision comes to be built, what is made visible and how. Despite the sense and meaning unleashed by those works, I think it is important to ask which visuals strategies are permitted if some artist choices a map as a frame (e.g. a printed map or a geo-locative medium), or opts for an installation; or again if the decision is for the mapping through movement both solo or in collaboration (e.g. psychogeography, art crowd-sourced cartography projects and the like) and certainly which message is presumed to convey or not through them. In this regard, it is often said that it is no insignificant matter how today art works and performances are designed. They require a move from a distant, detached and rational "eye" in engaging with artworks in favour of an immersive, sensuous and synesthetic disposition in decoding and complete the meaning (provided that there is) (du Pereez 2008; Hawkins 2005). However, before underlining in an over celebratory sense the difference imposed by this way of looking, we should be aware that not all artistic practices and objects demand to be seen in the same way. Certainly, especially in the case of installations and performances, it is asked to the viewer to be deeply involved in the changing materiality of the vision. This seems to be a detail of no small importance to those who currently engage with mapping in their work. Moreover, as observed by Harmon (2009), contemporary art releases a sense of plastic cartography, an engagement to a concrete materiality and a reflection on the affordance of objects used in the artistic practice. This attitude could balance the hyper-rationalism and the geometric abstraction that has informed mostly a male discourse over Western cartography. Once approached the argument from this perspective, it follows that the interest should be primary addressed to the role played by the materials chosen in the construction of the artistic practice (Armstrong 1996, du Pereez 2008) such as in the artistic map-meaning. However, when mapping is not involved in performances and installations, moving away from a traditional conception of visual analysis may result more complex and perhaps is not even required by the way the artist herself conceives her work.

The suggested points of entry raise, in their own small way, interesting questions in order to understand the particular ecology of an artwork, by asking, as we have already said, which practices and methods count to unfold the making of space (Hawkins 2014) but also "how things are made visible, what things are made visible and their politics of visibility" (Rose and Tolia Kelly 2012: 12). In short, in this other land, cultural geographers can find a congenial place where to engage with mapping, embracing in their research creativity, performance, affect, corporeality (as the non-representational would suggest) as well as exposing the more nuanced and invisible power-knowledge nexus embowed in the proliferation and production of mapping practices (as the radical approach of our discipline should not discard).

# Intermittences. The Coming and Going of maps

As I hope to have shown, an impressive and massive attention has been given by art practitioners (artists, curators, art theorists) but also militant researchers, activists, and designers to the choice of maps as interpretative means, creative tools and communicative devices for their activity or towards mapping as an ongoing and relational spatial process. As Cosgrove reminds us: "we live today in the most cartographically rich culture in history: the map is ubiquitous in daily life, and increasingly comes within the capacity of its user to manipulate and transform" (2008a: 15).

Even if the kind of questions and debates so far raised may let us seeing now maps everywhere, we could reasonably admit that there are so many geographies dispersed in the universe of academies and, as now should be also clearer, even outside disciplinary boundaries, that any consideration of who use maps and who do not, on how maps come and go away always in different guises, should be contextualized each time. In this regard, it might be also interesting both for cartographers and geographers to notice the diverse ways in which the object 'map' is continuously mobilised through the discourses of each scholar, creative subject or institution, to have a better sense on how they infiltrate, if they do, in the current debate on this topic. Now, there is little doubt that post-posivist geographers would agree in saying that there is only one and indisputable scopic regime, shaped and dominated for centuries by Western cartographers who have imposed a certain way to see, control and act in the world through the cartographic knowledge. A way of interpreting the territory encapsulated by a Euclidean spatial epistemology into a disembodied—to read reified and unquestioned—ontology. However, when the focus is not only addressed to the map itself but also to the social practices, places and discourses in which maps are embedded, several

questions arise: which discourse informs those mapping exercises? What kind of skill and visual knowledge those maps demand? When and where are they made to appear? How they circulate? Which medium and technologies are used? What kind of space do they negotiate and perform? How we experience and look at them?

In fact, taking a look beyond the cartographic "fence", as Denis Wood (2003) would say, it is now clear that maps as cultural artefacts if not mapping as a narrative spatial performance do not appear to have been such totemic tools created and manipulated exclusively in the scientific field of Western cartography, whether analogue or digital. To tell the truth, indeed, especially in its digital 'metempsychosis' today no activity seems to escape from the 'mapping paradigm' in its guises of collecting, orienting, displaying, surveilling, controlling, locating, catching, mining, tracking all sorts of data, places, bodies and movement. Furthermore, practices as walking, exploring, traveling, drawing, collaging, writing, assembling in a wide range of declinations are more often treated by practitioners and academics as mapping or counter-mapping exercises. We might now better understand why Harley blamed that "cartography is too important to be left to cartographers alone" (1989: 23). More importantly, recently such 'turn' has affected a dense array of cultural geographers who seem to have overcome their reservations on the map. A map, hence, is both multi-functional and multi-expressive, multi-contextual and aimed to circulate and to be opened to different meanings and actions. The visual economy of this trope actually encompasses many different cultures, imaginaries, functions, materials, technologies and medium so that map-making has been exploited as a massive reservoir from which to draw shapes, content, information, visions, suggestions, narratives and counter-narratives for inspiring and producing research, artworks and activism. This means that even if mapping is a pervasive language, experiencing a sort of metaphoric overload, it can be recognized diversified ways in which maps (and even no maps in the geographic sense) are embedded in a wide range of spatial practices. It is precisely such awareness that demands to work on multiple fronts and with hybrid methodologies: academic, artistic, literary, activist with their fruitful intersections. Indeed, "maps, their visual, textual or artefactual products, have their origins in distinct yet often overlapping cultures of knowledge production" (Roberts 2012: 11). More broadly, maps are deployed in order to visualise personal, political, social, cultural, economic issues which elect them as 'effective' analytical and synoptical tools; but we have also seen that maps are chosen to materialise and experiment a geo-aesthetics filled with revelation, emotion, trauma and delight. Going deeper, mapping is also experienced as a narrative process that encompasses

uncanny explorations of places and alternative ways of story-telling that may not always include any palpable cartographic artefact since it is virtualised through poetical and political walking (Careri 2006, O' Rourke 2013, Pinder 2005). Such performative mappings act as the template in which to experiment several practices of deterritorialisation and reterritorialisation, stemming from Surrealists, Situationists, Land artists and continuing up to contemporary psycho-geographical detournaments and *dérives*.

In short, the eclectic and (sometimes) recalcitrant practices emerging from these sources of inspiration, in the way they test the map as a multi-site of intervention and imagination, can give a clue of the reasons why they have drawn—especially over the last decade—the attention of numerous creative subjects. Even so, the result of this interest is still scattered and confused, especially regarding cultural geographers. On the one hand, even if, as I have already shown, creative mapping projects have engaged some of them (i.e. Amilhat Szary & Mekdjian 2015, Nash 2005, Till 2010), the overall geographic glance on these mapping practices seems to remain curious but superficial and not deeply involved. This is a behaviour, a stagnating atmosphere, that we could refer in the Kantian mode of a "interested disinterest". On the other, mapping projects, psycho-geographical exercises, countersurveillance practices, 'maps' exhibitions, seminars and conferences on this topic are mushrooming and proliferating at the intersection of other academic and non-academic fields. Hence, they require a tentatively work of understanding the aetiology of their propagation and the convergential points of their intersection. Similarly, they demand another approach that does not assess or judge only the potential of resistance and justice they can achieve, as many counter-mapping projects are usually presented (i.e. Craig and Mason-Deese 2012; Harris and Hazen 2006; Mogel 2008) in a direct legacy with critical geography and psychogeography literature; or as an exclusively forensic (and semiotic) evaluation of the alternativeness that they can provide to the "scientific cartographic ideal" (Edney 1993), as the so called creative cartographies may try to offer in their deep, emotional, subjective and embodied declinations.

The first biggest lesson that the artistic practices in cahoots with the visual and aesthetic theories seduced by them can provide to geographers is rather interpreting all sort of maps as "visual events" (Bal 2003, Rose 2012) or visual "spaces" (Del Casino and Hannah 2005), where representation and practice cannot be disentangled since they are thought as performance of seeing and doing. In this sense, visual theorist Bal (2003: 9) asks what

happens when people look, an interrogation that, here, we could similarly refer to the practices of looking at maps. She pinpoints that:

[t]he verb 'happens' entails the visual event as an object, and 'emerges' the visual image, but as a fleeting, fugitive, subjective image accrued to the subject. These two results – the event and the experienced image – are joined at the hip in the act of looking and its aftermath (Bal 2003:9).

Under such reading, maps can appear something less static to investigate. If we imagine the map as an ongoing outcome of a spatial practice, where meaning is constituted relationally, it may also require a study more inclined to explore who is mapping, which strategies are used to create a map and for what purpose; but, more importantly, a focus on the effects produced on the users involved, in terms of unpacking what they look at and how they see different mapping events. Conceiving maps as visual events or visual spaces, we can even respond to the re-iterative claims made by Italian and British cartographers who lamented an alleged lack of interest on mapping, map-making, geo-visualisation both as research tools and as objects of inquiry in the realm of human geography. As we have seen in Chapter 3, they pointed out that the epistemological shift in the have liberated maps from their stable security ontology, recognizing them as ontogenetic processes "always of the moment, brought into being through practices (embodied, social, technical, political)"( Kitchin and Dodge 2007: 2), thus enabling to be approached in a post or nonrepresentational theory. The focus on creative and participatory practices and materialities how human and nonhuman mapping are enacted or performed—demands especially key attention to digital mapping due to the fact that they are embedded and influencing and hybridizing a wide range of spatial activities (Elwood 2008, Elwood and Leszczynski 2013). The increasing opportunities offered by the use of digital technologies in terms of creation, manipulation, and participation in the mapping process is possible to attract even those human geographers who have not anymore the professional and technical skills in order to create, improve and thus participate to and critically analyse the cartographic knowledge production. Indeed, the democratisation of mapping, which obviously does not always imply that it is a democratised practice (Graham 2013; Roberts 2012), might reduce the gap between the creator and the user, since we assist to a commercialization of digital mapping software which can be easily used by amateurs. Regarding this, Crampton (2001: 32) outlines that: "allowing non-cartographers access to data and to produce their own maps, breaks one of the major principles of traditional map-making theory, that there is a clear separation

between the cartographer and the user". Seemingly, cultural geographers, bereft of a cartographic training, can therefore use these tools or understand better how they work in order to put to service their critical gaze, opening to new and still uncharted possibilities. To open up new areas for a critique of mapping, Dodge and Perkins (2008) are aware that as visual materials (whether printed or digital interfaces), maps demand the same interest that geographers—especially cultural geographers—have poured to other visual artefacts such as photography (i.e. De Silvey 2007, Edensor 2005, Rose 2010, Rossetto 2004), movies and tv series (i.e. Aitken and Dixon 2006; Dell' Agnese and Amato 2014), artworks (Hawkins 2014) and recently to digital urban visualizations (i.e. Rose and Degen 2008; 2014). Along similar lines, they argue that both cartographers and geographers should engage with the matter of the visual embedded in the map, but it still seems to me in a very distinctive way from that commonly adopted by Visual Cultural Studies. Indeed, in the section "Mapping visual culture", presented in the final chapter of Rethinking maps, Dodge, Kitchin, and Perkins ask support in pondering:

Which new ways of symbolizing data work best? Which widgets offer the most appealing ways of performing screen navigation and selection and why? How might geo-visualization best represent movement, change and dynamic data? What are the best ways of situating the observer on and in mapping displayed on different kinds of device? (2009: 127).

As a rebuttal to this point, it might be argued that this call could bring back the ghost of a 'progressive' conception of cartography (Edney 2005) with its narratives of advancement and perfectibility<sup>78</sup> rather than paying attention, rightly how the same authors actually demand next, on what maps do in a series of spatial practices. All the things considered, there are two main arguments that could be instead explored by the future visual and aesthetic cultural geographies. First, if the dialogue between cartographers and geographers (where there is a clear distinction) must be situated in terms of the visual, we should also have a better sense of what the Visual Culture or Visual Cultural Studies are, although contested and negotiated fields. This means that before engaging with empirical research, a clearer consideration of visual genealogies and of their different translations in the field should be always addressed as I tried to do in the previous sections. For instance, even if we have seen that visual culture has often claimed not to have any object (Mirzoeff 1999, Mitchell 2002,

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<sup>&</sup>lt;sup>78</sup> Harley (1989: 15) argues that cartographers have created an "epistemological myth that cartographic method reflects the cumulative progress of an objective science always producing better delineations of reality".

Smith 2011) nor a clear methodology (Bal 2003, Rose 2012), it does not seem to deal with 'how' to make images (in our case, maps) the most attractive or functional. This issue was actually noticed by Harley himself, when he claimed that the visual feature of the map "has often been accorded a cosmetic rather than a central role in cartographic communication" (2001:154). Standing rather on the other side of the river, visual culture theorists recall a discursive, hermeneutic, phenomenological and rarely deconstructive, semiotic, ethnographic analysis to ask instead what is the work of such images (and in a broad and nuanced sense of their definition) in specific cultural and social practices; in which regime of visuality or visibility are they inserted while replicating or contesting it; the dynamics, movements, relations, processes, circulation, production, manipulation that involve and produce such images in a wide range of network, media, and devices (Rose 2011, 2015a,b). The game of visual geography is played on this ground and on the charge of these questions. The improving of maps design, to which seems instead to refer cartographers and GIS scientists (Dodge et al. 2009, Krygier 1995, Perkins and Dodge 2008), cannot be considered or reclaimed as one of visual culture's main task but it can become instead an important and crucial object of critical inquiry if translated in the aesthetic, transformative and utopian apprehensions previously discussed. This way, geographers, in the guise of visual theorists, can participate in exploring and interpreting, by deploying a composite toolkit, the silent coming and going of maps through the surfaces and the thresholds of human imagination.

## Interferences: toward a twisted methodology to explore contemporary mapping practices

One of the further reasons why visual culture studies and aesthetics have been mobilised through the chapter as the two key movements and terminologies which can help and support cultural geographers in their research into mapping is also a matter of relevance. Visual culture, especially from French and German influence, has shown great interest, even though purely aesthetic, in the cartographic figures and in mapping practices, perhaps returning a sense of investigation mainly of those of the past (see Alpers 1983; Bruno 2002; Buci-Glucksmann 1996; Castro 2011; Didi Hubermann 2011). Only recently, it began to assert attentiveness for contemporary mapping, considering, on the one hand, the artistic products (Harmon 2009; Rogoff 2000), on the other hand digital practices, where the operational, self-generating and pervasive character of the cartographic and diagrammatic image are likely to attract a thick blanket of scholars (see Elkins 2012; Kurgan 2013; Mattern

2015, Verhoeff 2012). There is a missing point, however. When one enters the tricky terrain of methodologies, both the visual cultural theorists and cultural geographers find it difficult to consider the cartographic products, preferring instead to address such methodological concerns in relation to other visual products such as photos, videos, and audiovisual tools. What is the cause of this difficulty?

We could try to call it from a consideration of Brian Harley. He defines the mapping "as a body of theoretical and practical knowledge that map-makers employ to construct maps as a *distinct mode* of visual representation" (Harley 2001: 153, my italics). Is it perhaps this distinctive modality through which a geo-visualization comes to life to remove the attention of geographers and visual theorists from a purely concern on visual methodology?

To try to better explain this consideration, we can take charge of the geo-visualization definition provided by cartographer MacErahen and his colleagues:

Geographic Visualization, sometimes called cartographic visualization, is a form of information visualization in which principles from cartography, geographic information systems (GIS), Exploratory Data Analysis (EDA), and information visualization more generally are integrated in the development and assessment of visual methods that facilitate the exploration, analysis, synthesis, and presentation of georeferenced information (2004: 1).

We understand that this work requires an important theoretical training, specific technological skills and sophisticated software, as well as it presupposes a cartographic culture in order to make the optimal design choices for the final production of the infographic map, which is, I remind, a hybrid between the word and the image. According to Rose (in Bignante 2011: X), the lack of interest on the part of the visual disciplines in dealing with the mapping methods is due to the fact that cartography and GIS work as hard sciences and, as such, they already specify every phase of their operation and are based on a controlled methodology. The field of visual methodologies has instead developed where the problem of the methodology was not expressly addressed, as in the photographic field or in the kinematic images. Yet, we should not forget the various overlapping cultures of mapping knowledge production. This means that the methodological field of a possible visual cartography should be hybrid, it may not only be reduced to a reflective investigation on visualisations produced for academic purposes, especially if there is little interest in the politics of representation and more in the science of communication. As I have tried to discuss throughout the chapter, no disciplinary field is forced to be just a self-reflective

science, but rather there is the right/duty to analyse and interpret materials which are not self-produced. Hence, it could also be opened to the way in which maps are created outside of the discipline. As we have seen, mapping today is something more and something different. It is the result of diverse spatial practices and skills, where several processes of information and story-gathering often exceed the mere scientific methods. This specificity cannot be overlooked when one tries to make argument about new forms of mapping. In short, "[t]he word 'carto' should be understood as the equivalent of the word 'photo', meaning a complex technique that has become a popular art and, today, a medium" (Retaillé 2015: 260). Under this light, cultural geographers could have something important to say. For good reasons too, it is crucial to balance the visual methods produced by professional cartographers with the methodology of investigation which have been also addressed by cultural and human geographers in respect of the maps and landscape. In this regard, there are studies, even if limited, aimed to explore the persuasive geography of viral media where maps appear and disappear, routinizing certain endeavours, attracting or distancing their viewers. In this manifold universe, several approaches have been tested (historical, semiotic, discursive) which can be put in resonance with the similar visual culture apprehensions.

For example, Monmonier (1991) has revealed the visual manipulations and necessary distortions that all maps must make in order to function, even if, once routinized, we are usually invited to believe in what they show. Muehlenhaus (2012) created a database of more than two hundred "political cartographic manipulations" produced in the United States, Canada, and Western European countries post-1800. Using the database, he conducted a variable quantitative content analysis to explore different graphic design, data model, layout, and contextual characteristics of persuasive maps. Recently, Rossetto (2015), drawing from interests in map theory and visual studies, analysed a selected corpus of maps to see how they intersect and perform the question of racial/ethnic identity. It comes to works which deploy several methods, mostly preferring a semiotic approach based on discursive analysis. In the last period, the "call to maps" introduced in the previous chapter and launched by post-representational carto-geographers also placed emphasis on ethnomethodology to engage more vividly with maps as mapping processes and practices (see Brown and Laurier 2005). This gave rise to two types of correlated research, both focused on the use of maps and mapping in everyday life. In the first strand, as I have already introduced in Chapter 3, are included those works aimed to explore the use of mobile mapping, trying to understand how these new technologies affect our perception and construction of space. It is a kind of research that initially affected the field of media studies, and from there began to titillate the research questions of some geographers who work in the interface of geography and media studies (i.e. Wilmott 2016). A second line of research that is also attracting the attention of some cultural geographers regards deep mapping practices, which take as referent the work being done in Spatial Humanities and anthropology (Bohedramer 2010; Drucker 2012). It comes to a multisensory approach to investigating the material history of place (Dodge 2016; Roberts 2016; Wood 2015). Deep mapping involves scholars in narrative ethnographic research to unfold the many souls and practices which are believed to constitute and perform a peculiar place. In this case, the body is the privileged means of the map; the subject who crosses and stops in the many imaginative and material corners of the terrain, using a wide range of devices as video-recording, photography, interviews, diaries, poems in order to "exploring and placing oneself within the multi-scalar locative dimensions that are opened up through the act of deep mapping" (Roberts 2016: 3).

Importantly, the attribute "deep" signals the search for volume and profundity - "a diving within" (Roberts 2016) - instead of the common appeal to surface embraced by cartographic practices. This way, archaeological metaphors and grammatologies turn to be more fashionable than the cartographic, trying somehow to devour and re-signify it, posing the attention on the multifarious spatial practices whose map becomes the final outcome and not in the representational feature of the "deep map" itself. In this succinct description, the reader will notice a clear and familiar relation with the practices of psychogeography and wayfinding. It certainly is, even if the concept of deep mapping has risen in Humanities more as a literary mapping practice, presented for instance in the novel PrairyErth (a Deep Map) by William Least Heat-Moon (1991). Yet, it is especially thanks to digital technologies that maps can become a site of visual experimentation for geographers. Considered a supporting tool for research, the sketch-map developed by Rose, Basdas and Degen (2009) with the help of the web designer Barz, seemingly integrates text, audio files and photos, manifesting a tendency quite common among geographers for the potentiality of the deep mapping. This also means that, despite the postmodern cartophobia which stills exert a huge grip on human geography, some cultural geographers are also willing to maintain or revive the use of maps provided they are rethought and integrated by other tools: photographs, videos, texts, interviews that try to compensate for the narrative limitations of a conventional geographical map. Once uncovered a cauldron of mapping genealogies so varied and still largely unexplored, I believe that is important to begin asking for any mapping contest that we

encounter several questions in order to unpack its ecology. We might ask: when and where maps are made to appear, which medium and technologies are used, how they are presented, what kind of space they perform since objects create and constitute relations and atmospheres of meaning. In short, as the visual anthropologist Pink (2007: 28) suggests, it is crucial to look at the context, the content, the subjectivity, the materiality and agency. A technique of observation recoded by Rose (2012) in terms of context, practice and place. Questions and methods vary and raise different answers if they regard a participatory mapping, or if the object of inquiry is a map found in an advertisement, in a book, in a billboard, in Google maps, in a website, in urban visualisations or in a work of art. Albeit "all maps are mapping" as rightly promotes Kitchin (2007), namely ongoing processes and practices, maps are also objects designed to be practiced and used in certain ways. These distinctive modalities should emerge in order to grasp the "effects" each map has or not in the audience it wants to address and involve. On the other hand, like other images that constantly surround us, we should also remind that we could be totally or partially indifferent to them. In this respect, Crary (1988) underlines that attention and distraction cohabit in the modern ways of seeing. Strenuously, I believe that a mixed methodology of seeing and sensing can provide the arsenal of questions needed to unfold not merely the aesthetic form of mapping, but the always unpredictable ways through which maps "are treated as experienced, material objects, rather than mere images – and more specifically how–they are used, mobilised, animated, re-opened in their meanings, perceived within contingent atmospheres" (Rossetto 2013: 72). Visual hybrid methodologies should manifest and underline specific apprehensions that each event of mapping requires, rather than being a mechanic employment of already defined methods. This manoeuvre would overlook the fact that "looking is inherently framed, framing, interpreting, affect-laden, cognitive and intellectual" (Bal 2003: 9). In the same breath, I do not consider so instructive to simply favour one approach over another; it is more important to recognize the strengths and problematics of each modality in order to deploy, combine, mix them depending on the peculiar "bildaktiv" (Bredekamp 2015 [2010]) power of images we are dealing with, that is their constructive, constitutive and performative role in the configured experience. For this reason, it is not enough to recognize and reveal the dialectics (or ambivalence) between a sociological and a cultural approach, between visuality and aesthetics, between method and creativity, tilting them one over another and endlessly enumerating the list of devices and looks defining their ontology and phenomenal horizon. Such dialectics should indeed be triangulated with geography considered as a thought-image of the world, not in the guise of a disciplinary and scientific apparatus, suggesting a third mode of theoretical approach, one in which the mapping of the space can be conjugated as a process. The happening of whatever space rethought as verb, action, process and not as mere prison-container requires a theoretical and practical disposition aimed, on the one hand, to highlight the material and conflictual dimension on which contemporary cartographic visualizations become meaningful; on the other hand, it should reverse the meta-phorisation of the map, that is to bring down the reflections on it, which often are radically out of context - abstracts- in what Stuart Hall (1996: 12) would call "the dirty world from here below".

In this conflagration, maps can and have to, now more than ever, be returned as visual events: "covering all possible directions while nevertheless going in a straight line. An identity of the upright and the flat, of the plane and the volume. That is, the consideration of the space gives a new sense and a new object to exhaustion" (Pelbart 2014: 10). The interwoven of those research modes (deconstructive investigation, practical and context-dependent methodology, and the transformative vertigo of unexpected) encourages geography to recognize the richness of map studies and to discover what such "exhaustion" has still to offer.

Chapter Five

# Wet necro-cartographies

From the death of cartography to the (in)calculability of death

Accedendo al Mediterraneo, scegliamo innanzitutto un punto di partenza: riva o scena, porto o evento, navigazione o racconto. Poi diventa meno importante da dove siamo partiti e più fin dove siamo giunti: quel che si è visto e come. (Matjevjic 1994: 17)<sup>79</sup>

Or does the land lean down to lift the sea from under, drawing it unperturbed around itself? Along the fine tan sandy shelf is the land tugging at the sea from under? (Bishop 1946)

How do we ethically engage with mathematical and numerical certainties that compile, affirm, and honor bits and pieces of black death? (McKrittic 2014: 18)

## Mediterranean cartographies: the slippery mapping of migratory events

The 'land' on which we are going to move in this final chapter is supposed to be watery and wet, smooth and open, a horizon of epiphanies and hopes where to find a new lexicon and iconology to think and tie together the human and the non-human, the surface and the volume, and where to pour our desires and expectations in the moulding of a new world configuration. This way has been intended the energetic and always-generating power of water and consequently of the sea. As Steinberg and Peters (2015: 248) claim, two geographers engaged in forwarding a new horizon for geography by unleashing a Thalassalogy of space— a wet ontology—the sea "would seem to provide an ideal spatial foundation for theorisation since it is indisputably voluminous, stubbornly material, and unmistakably undergoing continual reformation".

Deepness, vibrancy, movement are the murky coordinates through which the seascape has been decanted poetically and philosophically through time. In such aesthetic depiction,

<sup>&</sup>lt;sup>79</sup> Eng. Tr. from It. (orig. Croatian): "By accessing the Mediterranean, first we choose a starting point: the bank or the scene, the port or the event, the navigation or the tale. Then it becomes less important from where we began and more how far we have come: what we have seen and how" (Matjevjic, 1994: 17).

the Mediterranean Sea is not less. It comes to occupy the space of "another world" (Farinelli 1998b), "the liquid continent" (Braudel 1959) where the continual reformation and ongoing flow of the sea has been perceived as playing a pivotal role in affecting the several turmoils of the land. Yet, when one dives into the theoretical and materials ravines of such slippery "Mediterraneism" (Herzfeld 2005), that, in Anne Ruel's opinion, is nothing more than "une invention de géographes" (1991: 8), the ontological boundaries between the sea and the land become in more than one sense blurred. Indeed, it is no longer and often clear whether scholars are referring to the sea as a space of salience or rather to the land surrounding it. In other words, besides the consideration that "[i]l Mediterraneo è ciò che decidiamo che sia, è un progetto, è una metafora, è un modo di pensare e di rappresentare" (Minca 2003: 12)80, the majority of scholars seemed to be more interested in understanding the ways of life fermenting within Mediterranean coasts and in its urban civilizations, thus in the land, while considering the sea putatively, as a way of passage or, reversely, as a dividing line between lands. More recently I believe, several radical scholars<sup>81</sup> have tried to discuss the legacies of such perspectives, in the effort to produce theories—ways of looking—which specifically consider what was happening and still goes on in the sea; performances of seeing managed to bring out the marine 'voluminosity' and ontology as well as the stories and topographies that have been consuming in its waves. Concerning this aspect, Deleuze and Guattari, at least at first, acutely distinguished the sea (the smooth space) from the land (the straight space) arguing that: "smooth space is filled by events or haecceities, far more than by formed and perceived things. It is a space of affects, more than one of properties" (1988: 479).

In the light of this interpretation, how are we demanded to disclose this tension between smooth and striated spaces in the Mediterranean horizon, today?

Thinking of the sea, to tell the truth, is nowadays painful and harmful. When we approach the Mediterranean in our study, it comes to admit that the contact zone made of livingness and tensions, filled by events and haecceity, has now translated into an interrupted space, the 'impossible' event of migratory routes. While retaining many of the features of the "corrupting sea" described by Horden and Purcell (2000), a corpuscular area creatively

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<sup>&</sup>lt;sup>80</sup> English translation from orig. IT: "The Mediterranean is what we decide it is; it is a project, it is a metaphor, it is a way of thinking and representing" (Minca 2003: 12).

<sup>&</sup>lt;sup>81</sup> Many of these works have been the source of inspiration of this chapter, therefore, the thought of these authors will be disseminated throughout the text. I would, however, underline that important reflections on a critical thalassology have been recently also provided during the conference "And So Europe Dehumanized Itself. Mediterranean Geographies in Action" (Palermo, 10-11 November 2015), whose review can be read in Lo Presti (2016).

polluted by encounters and clashes of various micro-regions, the Mediterranean Sea is currently more felt as a solid deathscape, a viscous cartography of wet flesh. Under such circumstances, if on the one hand I should live in the desire to tend to a new space, opposed to the grid and bordering operations carved on the mainland, on the other hand, I must not fail to question and turn round the space on which people materially and symbolically move and not move, live and die, are made visible or not as bodies or numbers, as points or lines, depending on the tools and frames that define, each time, the coordinates of such (im)mobility in the contemporary visual culture (see also Giubilaro 2016, Lo Presti 2015). Only once diagnostically exposed the visual space of our present epoch is it possible to think of a set of tactics able to striate the demonic centres of spatial representation. We are, after all, immersed in that theoretical practice enunciated by the philosopher Benhahib (1986). The idea that a critical theory must be able to hold together two moments, the explanatory-diagnostic and the anticipatory-utopian. Two interpretative methodologies that the Mediterranean metaphor seems inescapably to draw to itself. In other words, as Minca points out:

Chiamare in causa la metafora mediterranea significa mobilitare sia lo spazio senza confine del desiderio sia, al tempo stesso, lo spazio cartografico dell'ordine e dell'identità. [...] Il Mediterraneo, oggi, è una formidabile tensione moderna, uno spazio in bilico tra la linea della mappa e la curva dell'orizzonte (2003:36)82.

In hindsight, what might happen if the lines of the map were not only conceived as the dried entrapment of events but also as an event generator in themselves? A spatial practice, a cartography of anticipation, and, more ambitiously, a guideline to approach the curve of the horizon? In this sense, as the reader will have well understood in the course of the dissertation, the map is one of the iconic tools that, in recent years, has taken a crucial role in tracing the space of continuously monitored bodies, very often locked and un-aesthetized in their movement. Hence, what I finally propose to explore, in the collision of mapping theory and visual culture with the turbulent migratory practices of our hyper-mediatized epoch, is the way in which the peculiar visual architecture of the map can be strategically or tactically used by different actors in order to define a migratory event. I would argue, at the risk of sounding too general, that every small, big, and tragic event of migration might ask a map to be generated. But it could also be asserted the contrary, that a map can produce a

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<sup>&</sup>lt;sup>82</sup> Eng. Translation from orig. It.: "Calling into question the Mediterranean metaphor means mobilizing both the boundless space of desire and, likewise, the cartographic space of order and identity. [...]. The Mediterranean today is a modern formidable tension, one poised space between the line of the map and the curve of the horizon (Minca 2003:36).

migratory event, namely to spot and detect it, to channel our attention on it and to lend it back according to a peculiar configuration.

Specifically, geographic visualizations—which constitute, as we argued in the previous chapter, a special and distinct iconographic mode (Harley 2001)—convey peculiar visual regimes in the need to be contextualized, taking care to distinguish the different mapping actors and audiences, hence their different contexts of production and circulation. Indeed, acts of mapping, emerging within the physicality of the media by which they are framed, have the ability to simultaneously distance and engage their viewers, to generate empathy or detachment, depending on the techniques used and the intentionality fielded. They might offer, in short, persuasive visual evidences which influence and induce, but even weaken and null, political debates. Not surprisingly, a map is anyway an inscription "that does (or does not do) work in the world" (Pickles 2004: 67). However, we tried to explain during the chapters that maps do not act only as "silent arbiter[s] of power" (Harley 2001: 166) and exclusively through their representational frame. This posture suggests that they cannot be investigated only as figures, misleading and ideological representations of the world. Certainly, if contextualized in the geopolitical arena, this aspect cannot be overlooked and I will not be outdone. In particular, it implies a serious and complex commitment to a "practical" and "popular" geopolitics (Ó Tuathail 1996; 2000), aimed to explore "the ways in which visual culture has become part of the apparatus of persuasion" (MacDonald et al. 2010: 13). Yet, it is worth insisting on the point that a visual approach must look also at the non-representational or post-representational features of cartographic processes that I have mostly translated as aesthetic and visual-methodological concerns (see Chapter 4). In this fruitful combination, the ecology of the visual gains vigour precisely in "the careful attention it pays to just how a particular image gains social traction through its connection both to discursive frames and to structures of feeling" (Rose 2015b: 2).

In short, maps can be loci of meaning, sites of struggles and negotiation, but also and foremost specifically tools generating and fostering action. Both aspects should be constantly questioned since they become crucial with the attempt to expose the various regimes of visibilities where such 'migratory' mapping activities are made meaningful. More importantly, only once afforded together, it is possible to unpack the effects that such projects might trigger in the public realm. Indeed, it is worth admitting that the considered mapping practices might also generate important moral and socio-political concerns. Maps can be, above all, symptomatic of the present political and critical scenario, so that going back to

analyse the narratives and operations they presuppose can be a valid strategy to understand the multifarious ways through which the border and counter-border scopic regimes of hypermodernity work and get salience. For these reasons, I will focus on three main categories of mapping related to, but not limited to, the thanatology of migration, to the risky and tragic relationship between Mediterranean migratory routes and the deliberative politics of death. They are visual performances that, on the basis of the mapping knowledge previously unleashed and discussed, could be now defined as figurative, operational and, finally, forensic. As we are going to explore through the chapter, these parallel and more than interlaced cartographic practices inevitably overlap and conflict in the interpretative reading of the researcher.

Yet, this chaotic strategy helps me raising a few problematics that I consider crucial in addressing the contemporary visual culture and aesthetics of map-making. First of all, one of the question deeply haunting me is to understand why, even if in the visual 'stock' of migration, geographical visualizations occupy, quantitatively, a not negligible dimension, they have not been subjected to a critical and dense, even emotional and affective, visual interest. This attitude is certainly contrasting the abundance of study recently focusing on the photographic archive of the migration crisis. More broadly, issues of iconoclasm, ethics, and phobia/desire of looking occupy intensively a consistent presence in visual culture's scholarship, especially when images of death and torture are discussed (i.e. Butler 2004; Campbell 2004; Cometa 2008; Kleinman and Lock 2007; Latour and Wiebel 2002; Mitchell 2005; Mirzoeff 2005, Rose 2009; Sontag 2003; Zelizer 2005). In other words, they raise specific concerns and a sort of theoretical obsession toward the "fleshed image", the image incarnated or haunted by bodies. Yet, even maps have a peculiar and frustrating relationship with bodies and subjectivity (see Chapter 2) to which geographers and visual theorists should be now, more than ever, attuned and sensitive. The bodies to which I refer are people who create and consume maps, often rendered invisible by the theories and methods used by the researcher; as well as those subjects who inhabit the spaces performed by maps, often forcluded by the cartographic frame, if not reduced to numbers, points, or lines. It is a sort of mathematics of skin (Browne 2004; McKrittic 2014), overlapping both aritmethics and geometry, and often blamed to dry the stories, feelings, and ongoing movements of people; in the case in question, people who try to move from one country to another in search of a new and safer life. However, such migratory (in)visibilities are not that simple to tell or unpack. They urge more complexity. In this sense, I believe it is of paramount importance

to lay bare the scopic, social, and ethical regime as well as the cultural universe of practices where mapping projects related to migration and border and counter-border control are framed: what effects are they aimed to silence or, reversely, provoke and trigger in the political debate? How particular choices of design and cultural circulation may attract or leave 'us' totally indifferent? How is the human discussed, visualised or banned in mapping projects related to migration?

These questions need to be posed in front of the media weight exerted by the 'migration crisis' today, an excess which results in the proliferation of words, icons, visualizations of migratory fluxes and routes, shipwrecks, fights, 'invasions', as well as in the obsessive numerical epidemy of bodies. Such abundancy, indeed, risks saturating our imagination, accruing the sense of indifference and distance. Therefore, it becomes essential to train and multiply the critical looks to deconstruct the complex system of representations and processes in which such dehumanized, bordered, and exclusionary visual arrangements take shape. We must be cautious, however. Any attempt to universalize and hegemonize those cartographic regimes runs the risk of misconstruing the multiplicity and heterogeneity of several visual practices that can run parallel, intersect, or even be built in opposition and in reaction to the dominant codes (Hall 1997). The discourses, practices, spaces and purposes within which contemporary maps flourish are indeed manifold. Thus, in order to delve into such ruminations, I return to argue that it is fundamental to consider the discourse, practice and place (Rose 2012) of the proposed mapping events. Essentially, it is demanded to ask who produce them, how, why and where in order to indirectly expose the effects that the 'cartographers of the present' are willed to generate in the political and disarticulated realm of migration. Consequently, it urges to understand how 'we', as singular viewers, are demanded to re-act on them, conscious of the fact that "we cannot [just] blame maps per se, but rather the lack of a sufficient cartographic culture" (Lévy 2015: 188) in which, for better or for worse, we live or succumb.

In conclusion, instead of treating the Map as a universal totem, I am conscious that, paraphrasing Harley, "our map of theory would be redrawn for each cartographic event" (2001: x) taken in consideration during the chapter. Only then, in dissecting and inspecting the cartographic flaps of contemporary Western society, we could really understand how maps, mapping, geographic visualizations and the like are surprisingly attached through different modalities and with different ontologies to the epidermic thinking and the embodied livingness of the world.

### Drowning on a wet earth: scratching the surficial deathscape of the Sea

Case 1: On the night of April 18, 2015 more than 800 people disappeared at 73 km from the Libyan coast, shipwrecking on a fishing vessel headed to Lampedusa. Of these, at the time, only 58 victims will be counted. A Portuguese mercantile ship called to the rescue, the King Jacob, perhaps for the waves generated by its arrival, perhaps for the vessel's imbalance, assisted to the engulfment of those bodies by the sea<sup>83</sup>.

A year later, in June 2016, the wreckage has been recovered from the seabed, because of an Italian political initiative, with the hope to give names, and through them, the stories of those bodies trapped in the iron box and, legally, to assign once and for all the responsibility of such tragedy.

Let's turn back the clock. The day before, on April 17, 2015, on the online platform of the Italian Geopolitical Journal *LIMES*, a blank map peeps accompanied by an article, or rather by cartographer Laura Canali's detailed comment to explain the new issue's cover image choice, *Chi ha paura del Califfo* (Who's Afraid of the Caliph):

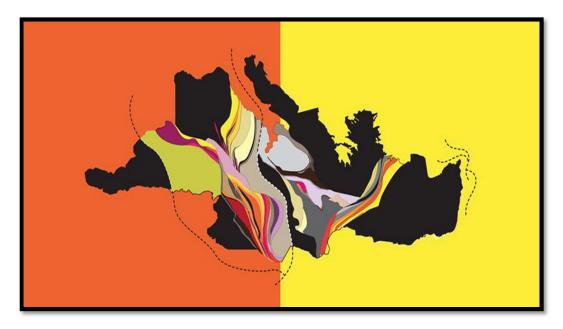
Avevo realizzato il disegno in copertina nel nuovo numero di Limes per dipingere un quadro dedicato al concetto di limite/confine. Avevo scelto il nostro mare perché oggi è una delle frontiere più problematiche del mondo. [...] Quando si è trattato di usare il colore per riempire il mare, mi sono resa conto che i colori terrestri erano più adatti ai colori marini perché in realtà questo mare non era più fluido ai miei occhi, ma duro e roccioso come una catena montuosa (Canali 2015, online)<sup>84</sup>.

"Il Mediterraneo non è più liquido. E non è più poetico" <sup>85</sup>(Canali 2015) is the title that sums up well the performance of despair parallel to the act of accusation launched by the cartographer.

<sup>&</sup>lt;sup>83</sup> According to The Forensic Oceanography, a platform created at the Centre for Research Architecture at Goldsmiths (London, Uk) to investigate the main causes of more than ten cases of death at sea, the boat driver slammed violently against the cargo ship when the latter switched on the headlights. In reconstructing the dynamics of the shipwreck through the testimonies of survivors, what has been eventually observed is that, practically, a private vessel (a mercantile ship) called from European agencies to the rescue, obviously unprepared for an operation of that kind, turned to be a danger than a help, if not, in spite of himself, the leading cause of the shipwreck (Pezzani & Heller 2016).

<sup>&</sup>lt;sup>84</sup> English translation from Orig. Italian: "I made the cover design of Limes' new issue to paint a picture dedicated to the concept of limit/border. I chose our sea because today is one of the most problematic frontiers of the world. [...] When it came to use colour to fill the sea, I realized that the land colours were more suitable for marine colours because, in truth, this sea was no more fluid on my eyes, but harsh and rocky like a chain mountain" (Canali 2015, online).

<sup>&</sup>lt;sup>85</sup> Eng. Translation from original Italian: "The Mediterranean is no longer liquid and no more poetic" (Canali 2015, online).





Figures 12-13: The first map is the cover design of Limes Journal's issue on "Chi ha paura del Califfo" (April 2015) realized by cartographer Laura Canali and held in the section "Ricamando il Mondo" under the title "Il Mediterraneo non è più liquido, e non è più poetico". The second one is a canvas "Il Mediterraneo è pietra" made by Laura Canali before the shipwreck of April, 18 and then presented at the Rotonda della Besana in occasion of the exhibition "La Natura non è un soffio", 1-4 October 2015. Both images are courtesy of Laura Canali.

Before discussing the above maps and to avoid the reader floating in an early—perhaps too abruptly—beginning, it is fair to provide some initial coordinates.

Laura Canali is a graphic designer, cartographer, and artist born in Rome and responsible for the production and design of geopolitical maps at *Limes, Italian Review of Geopolitics* since its foundation. *Limes* is a popular Italian geopolitical journal established in 1993 by political scientist Lucio Caracciolo. It is the fruit of the collaboration between scholars (historians, geographers, sociologists, political scientists, lawyers, and anthropologists), but also journalists and decision makers (politicians, diplomats, military, entrepreneurs, managers). Furthermore, it has a website (Limesonline.org) and two sister publications: the Englishlanguage *Heartland, Eurasian Review of Geopolitics* and the Serbo-Croatian *Limesplus*.

In such variegated mixture, where policy makers 'meet' critical scholars, Canali's maps have to mediate, translate and communicate the many reflections and perspectives on the geopolitical space made by the various analysts and held in the different sections of the online site as well as of the printed journal. It is then understandable that, at some point of her career, Canali has felt the necessity to explain her work to the readers, by curating two personal columns, *Ricamando il Mondo* (Embroidering the World) since 2009, and *Cartografie dell'Immaginario* (Imaginary Cartographies), since 2011.

The first one, in particular, was born from the need to explain her work process, the visual choices and the ethical claims underpinning her mapping production. The second one holds an ongoing experimental work on what she defines 'geopoetics', the idea to visually and cartographically translate the lived and literary geography performed in poems and novels (Canali, interview 6 May 2016)<sup>86</sup>.

Suspended between the geopolitical and geo-aesthetical<sup>87</sup> features, her maps are often symptomatic of the figural cartography that I am going to discuss below. However, other

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<sup>&</sup>lt;sup>86</sup>On May 6, 2016 and May, 17 2016 I interviewed Laura Canali on Skype. The interviews have been conducted in Italian but the excerpts of the interview here proposed are directly translated in English. For a choice of the interviewee, some of the informal phrases have been redrafted to a more appropriate register in order to be suitable for the written dimension. It should be noticed that the map-essay on which poses our reasoning, "Il Mediterraneo non è più liquido, non è più poetico" has been extrapolated from the section *Ricamando il mondo* -"Embroidering the World". During the conversation, Canali has explained that: "*Embroidering the world* was born because, through the time, I also needed to explain the work I was doing. In fact, if you give a look to the first columns they are a bit 'constipated'. I had to learn to write and speak. I am a 'dumb being'. I am alone in front of the computer; I do everything by myself ... I do not have many exchanges. But it was a very useful exercise, and, how you see now, I no longer have this problem of talking [she laughs]" (Eng. Tr, form orig Italian).

<sup>&</sup>lt;sup>87</sup> Art and Science, aesthetics and research issues live an intense relation in the work of the cartographer. As Laura Canali further explains in the interview, the cartographic design and the artistic painting are seen as the result of the same activity. However, the awareness of this coincidence took a while to be accepted: "now everything is mixed, even painting. That was a thing apart and now I paint geography even there! Because maps saturated me before, at some point there was too much geography, I had enough. So I made many geometric drawings – the leftovers – as I call them which I slammed on the canvas. Since I have painted the *Il Mediterraneo è pietra (The Mediterranean is stone)*, geography has entered on the canvas as well" (Canali, interview May 6 2016).

preliminary considerations are needed before immerging in the singularity of her cartographic poetics. Canali has indeed be trained as a graphic designer who, through time, has transformed herself into a cartographer, recognizing the work of the map-maker as different, namely scientific and 'critic' than the designer's activity. In trying to justify and then overcome such diverse identity positions, she argues:

A graphic designer executes. You give him a ladder, you explain him what you want and he performs the task. In fact, most of the time there are so many mistakes because they do not always understand what they do. I do a completely different job. I do research: I create, I invent the map, I decide the cut, the geography, I decide what the main message is. In short, I create from scratch. I create from the word... (interview, May 6 2016).

When she states that she is creating from the word, she wants to underline the fact that the maps made for the Journal are usually the visual transposition of specific articles beyond of her production. This means that she has to represent the thought and message transmitted by another author or decided by the editorial board for whom she has to provide data and for which, perhaps, she might not always share, even for political or ethical reasons, the analysis. In this light, it might remind the relationship between the patron and the cartographer, the outer and inner voice of the map, as defined by Brian Harley (1990, see Chapter 2). Nevertheless, it prompts the idea that cartographic visualizations often produced by institutions or organizations are the result of a labour chain. For this reason, the maps that I have considered in my discussion are not specifically committed for the Journal's specific sections but they were created independently and freely by the cartographer and then accepted by the editorial board as cover images for the Journal and afterwards even presented in exhibitions.

Not surprisingly, aesthetical, ethical, creative and emotional problematics find a congenial place in her production, re-balancing the more technical apprehensions often considered by GISers or "coders" (Zook et al. 2015, online). In this sense, before proceeding in presenting and motivating the choice of her map in my discourse, it is important to understand how the graphic designer/cartographer/artist negotiates her positions in order to make sense of the

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<sup>&</sup>lt;sup>88</sup> A further underscore of the alleged freedom of her cartographic work has been underlined by the cartographer in one of her posts on the column "Ricamando il mondo" (Canali 2016), available here: <a href="http://www.limesonline.com/rubrica/centro-e-periferia-come-nascono-allalba-le-mappe-di-limes">http://www.limesonline.com/rubrica/centro-e-periferia-come-nascono-allalba-le-mappe-di-limes</a>.

peculiar feature of the maps she crafts and, consequently, how she looks at them. Therefore, as concerning the first aspect, she reflects to her job in the following way;

I never said "I am a cartographer" as well as "I am an artist". [...] Everything was a step by step. First of all, I think that being a cartographer means collecting a number of elements in order to create a map. Elements of various origins. Firstly "scientific" information, in my case it is the information provided by the author. I have to make a drawing so the focus of the map must be the central theme that I find in reading the articles of the Journal. Then I provide myself with several sources for I am the medium between the reader and the map; thus, I try to somehow find all the elements necessary to make it as clearer as possible. Here, there is a research question. I think this corresponds to the work of the cartographer. The drawing phase is the final one, more pleasant, more relaxing, because once I got all the information, I have to check it out, therefore the preparation work is the longest. Since each map comes deeply inside me because of this research work, it has been necessary to paint (Canali, interview May, 17 2016).

What is interesting to notice is that Canali considers herself the medium between the map and the reader and not, as one might more readily think of the map as a medium between the cartographer and the map-reader. The emphasis on the subject rather than the object has important implications for maps production's modalities in the journal. Every map has its own genesis, certainly, but they are more than often intended by the cartographer as an "outburst of herself" (Canali, interview 6 May 2016) rather than the result of an operational, technical and routinized activity. Regarding this aspect of Canali's work, maps should be intended more as "compressed performances" (Pinney 1997), spatial events whose final product, the representation, constitutes then only a small part of the whole set of practices and processes accompanying their creation.

To provide a more vivid context, let us imagine, for a moment, to be in the studio of the cartographer in one of her working days. She works with the Illustrator software, a digital tool often used by graphic designers and cartographers. Yet, even if it is a digital instrument, she makes clear that the phase of the hand design is essential for her. Indeed, Canali uses paper notebooks for her initial drafts and, more importantly, she considers the mouse her pencil. Therefore, her maps can be conceived as a hybrid product, oscillating between the hand paper craft and the digitalization process. In particular, a program such as Illustrator operates at levels as if she worked on a light table. She begins with the scan of the atlas, of the world's portion that is of interest to her, and then she goes on adding the needed details for the map. She explains her map-making routine step by step:

I put the original, then I over a film ... everything is virtual ...I put another sheet ...and...finally I trace the entire geography. For me, this is a critical step because we work very quickly and we have a very tight schedule ... and it happens that at that moment in which I am drawing the geography, the ideas to create the concepts come up, because then the real point of these maps is to express a concept. Anyway, I put this second sheet and I begin drawing the region, I think through... and, then, I start to put all the elements that could be functional to the discourse, to the thought that this map has to express. [...] Because the map has a centre. I work in this way: for me, the map has a centre - a heart - which generally is the main concept: a political concept, an event, but often what is written by the author, to whom the map is linked. The map accompanies the text. Therefore, I refer to the author and I'll put all the geographic elements which are relevant to his speech, otherwise the map becomes overloaded. Especially you lose the centre! (Canali, interview May 6 2016).

The unfolded processuality of her work reveals the map to be treated as both an epistemic and technical object, where emphasis is considerably put in the reading effects. Canali imagines a sort of pedagogic work entitled by the cartographer in order to guide the reader. Despite other types of images, the map allows the cartographer to integrate internally pictorial and verbal elements, as we argued in the previous chapter. More importantly, just like a text, it is inevitably the result of a selection and it has a point of view. In the case of Canali's conception, it becomes an ongoing negotiation between her point of view and that one of the analyst, as well as a translation from the word to the image.

In a translation process, it is inevitable that something is lost and something different is gained, hence it is misleading even thinking of putting these two aspects in opposition. Image and text are two different, even if complementary and integrative, moments of each cartographic production. When the text is not shown, as in the case of the blank map that I presented above, the guideline action is given by her external comment, from the text contained in the comment that she wrote in the column *Ricamando il Mondo* which acts as a legend for the map. In this respect, I hope that the short digression on the work of the cartographer might give a clue of her mapping creation procedure, demanding now to move on the moment of representation, to explore the ways in which the final map is expected to affect the reader. Therefore, let us get back on the map we were talking about at the beginning of the paragraph. "Il Mediterraneo non è più liquido, e non è più poetico" (Canali, 2015) as well as offering the advantage of anchoring the reasoning that will unfold over the course of the text to a solid but flexible space, that of the Mediterranean Sea, is a performative gesture, both in the sense of a speech act which produces, by anticipating, the effects it appoints (a sort of fulfilling prophecy), that in the contours of a visual performance.

In primis, it comes to anticipate the raison d'être of one of the most shocking shipwrecks of the century, that took place between 18 and 19 April 2015. It is a tragedy that will be then mobilized by the media as the indelible icon of European inhumanity<sup>89</sup>. More than a shipwreck, however, I am convinced to read, through this map, the event of April 18 as a burial of bodies and the same can be said of all those tragedies occurred before, and tragically afterwards, in the Mediterranean Sea. Indeed, what can be seen from the 'silent' map is the emergence of a territory, at first stance unidentifiable due to the absence of a title and a legend, place names and scale, that, in a sort of epiphanic vision, gives us back the material and rigid substance of Mediterranean Sea.

Configured in this way, the marine voluminosity that led the geographer Steinberg to claim the rethinking of Western spatial categories 'with' and 'through' the sea, promoting a "wet ontology" (Steinberg & Peters 2015) is now rather dried by the dramatic intrusion of the land categories into the sea. The sea is thus reified in a 'surficial' and striated space, revealed in the visual fabric claimed by the cartographer of Limes. Here, the word 'surficial' is preferred to that of superficial because it recalls a theoretical body of work engaged with "modes of thinking that replace surfaces as sites to be dismissed as associated with the distanced and disengaged, with surfaces as complex zones of transmission, transition and transformation" (Straughan and Hawkins 2015: 10; see also Bruno 2014).

After the initial disorientating vertigo, the cartographer takes the reader into the explanation and commentary of her graphic choices. In her eyes, the Mediterranean is no longer the liquid continent of Braudellian memory but a rocky surface made of broken and continuous lines. The diaphragmatic, cerulean and homogenous transparency through which we usually imagine a watery space it is now tarnished and striated by terrestrial shades.

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<sup>&</sup>lt;sup>89</sup>Obviously, many other shipwrecks' events have remained imprinted in the consciousness of European citizens and made it possible to intensify the presence of organizations runned by activists for rescuing and for media mobilization. Yet, the continuous and daily reporting of wrecks leaves the public almost indifferent unless great tragedies or peculiar events occur that can then become iconic images of the contemporary situation.

<sup>&</sup>lt;sup>90</sup> The surficial mapping presented here should not be confused with the common surficial geology mapping, where cartographers are interested in providing information on surface sediments, their properties, morphology, and genesis. These maps can be used in mineral exploration, hazard assessment, land use planning etc. The aesthetics of surficial is rather interested in finding salience, density and material meaning-making on surfaces without simply discarding or dialectically devaluing them in favour of western anthropological categories of deepness and volumes (Bruno 2014; Hawkins and Straughan 2015).

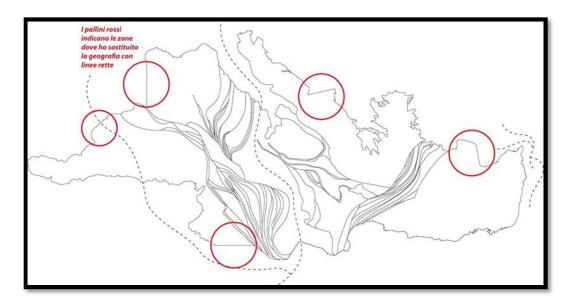


Figure 14. This is the initial draft created by Laura Canali via Illustrator. It shows the stylistic (and ethical) choices made by the artist. The caption reads: "Red dots pointing those zones where geography has been replaced by straight lines". Source: Canali 2015, online.

Not by chance, Deleuze and Guattari assess that although the sea is the smooth space par excellence, however it was "the first to encounter the demands of increasingly strict striation" (1988: 479). As such, the Mediterranean Sea has been one of the first watery spaces to be mapped by artificial lines and grids. Futhermore, as Veronica della Dora (2010) explains, during the Roman age a manuscript called "periplus" was commonly used by sailors to list the harbours encountered during the journey. In the Middle Ages, the *periplus* was transposed in the *portolan*, a map illustrating, this time graphically, sea-routes and ports. The most interesting feature of portolan charts is perhaps due to the fact that: "[they] were constructed from the sea, from a mobile 'shipboard perspective' and were originally meant for the practical use of seafarers" (Della Dora: 2010: 7).

What was fundamental to know and map in that epoch was the indomitable and uncountable space of sea and not, surprisingly, of the land. This could be one of the reasons why the interior of the land was originally left blank and, only in a second moment, filled with blazons or monsters, especially referring to those places yet to discover and perceived as inhuman and exotic. Nowadays such ridges and lines which cross the sea are being resemantised, by taking a new significance; they are patterns, longitudinal lines used to plan the migratory routes; they are the maritime borders, invisible lines that should separate the jurisdictions of the various countries, lines that allocate and discard agentive responsibilities; finally, such lines are bodies, thousands, deposited on the water until they disappear.

I would venture to argue that most of those lines' conceptualizations emerge from the work of Laura Canali. In this regard, when her cover design was still a draft (see figure 14), the arrangement and shape of those lines were chosen by the cartographer to express her quite strong and polemic message. For instance, she draws broken lines in the vicinity of Syria and Libya that then unroll into the seascape. They do not represent the exact migration routes but want to evoke them. In other countries, instead, the broken lines are replaced by straight lines (Canali 2015, online). She suggests that those are the breaking points where geography has been replaced by geometry. A way to say that the living and real geography of movement, the risky but planned journeys of migrants, comes to be blocked by the insensitive and necrotic straight border of Europe. In such opposition, the writing and drawing of earth (geo-graphia) and its measurement (geo-metria) are not overlapped by the cartographer but they stay in a sort of productive tension.

In this respect, Guarrasi (1996) recognizes that, in the cartographic medium, the geometrical space—bearer of order—and the geographical space—bearer of meaning—co-habit. There is not a replacement of one over the other space, but the recognition of a world onto the other. Notably, we are aware that the printed lines of a map usually represent the alleged borders of territorial spaces. In this regard, John Agnew suggests to train the gaze in order to 'see' the multifarious effects, material and imaginary, of everyday bordering practices:

Borders matter, then, both because they have real effects and because they trap thinking about and acting in the world in territorial terms. They not only limit movements of things, money, and people, but they also limit the exercise of intellect, imagination, and political will (2008:x).

Such bordering operations are seen as an experience of place in territorial constraints, limiting the view, hence the imagination, of a political will. Yet, in a huge body of literary and philosophical work, not only limits are necessary just to exert human imagination, that is to figure otherwise what cannot or is forbidden to be seen, but we have also argued that, *surficially* speaking, a geometrical operator like the line can be used also to represent connections, crossing, networks that have very less to do with the definition of the border as encountered above— a fence—trying instead to counter it and to reveal it more as a space in itself. In this significance, a line might be also an: "enduring mark left in or on a solid surface by a continuous movement" (Ingold 2007a: 8). The trace of a story, made of hope and suffering, and not only the imprint of its annihilation. Not surprisingly, the dotted line

chosen by the cartographer departs from the mainland to cross the viscous "earthly" sea until the arrival in the Fortress Europe<sup>91</sup>. In this sense, the geometry of lines evoked by Laura Canali is quite ambiguous and paradoxical. From one hand, it stifles from her any imaginative operation of picturing the Mediterranean as a fluid and peaceful space, as John Agnew (2008) argued above as concerning the border more broadly. Such reaction is understandable when the European borderity is revealed in its nature of apartheid (Balibar 2004). More specifically, the hearth of her pessimistic reasoning can be grasped in the following passage:

Ecco, nulla di poetico nel nostro mare. Nemmeno di liquido però. L'acqua scioglie la roccia, la ingloba e la trascina verso altri luoghi, crea unioni, fusioni e miscugli. In questo momento invece nulla di simile sta avvenendo anzi, l'esatto contrario (Canali, 2015 online)<sup>92</sup>.

But just now when the anaesthetization of movement and fluidity take shape, reported by the operator of the geometric line, the cartographer transcodes the choice of bright colours and broken lines—before justified as symptomatic of the sea earthiness— to re-think them as resistential images: "Certe volte una mano di colore vivace aiuta a ricordare che il bello esiste e che deve resistere, anche dove stanno facendo la storia in questo momento" (Canali 2015, online). This aspect can be better explained by returning to the interview we had together, where she refers to the aesthetic potentialities inherent in the use of bright and vivid colours:

[I]n my opinion, and I believe it so firmly, the human eye needs beauty to "see" something. You do not look at a bad and ugly thing, or better you look at it as well but after you turn the eye away. Instead, in my opinion, thanks to the use of colour with harmonic forms, with graceful signs, the reader slowly finds the courage to look in depth. You somehow cuddle him, you help him to look, because understanding the world is difficult and could be distressing. However, you need to know it to live it better. It is like a disease, isn't it? When a disease affects you, there is fear - the initial shock - but then, the more you know it, the more you can deal with it. And, in still, is the same mechanism. You should understand what's going on in the world to have less fear. Thus, I think it is important to ensure that the reader read, that he comes to be informed without running away. Overreaching with colour means getting involved. Those neutral

<sup>91</sup> The term 'Fortress Europe' refers to "the idea that just as the internal [European] community is strengthened, so outsiders are increasingly viewed as hostile invaders, who must be excluded through physical defense" (McNeill 2004: 146).

<sup>93</sup> English translation from original Italian: "Sometimes a hand of bright colour helps to remind us that beauty exists and must resist, even where they are making history right now" (Canali 2015, online).

<sup>&</sup>lt;sup>92</sup> Eng. Tr. From orig. It: "Well, there is anything poetic in our sea nor liquid, though. The water dissolves the rock, embracing and dragging it to other places, creating unions, fusions and mixtures. Right now, however, anithing similar is happening but the exact opposite" (Canali, 2015 online).

things, which remain in the balance, you cannot say that they are bad or good, you cannot make a choice on them (Canali, 6 May 2016).

Despite of dealing with very stressful topics such as migrations, wars, terrorism, Canali recognizes her position as that of a "guide" who cannot shirk from revealing her point of view on the events, expressing it through the choices of colours, shapes, lines, the size of her maps. Seemingly, we can now understand the ethical dilemma underlying the aesthetic choices of the Limes cartographer, who considers frustrating and painful to bring out the migratory 'thingness' and 'obstacles' using lines and ridges but at the same time she can not help but denounce the necrophiliac regime on which the Mediterranean is built today. Importantly, she treats the map as a powerful image as she believes that it can help to influence the perception of events, in this case the geo-political ones<sup>94</sup> and she does not underestimate her role (probably this is also because she is doing an interview). Moreover, once the obsessive hardness of the migratory chronicle is introduced as a paralyzing force of any poetic impulse that would lead to decant the sea as a fluid, calm and boundless space, it is time for the cartographer to explain from where such hardness comes from. The solidity and luttuosity of the seascape are mostly addressed as the fatal consequences of International and European policies.

Il concetto di durezza mi è sembrato indispensabile per descrivere ciò che ci circonda attualmente. Tutte le guerre, le sofferenze, le ingiustizie, la morte, il dolore che stanno sconvolgendo i paesi dell'altra costa del mare hanno tolto l'idea dentro di me che il mare possa essere un liquido (ibidem)<sup>95</sup>.

Visually, such hardness is translated as a removal of water but especially of those little islands that are used as handhold by people escaping from their former countries. This is a deliberate, even if presented as a suffered choice, made by the cartographer.

There are no more islands on the map. I removed all the islands in that sea. First, I thought a bit about it, then I decided that the islands should be taken away because I wanted to give the idea of the hard path, while the island still is a landing place, a place where one can hang on you. You landed there, it's a place where you can rest and be welcomed. While removing them was like taking the stairs away from the pool (Canali, interview May 6, 2016).

<sup>&</sup>lt;sup>94</sup> This aspect has been discussed by the cartographer in another article published in the column "Ricamando il Mondo". See Canali (2011).

<sup>&</sup>lt;sup>95</sup> Eng. Tr. from orig. It: "The concept of hardness I felt it necessary to describe the world around us today. All wars, suffering, injustice, death, pain that are shaking the countries on the other coast of the sea took me away the idea that the sea might be liquid" (ibid).

Overall, the map proposed by the cartographer of Limes requires us of a different critical gesture in looking at the sea than the one articulated by Carl Schmitt in *The Nomos of the Earth* and that for a long time has influenced, if not structured, the way in which political scientists usually see, and prefer to analyse, the geopolitics of the land than the sea. There, he writes: "[t]he sea has no character, in the original sense of the word, which comes from the Greek *charassein*, meaning to engrave, to scratch, to imprint. ... On the waves there is nothing but waves" (2003: 42–43). Yet, as we might feel, waves, today, are not so empty. On the waves, today, the solid thanatology of the current moment is engraved, waiting for being unearthed and scraped, resisted and challenged.

## On the Mediterranean necro-cartographic territory

Why beginning with this map? The initial speculative gesture has perhaps indulged in the tones of a heartfelt interpretation with a consequent fetishization of the map, but just to stress how an image of this kind may solicit that peculiar act of seeing and meditation. Further, the map presented at the opening is instrumental in condensing the visual choices of her creator and, thus, her specific point of view. That is the positionality of a cartographer who absorbs, traces and reproduces, through her aesthetic codes, contemporary geopolitical events. In figuring the insidious relationship between positionality and mapping, critical theorist Rosi Braidotti argues that:

a figuration is the expression of one's specific positioning in both space and time. It marks certain territorial or geopolitical coordinates, but it also points out one's sense of genealogy or of historical inscription. Figurations deterritorialize and destabilize the certainties of the subject and allow for a proliferation of situated or micro narratives of self and others (1994: 90).

Subjective genealogical and topological thinking are often neglected aspects in mapmaking (Della Dora 2010, Mangani 2006) since maps are common-sensical believed to be, simply and only, neutral abstractions of spatial reality, the result of highly technical and standardized operations— a sort of Foucauldian *dressage*— without admitting that they settle in their materiality of the intentions and of the specific cultural and social desires and concerns. On a closer inspection, the figurative map proposed is anything but silent. It is a symbolic map, a figuration somehow bleeding and humanized in the sense that it exudes even without showing directly bodies, terror and death—the suffering, trauma and paralysis

experienced by the creator in showing those kinds of disruptive events. Furthermore, the cartographer's effort to build an empathic relationship with the reader, referring to a sort of public sphere of intimacy (Berlant 1998), causes the map to arouse feelings, emotions and to trigger critical reasoning. Better, it opens to a reflexive moment of suspension, inviting a different kind of emotional investment on the part of the viewer that is usually not demanded by geopolitical maps. Aesthetically speaking, this should be intended as one of the most crucial and overreaching aspects of the image's power. Indeed, once we start to approach such cartographic image as a figurative and symbolic mapping practice of the migration event, it is easier to recognize the mapmaker's positionality, her codes of meaning, in order to explore 'the micro-narratives of self and others' unleashed by such aesthetic and textual performance. In fact, each of us could respond (in) differently to the seduction of an image. As we noted in the previous chapter, attention and distraction co-habit in modern ways of seeing (Crary 1988). In this respect, every act of looking may or not trigger a visual event, that I translate as an in-tensive interaction involving both the creator's subjectivity and emotionality in relating to her subject as well as a willingness by the viewer to accept, recode or reject the image's scope and swarm of meaning. In this sense, one might think nothing of this image while I am trapped in the network of meaning of this visual event. In other words, it might be possible that: "[i]t exists only for me. For you, it would be nothing but an indifferent picture" (Barthes 1981: 73). Accepting this possible indifference, I believe I can only talk subjectively and ask myself: what happens when I turn my eyes on this map? How does it ensnare me?

My pro-tending toward the image comes from the fact that it welcomes into the sphere of the visible a detail that it is often overlooked. When you look at a map—which has a focus, a center or a 'heart' as Laura Canali has assumed (interview, May 6, 2016)— attention is not focused on the sea, which appears as a void, a gap between lands. Something very interesting, almost disorienting, takes place instead on April 17, 2015, a real change in the cartographic frame through which the audience usually perceives the visual space of the Mediterranean Sea. It makes its way the disenchant idea of thinking the sea as more than a simple stretch of water, revealing its extrinsic territorial nature, that of a 'fullness' crossed by a politics of death. When realizing that the sea is not usually one of the meaningful spaces highlighted in the architecture of a map, it goes that neither are the events happening in its spatiality. The seaborne migration becomes a foreclosed space, intermittently visible, and just only when the bodies come in, dead or alive, in the visible regime of the land. Then, the map we are

considering shows its importance in the visual array of migration because it returns sense to the sea, it underscores the meaning of the stories, suffocated movements and disruptions experienced by those who face those dangerous journeys.

However, it is worth noticing that such cartographic image could be blamed of being far from documenting or informing as geographic visualizations are usually undertaken on media in the guise of evidences. I have already said that, according to Limes cartographer, lines and colours evoke in this specific map rather than indicating peculiar migratory routes and blockages. Therefore, she goes through depicting shipwreck, mooring or death as potentialities, or, in grammatical terms, she blurs the indexical and indicative feature of the map with the subjunctive and the subjective. Indeed, indicative is a mood verb which stresses the reality of an event. Likewise, the similarity with the real situation is figurally embossed by the index, which "stands for its object by virtue of a real connection with it, or because it forces the mind to attend to that object' (Peirce 1998: 14). While the subjective mood denotes acts or states not as facts but as contingent or possible, viewed emotionally with doubt or desire. In this cartographic transfiguration of the Mediterranean as both potential and aporia of the passage, her map asks to agglutinates together sea and land, water and surface in order to think otherwise. In this regard, Steinberg and Peters notice that:

Water is simultaneously encountered as a depth and as a surface, as a set of fixed locations but also as an ungraspable space that is continually being reproduced by mobile molecules; water has a taken-for-granted materiality (liquidity, or wetness), but it is also just one of three physical states that exist in continual interchange (the other two being ice and vapour). Each of these properties can be ascribed to land as well (land too has depth, underlying mobility, and transformation across physical states), but in water these properties are distinct in the speed and rhythm of mobility, the persistent ease of transformation, and the enclosing materiality of depth. Thus, it would seem that water provides a fertile environment for rethinking the ways in which our political geographies emerge from—and impose themselves on—a dynamic, voluminous materiality (2015: 252).

Thinking of the sea as a mobile territory, shifting from depth to surface accordingly, is not enough, however, if we disperse the political agency that at turn shapes it. The territory, indeed, is a very dear interpretative category to political geographers, often mobilized in direct correspondence with the birth of the modern state<sup>96</sup>. Seeing the sea through the

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<sup>&</sup>lt;sup>96</sup> The concept of territory used in the field of international relations refers to the portion of land, materially and/or symbolically demarcated, inhabited by a population where a governmental entity exerts its power, namely a jurisdiction. In human geography, especially from French and Italian derivation, the territory usually coincides with place, therefore, it is understood as a space modeled and rendered significant by the people who

"territorial trap" (Agnew 1994) is more than a provocation, as it means more specifically to attribute the character of an ambiguous and factual sovereignty. A sovereignty that materializes itself through what the postcolonial intellectual Mbembe defines a necro-power: "the power and the capacity to dictate who may live and who must die" (2003:11).

Mbembe focusses specifically on the power of the postcolony "as it makes the murder of the enemy its primary and absolute objective" (2003:12). We could, anyway, translate the necropolitical gesture even in the geopolitical space of the Mediterranean, if it is true that, never as before, Western desultory sovereignties have entered a tremendous murderous phase addressed against the movement of people. The necropolitics is, this time, covered and shrouded by the veil of humanitarianism and emergentiality.

Therein, I would venture to argue, lies the Barthesian punctum of this figural map: the sea, rethought in the territorial form, is re-discovered in the presence of a sovereignty; such sovereignty appears formless and intermittent since the necropolitics' translation within the governmental space of the Mediterranean Sea implies the recognition of a discontinuous and disaggregate power, which goes far beyond the territorial boundaries of each state and is capable, through a complex network of actors, of letting die or letting live. More dramatically, the Mediterranean migratory regime encodes a way to let die in the name of the securitization of the Western living subject, discarding his direct responsibility by using as a scapegoat the indomitability and uncertainty of the sea. This rhetoric appears somehow ridiculous and nonsensical given that they are actually the decisions taken at international and state level that limit the possibility of legal and safe movement which, then, push people to undertake those unsafe journeys. More importantly, the sovereignty that permeates such regime of border control could be described in the words of Saskia Sassen (2013), reproposed by Pezzani and Heller (2016) for the migratory regime, as "disjointed". Many actors are indeed at work, including Coast Guards, national and multinational military institutions as well as nongovernmental (private) agencies who come—the latters—to rescue (rather than blocking) migrants at sea, independently form the European operations as Triton, Frontex<sup>97</sup> or EUNAVFOR MED. Even such disarticulated multi-action is a feature of the water 'territoriality'. As John Agnew reminds us in terms of unbundled territoriality: "territory can

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inhabit it and not only by the authority exterted on it (see Agnew 2015; Antonsich 2010; Raffestin 1986). The notion of territory to which we refer in this context is the first, the geopolitical one.

<sup>&</sup>lt;sup>97</sup> The European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (Frontex) has been created with the Council Regulation (EC) No 2007/2004 of 26th October, 2004, in order "to improve the integrated management of the Union's external borders".

be seen as defining vectors not monopolized by the borders of particular states or, in a different formulation, that legal jurisdiction and the organizational structures (of various public and private actors) are not restricted to state territories" (2015: 119).

Disarticulation, however, allows states to take advantage of the ever-changing policies and tractates on the migration issue as an excuse to intervene or not at sea. Mapping operations are seemingly involved in this game, as we are going to see in the next section, even if it is true that they participate in and are exploited by the same rhetoric of the natural formlessness of the marine voluminosity, so that: "[t]he drawing of lines through water in an attempt to constitute levels of legal authority fails to account for the dynamic fluidity of the various elements that constitute the marine assemblage" (Steinberg and Peters 2015: 253).

It is in the rhetoric suspended and flooded between the rescue, the inability to tame the sea, and the Fortress Europe's defence, that this formless sovereignty enters the regime of biopower. Foucault indeed distinguishes between sovereignty and biopolitics arguing that the priority of sovereignty is always life: "[i]t is the right to take life or let live" (1990:136). While it is in the guise of biopolitics that sovereignty is read as a mode to authorize and to regularize life, hence more suitable to translates itself as "the power to give life and to let die" (1990: 138). But, perhaps, the biopolitics of sea is far fiercer and more insidious than the one analysed by the French philosopher precisely because it is exercised in terms of necropolitics and not of biopolitics, hence as the potentially both to take life and to let die, accordingly. Furthermore, it is a very subtle and slow process in need of the constant, silent, routinized dehumanization of some bodies through different political, economic, mediatic practices which makes their death justifiable and presentable in the bio-political regime itself. In other words, it comes to what Laura Berlant (2007) defines a "slow death", where "it is hard to distinguish modes of incoherence, distractedness, and habituation from deliberate and deliberative activity [of taking life], as they are all involved in the reproduction of predictable life" (2007: 754).

Such discursive formations, where the politics for life is a shield to hide the necrotic consequence of its sustainability, are for instance articulated in the migratory regime by Didier Fassin (2012) in the terms of "moral technology". He refers to all that kinds of spatial and materials tools, organizations, technical parameters, procedures and control systems which, despite being employed in the name of caring about the human, have become the means of exercising the contemporary violence over the refugees, felt more as enemies and the "unwanted". Eventually, the Limes map gives us a further theoretical reasoning. Beyond

sovereignty, the peculiar characteristic of a territory is its measurability, its mappability. Therefore, once the terrestrial nature of the marine space is recognized, it is also justified an act of mapping. Put differently, it is the transformation of the sea in the territory that commands us to look at its spatiality through the frame of the map, and consequently to direct our gaze on that 'emptiness'.

Yet, in the third chapter, we asked how is possible to capture that moment when certain phenomena require a different way of looking. That moment when you need a change of perspective, another mode of seeing. Some strands of the post-structuralist philosophy would agree in saying that a change of the frame is made possible by the irruption of an event. Here, however, the 'map space' becomes predictive, it is the frame that anticipates the next event (the April 18, 2015 shipwreck), strong of the previous ones' sedimentation.

In other words, a frame is shaped not only by what it defines, outlines and presents in the moment of its capture but also from all that precedes it. It is a slow and stratigraphic accumulation. And it is precisely in this upheaval of oscillations and overlaps that, on April 17, the sea is terrified (transformed in territory) by the cartographer, while the following day, on April 18, it is terrified (this time transformed in a space of terror) by the occurring of the migratory event. The prediction raises the event and the event tragically fulfils the prediction. The frame and the event, the map and the tragedy are now in synchrony.

#### Operational cartographies. The visual regime of spatial numericality

Case 2: Blue, red, and green triangular markers move on the surface of a screen recalling swarms of bees or the movements of oceanic currents. Yet, they stand for fishing boats, vessels, cargos monitored in order not to invade the maritime area of other states or tracked to help vessels reaching the nearest harbour in case of danger. In hindsight, there is not only one device, but dozens of them. Some are hanging on the walls, others lounging on desks. This is how the Coast Guard control room of Palermo welcomes you<sup>98</sup>. This is how we could imagine every control room of each institution interested in monitoring events at sea. A space framed by screens of all sorts. An intervening laboratory managed by several actors, busy in moving from one location to another, and in coordinating their activities; activities which become frantic when a migratory event is detected, when it comes to manage and act on what is perceived as unexpected, out of the norm and 'illegal'.

<sup>&</sup>lt;sup>98</sup> I visited the Coast Guard control room in Palermo in occasion of the already mentioned international workshop organized by Giulia de Spuches, Vincenzo Guarrasi, Marco Picone, Francesca Genduso, Chiara Giubilaro and myself on 10-11 November 2015, titled "And So Europe dehumanized itself. Mediterranean geographies in action". In that occasion, the captain and his officers simulated an operation of intervention and they explained (even in further follow-up) the use of the various tools in the room.

As we argued in Chapter 3, the reflections accompanying the cartographic theory toward the contemporary digital world leave often open the political and moral implications concerning the monitoring, tracking and subsequent displaying of 'data life'. During time, geographers became sensitive in distinguishing the cartographic application in military or governmental policies from the civilian ones (Goodchild 2007; Herb 2009), and this distinction proves its importance even to unpack the multiplicity of actors involved at various grades in the explotation of digital technologies' potentialities which deal with migration issues and border-control.

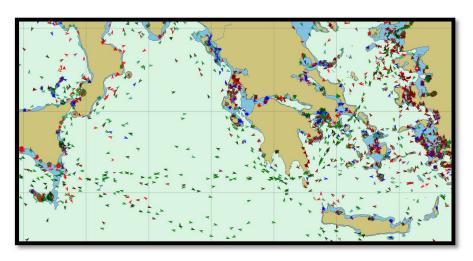


Figure 15. The image shows the tracked vessels on the sea as they are usually visualized on the screen. Source: <a href="http://www.guardiacostiera.gov.it/mezzi-e-tecnologie/Pages/rete-ais-nazionale.aspx">http://www.guardiacostiera.gov.it/mezzi-e-tecnologie/Pages/rete-ais-nazionale.aspx</a>





Figures 16-17. The first image shows a view of the screen captured during the visit to the control room of Palermo's Coast Guard (personal picture). The second one shows the way thorugh wich the Central Office is presented in the Coast Guard's website (source: http://www.guardiacostiera.gov.it/attivita/Pages/Ricerca.aspx).

Importantly, as we have already noticed in previous discussions, visual culture has a strong focus on hyper-visuality, hence it is decisive to underline that cartographic visualizations are ubiquitous and central to many developments in current migratory policies as well. Broadly speaking, any of us can experience daily monitored movements that bring to a massive amount of data, perhaps easy to collect but still impossible to fully assemble. Those can be managed to produce visual representations as to arrive at a 'situational awareness' of certain phenomena and to propose resolutions to act on them. On their part, mapping practices certainly occupy an increasing and more always critical role in the European and national institutions as the working tables where to spot migratory events (border-crossing, shipwrecks) and to promote actions based on such visualizations. The more the recital of the crisis at the border takes shape, the more the necessitated spread of security arises, asking for an implantation of monitoring and controlling devices. It is in this particular context that "the algorithm" has become a buzzword and a frightening figure for critical scholars and activists. A predictive analytics resulting in a new metrics of seeing that cuts events and individuals in bits and assesses threats and risk.

In particular, recalling Harun Farocki's work on 'operational images' where the artist explores the threat and the potential brought into play by the proliferation of surveillance mechanisms that increasingly permeate our society (see Somaini 2010), I now refer to a seemingly 'operational cartography' with the aim to put into resonance the various mapping practices at work for the securitization of Europe's marine borders, disputing the apparent simplification of the complex regimes of visibility and invisibility that they enact. The improvement of surveillance technologies, from satellite images to drones incursions until complex computational systems that are capable through algorithms to capture and extract data of any type (data mining) and offer (nearly) real-time prediction of any social behaviour (life mining) (see Chapter 3), shows tremendous effects also, and mostly, in migration policies. Indeed, even though important reflections about data caption, behaviours prediction, monitoring and control of daily operations are primarily debated in smart cities agendas of the global North, I think it is seemingly necessary to note that the 'smartization' of society is equally affecting the border of Europe (see Amoore and Hall 2009, Andrejevic 2007, Potzsch 2013) in an increasingly faster and intense manner, facing us with important ethical dilemmas to be solved and, equally importantly, with the aim of catching the frictions and the limitations of such apparatuses. In this respect, despite those algorithm-driven forms of bordering need to be criticized for their oppressive and coercive ways of detecting and performing exclusionary identities, it is also fair to undermine the errors, the limited technological capabilities of the 'ubiquitous surveillance'. This counter-argument is not intended much to limit their power but to show the tragic effects resulting even from the fallibility of the system. In tandem with this this persistent dilemma, let's go back, for instance, to the screened image presented above. The view of the screen that at first might disturb a critical geographer in the way it visualises a controlled and abstract geo-referenced space, a "watchful politics" (Amoore 2009) where some privileged actors can, through a view from above, observe without being observed what is happening in the Mediterranean Sea, is far to be a totalising god-trick. On the screen, it is shown what is legally possible to be visualized, namely those boats equipped with a radio-satellite system<sup>99</sup>.

Typically, 'illegalized'<sup>100</sup> migrants travel on untraceable boats—therefore off the map—unless any of them or the passator decides to activate the satellite phone. Only in that precise moment, their boat can enter, in the guise of a little triangle, the visual architecture of the screen. In Italy, there are *Vessel Traffic Service* centres with AIS (Automatic Identification System) stations that automatically collect data on vessels and exchange them, in agreement with the European Maritime Safety Agency (EMSA), with the other European Union countries for their integration into the Community system called *SafeSeaNet*. Italian coast guards are obviously operating in the Mediterranean zone, especially through a platform called MAREΣ. In this sense, the architecture of maritime monitoring suggests a decentralization and dislocation of the tracking functions that eventually converge in a single platform, *SafeSeaNet*. This way, we can also better understand in which sense I am going to argue that operational cartographies do not have meaning on their own; they are part of an assemblage of people, discursive processes and material devices.

To better understand the practices of an operational cartography, I turn to another example. Recently, Martina Tazzioli (2016) has analysed the implications of the real-time map provided by the European External Border Surveillance System (Eurosur) launched in December 2013, one of the Frontex agencies which has access to different monitoring systems of European navies to 'predict', through a complex set of algorithms and satellite and optical systems, possible migratory events to intervene or thwart. The key aspect to consider, as we argued before, are the unintended frictions underpinning the watchful politics. This means, for instance, that if something occurs on the sea but that something is,

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<sup>&</sup>lt;sup>99</sup> As explained by the captain of the Palermo's Coast Guard, the Italian Satellite system station Cospas-Sarsat is in Bari and has been in operation since June 1, 1996. It is able to receive and locate the warning transmitters (EPIRB-ELT- PLB) at the digital frequency of 406 MHz.

<sup>&</sup>lt;sup>100</sup> The adjective "illegalized" is used in migration studies (Dauvergne 2008, De Genova 2005) to define those subjects, such as the public category of migrants, who are made illegal by the state's policies, but who do not possess the 'quality' of illegality in themselves. Put differently, Balibar points out that: "The sans-papiers have shown that their illegality has not been reformed by the state but rather created by it" (2000: 42).

for various reasons, forbidden to appear on the theatre of the digital screen, it can be simply treated as not existent. Put differently, there is no event out of that signalled by the map, as furtherly argued by Tazzioli:

when the mapping devices do not observe any presence, and when no trace is left in the mechanisms of control-through-monitoring, migrants' deaths become disappearances that cannot even be known by the mapping actors. Thus, for the technological governmental eyes expecting to detect migrants at sea and record a migratory event, the fact that a migrant vessel passes undetected entails that it remains a non-event that no authority can account for (Tazzioli 2016: 573).

The map, then, acts as an extension of the (in)ability of the subject to see and hear what happens in remote distance. This is the McLuhanan (1964) sense of the medium. But it also brings with it the defects and limitations of the human. Indeed, integrated into command and control systems, these surveillance networks are configured to visualize filtered data, distinguishing good from bad, relevant from irrelevant, and threats from the innocuous (Soderlund 2013) with the aim to capture intermittently the volatility of moving bodies in making them mechanically readable (Van der Ploeg and Sprenkels 2011). In the case of Eurosur's visualizations, for example, the dots appearing on the screens are of different sizes. Those sizes do not stand for the number of migrants involved in the journey but for their potential impact on affecting the European countries' management of the rescue (Tazzioli 2016). Furthermore, as Tazzioli explains, by clicking on those dots the characteristics of any single 'migratory event' are disclosed. The model of the vessel, the number of people on board, the eventual smugglers arrested and the kind of illegal action in which they were apprehended are the main sets of information reported for any illegal border crossing event. In particular, Tazzioli claims that "the growing centrality gained by mapping devices for controlling, containing and monitoring mobility, should lead us to interrogate the governmental gaze that sustains the current struggle over a real-time visibility" (2016: 565). In this regard, several geographers have argued that the geographical knowledge, once become a "geometry with names" (Olsson 2007: 8), can be functional to a type of operation which is related to the sphere of control: it is a readable medium that simplifies the operations of those who hold political power and make use of the map as a calculative dashboard to measure, to lay down a territoriality to act on it. Historically, if we argued that there is a strong relationship between territoriality and mapping, we can now implement the dyad with the third element of calculus. In this respect, Mangani considers the exercise of calculating inherently topographic. Anciently, the calculus was a small stone used in the abacus (a

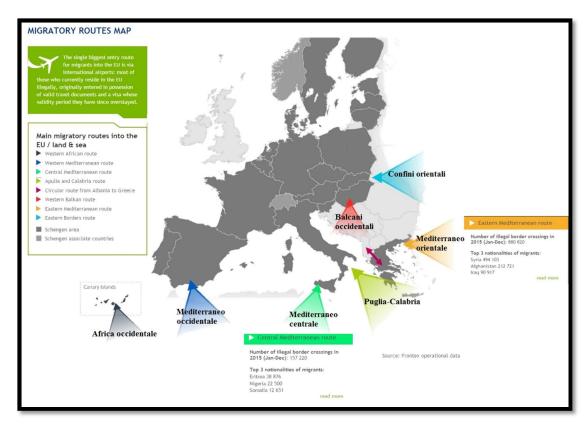
topographic pattern) for numbers notation (2006: 29). Yet, the peculiar character of the calculus involved in the operational cartographies, compared to the use of the modern map as a document legitimizing a political operation on space (\(\)Chapter 2) or even to the symbolic map drawn by the cartographer of Limes, is due to the fact that those mapping are able to self-generating thanks to algorithmic procedures, suggesting and anticipating (though not always succeeding) actions to be taken. In short, as post-representational authors would argue, 'becoming' and 'ongoing flow' enacted by algorithmic procedures are intrinsic features of maps themselves as they change constantly under our eyes (Kitchin 2014). In this sense, when approaching mapping practices through an operational methodology, it is perhaps not more only a question about how to best represent data, an inclination easily assisted by the representational work. But it becomes even more important to understand how those visualisations work, how they get things done, what kind of effects are they supposed to enact and which kind of decisions allows to take on the "evidence" of what they constantly and changeably show (and conceal). In other words, I would venture to argue that it is not vital, in this case, to question only the politics of representation (what the image ideologically and persuasively shows, by whom and for what purpose) but its agentive capacity, the fact that the map appears with its own intelligence and targets. However, I think it has become clear to the reader that I consider necessary a sort of twisted strategy whereby it would be more critical to see and combine the two aspects together. Indeed, it is now obvious that the algorithms operate in such a way as to draw attention to specific elements, on the programmed focal point of view, while obscuring other possibilities (Beer 2013). However, the missing link of this reasoning is trying to understand why confidence and reliability are given to this type of calculative practice so that apparently they cannot be disputed. In this respect, we could argue that such virtual cartographic operations are moulded and in turn affect a peculiar theoretical and cultural spatial practice: numerical and algorithmic (Elden 2006). We can consider the numerical one of the regimes of spatial visibilities which has taken an incredible emphasis in the present moment. In other words, if art theorist Martin Jay (1988) had the right clue in distinguishing the different competing ocular fields of modernity, now it is time to stress again the tones of a mosaic way of seeing of which the numericality seems to be perceived as one of the dominant but not exclusive visual regimes of migration. Seen from this light, Alain Badiou proclaims that we live today in the "era of number's despotism" (2008: 1). In a nutshell, we could argue that era of 'cartographic dictatorship', waged by Carl Ritter in the XIX century, has now been transposed into the age

of numeric. As we said, there is indeed a strong connection between mappability and calculability as both are expected to order, control and hence act upon a given phenomenon. However, what it remains critical to ask and unfold is: "the relation between politics and number, between our understanding of the political as the realm in which political action occurs and the notion of calculation" (Elden 2006: XI).

Put in this way, the new age of numeric or the data revolution could be at first seen as a fulfilled translation and application of the modern conception of measurement (Elden 2006) which takes its roots in the Enlightment period (Daston 1994). The calculation was indeed needed in order to exert governmentality. Tools like the census and the cadastral survey were instrumental for the modern state to establish the power both in its territory than overseas, in the colony (Appadurai 1996; Foucault 1980). Especially in the colony, the cadastral operation, the landscape agrimental survey, the census, in the way they entailed classification and measurement, have been deconstructed as ideological dispositives aimed to instil into colonizers a western attitude to order and give significance to the territory that is build in an asymmetrical opposition. Indeed, the spatial and governmental skills of the colonizers were perceived by Europeans as naïve and inferior (Appadurai 1996). The enumeration of body under the colonial rule was therefore functional in shaping the colonial imagery, endowing a pedagogical and disciplinary role more than a utilitarian use of the number as was more commonly featured in the homeland. Behind its complained link with western sovereignty, there is another interesting aspect of the calculation in the guise of a cultural and social practice. If the calculative power was at first seen as a peculiar and genial cognitive skill of human intellect, it was then, during XIX century, that calculation started to be developed in mechanical terms. Once the overlapping between calculation and machine was fulfilled, the numeric activity started to be perceived by philosphers, especially during Romanticism, as a dangerous amorality so that those who used to work with machine and computational systems were addressed as selfish, insensitive and cruels (Daston 1994).

In our case, the calculation aims to be contextualized through the filter of visuality, as for Tazzioli (2016) is important to speak of a "govern-visibility". Therefore, what I am suggesting here is to ask what happens when the politics of counting and mapping conflates in the tracking /tracing of migratory events. Taking again a quick look at the Eurosur and at the European Navies activities, it could be argued that the calculative politics exerted through mapping practices is both procedural and representational. It is imbricated now in predictive mapping projects whose (nearly) real time information is mostly inaccessible to the public;

now in cartographic products and visualizations thought for the public audience and published by media and journalists. If one surfs on Frontex's website, such dual activity of the map comes easily to the surface. From one hand, it is concerned through the monitoring and data storing of migratory fluxes in order to intervene or not on them. In this case, the map is clearly acted upon. At the same time, there is an accumulation of information that is not just produced for privileged operators' consumption but that is specifically kept open and 'transparent' for media agencies. The problem is that the maps produced by Frontex's GIS analysers, since they are interested in managing European border policies, end up defining most of the times the terms of a migrant invasion, of a visual and numeric encirclement measured in terms of "illegal border crossings" (see figure 18).



**Figure 18.** Frontex's Migratory routes map measuring the number of illegal border crossing. Source: http://frontex.europa.eu/trends-and-routes/migratory-routes-map/

The prototype of this map, often circulating in the main newspapers, speaks to the heart of the visual regime of late modernity. This happens because the migrant is perceived as an external factor, a jamming element compared to the normality and the centrality of the

European subject. If we give a look to the map presented above, one cannot help but noticing its objective persuasive character, where "factual statements [are] written in the language of mathematics" (Harley, 2001: 36-37) in order to silence subjective considerations. At this point, we could certainly admit that "there [is] something problematic in reducing complex phenomena to a question of number" (Elden 2006) because the numericality of opinion gives certitude and exactness, nulling other modalities to see the same phenomenon from another perspective. However, it is also true, as Badiou points out, that until "we don't know what a number is—it would be impossible to think—what we are" (2008:13).

Indeed, we have just a very utilitarian approach to numbers. We are taught only how to use and read them. Counting, as Ludwig Wittgenstein (1974) [1921] would admit, is indeed a technique that is daily employed in the most various operations of our lives. No one, however, questions the ontology of number. This is certainly beyond the scope of the chapter. Yet, what it is interesting to stress is the 'faith' that we rely on numbers that consequentially puts other projects, having no number, to be considered without any truth (Badiou 2008). Once entered the numericality regime, the event seems to become a fact, it gains substance and credibility, so that it proves difficult to put it into question, to tell a different version of it. However, rather than pointing the finger on what is true or false, right or wrong, it is essential to understand for the moment from where the visual regime of the numericality draws its strength. Deleuze (1995), for instance, argues that the real power of information is given by its very nullity, by its radical ineffectiveness. Once again, the more an image is silent and trivial, the more needs to alarm the critic. Nonetheless, we need to be suspicious when this designed nulled objectivity permeates the media pellicle of the contemporary world. On the other hand, if numbers permeate our life and they will certainly continue shaping it, it would be opportune to ask: "[i]sn't another idea of number necessary, in order for us to turn thought back against the despotism of number, in order that the Subject might be subtracted from it?" (Badiou 2008: 4). To find an answer to this question, it is time to explore other mapping practices.

Ap/prehensive spaces: mapactivism and the re-assemblage of (in)visibilities regimes

Case 3. It is September 6, 2015. Trapped in the Keleti station in Budapest, hundreds of migrants start to march to overcome the borders of Hungary and seek refuge in Germany and Austria, countries that have expressed their willingness in welcoming them. This gesture is followed by another of equal power. Activists, ordinary people, families make available, mainly from Vienna, several vehicles to recover the refugees and to bring them within their borders, challenging the allegations of illegal trafficking in human beings. The long march, starting from the station to the highway, leads to a visibility that makes very easily to pick up people on the cars and vans. But in the hours, it proves increasingly difficult to understand where so many other groups of refugees have been brought by Hungarian authorities. Suddenly, at 15.30, it is posted on the page of an activist group in Vienna a tweet on the Roszke camp location. The screenshot of the map comes to be retweeted several times in order to help 'bootleggers' to reach the camp and let the migrants escape.



Figure 19. A screenshot of the tweet on the location of Roszke camp. 6 Sep 2015.

September 6, 2015 has passed to the record as one of the strongest moments of the aesthetics of migration. And the effort of activists, groups and individuals would have been vain if not supported by digital technologies and social networks. This aspect is noteworthy because the line of interrogation followed so far has been that to engage with cartographic images and operations which reveal the metrics and asymmetry of seeing enacted by the migratory operational cartography. Insightfully, this new case tells us that mapping cannot be simply devoured by the evil dyad knowledge-power. Mapping cannot be once and for all discarded as a process tethered by governmental actors who succeed in a sort of panopticon overview. Perhaps, it has also become useless to talk about a panoptical gaze, now replaced by the model of panspectrum. Deleuze (1995), followed by other theorists (Beck, Giddens, and Lash 1994) has argued indeed that the contemporary epoch is determined by the shift

from the disciplinary society (Foucault 2004) to the society of control. A passage made possible through the implantation of digital technology. However, as Soderlund notes:

these technologies (though they greatly expand the capabilities of individuals in terms of their perceptual abilities and cognitive horizons) are not seen as liberating forces endowing people with particular freedoms but as mandatory means of creating flexible, adaptive individuals who must participate in the use of these technologies, meeting the technology's increasing needs, and becoming enmeshed into the social networks and shifting power relationships the technologies are inseparable from (2013: 165).

Others, however, have argued that the era of network is contributing to enhance democratization and participation (Jenkins 2006; Shirky 2008) even if creating such 'adaptive individuals'101. Under this light, the digital cartographic space is anything but a field of action for the exclusive use of surveillance apparatuses. On the contrary, techno-optimists would say that new digital technologies, allowing the multiplication of the points of enunciation, the sharing of information and the cooperation at distance can realize the creation of new communities able to negotiate and challenge collective decisions. The democratization of digital technology is seemingly implicated in the spread of counter-mapping practices, but it is important to look at the open spatial data in their ambivalence. On one hand, as a strength because it is possible to modify, supplement data and develop numerous counter mappings strategies to trouble egemonic systems, opposing a network to another one. But on the other hand, we need to be aware that power relations and discursive formations are mediated by digital technologies as well. In every context, it should be understood each time who are the users who participate and those who remain potentially and practically outside (Graham et al. 2013) and how this participation transforms and orients aims and representations of the crowd-sourcing cartography as well. The same discourse is valid for those mapping activities that today are increasingly related to migration issues. We could encounter projects that attempt to show how migration flows are not one-way and euro-centripetal; we can direct our attention to the collective effort, made possible by Volunteered Geographic Information (Goodchild, 2007), to create real-time mapping to help migrants in their daily crossing of Fortress Europe until the arrival; we might eventually consider those projects that deal with the tracing and visibility of phenomena kept hidden by Western spotlight, as the deaths at

<sup>&</sup>lt;sup>101</sup> In any case, beyond dystopic or utopic visions of technology, what comes to be stressed is the idea to treat the human being as co-constitued with it, as philosopher Steigler (1998; 2009) considers with the concept of "prosthetic beings" or Hayles (2012) with the idea of "technogenesis".

sea<sup>102</sup>. In its various possibilities and methods, and especially through the help of digital technologies, something that we could broadly define "mapactivism" take salience and vigour. At a first look, it can be described in the way usually a counter-mapping is defined in the circles of critical cartographers:

a call for hands-on engagement with mapmaking for critical geographic work, to visually engage in current spatial transformations (from global capitalism to the war on terror) and alternative modes of information distribution that mapmaking may facilitate (Cobarrubias in Herb 2009: 341).

Yet, on a deeper look, I would propose to distinguish to some extent such mapactivism from, or better to avoid a neat overlapping with, the critical cartography introduced in the third chapter. While I certainly suggest here to consider the multifarious mapping practices related to counter-migration policies as a strand of critical cartography, on the other hand, we should consider the fact that, in the following examples, we will see that those mapping operations are not specifically driven by critical geographers, while they usually demand the technical support of GiSers. There are, however, also open online software easily manageable by 'rudimental' map-makers. In other words, those are platforms that might also run in parallel in respect to projects and critique involving academic geographers with mapping practices, otherwise signalling the emergence of specific, even if hybrid, new mapping communities (Cobarrubias 2009). Furthermore, activist cartographers can usually (but it depends on the project) stress the importance more on the kind of action those data can allow to take on the evidences of what they present than on the representation of data itself. To better understand such distinction of intent, we could refer again to the 2006 ACME issue on Critical cartographies, where Harris and Hazen define a counter-mapping as "any effort that fundamentally questions the assumptions or biases of cartographic conventions, that challenges predominant power effects of mapping" (2006: 115). This definition brings us to imagine an effort aimed to contrast the cartographic gaze rather than sketching such critique only accidentally. Indeed, map-activists have other goals to achieve through maps and not

<sup>&</sup>lt;sup>102</sup>Concerning those issues, we can consider various groups and projects. *Migreurop*, founded in Paris in 2005, is an observatory of the European border that welcomes researchers and activists to fight against the generalization and stereotypes of migration, even providing alternative maps. *The Refugee Project* (2015) is an online temporal map showing global migratory routes since 1975, avoiding to consider just those canalized toward Europe. *WatchtheMed*(taken as an example in the text) is an online platform helping migrants in their daily sea or land border-crossing; *Human costs of border control* (2013) is a Vrije Universiteit's database on migrant deaths (for which data were retrieved through the search for death certificates) between 1990 and 2013.

against them. This is neat in those projects where diagrams, geographic maps, photography, geo-locative media are exploited to make visible mechanisms as capital flows, border control, chains of power, by gathering and displaying data that remain largely hidden to the audience in order to promote social change or social justice. In this regard, they are therefore contextualized in an operation that hovers between visibility and invisibility and does not shy away, indeed it feeds, on this dialectic. Such difference between critical cartography and mapactivism is addressed again by critical artists Bhagat and Mogel in their incisive introduction to *An Atlas of Radical Cartography*, a collection of 10 maps and 10 companion essays:

[w]e define radical cartography as the practice of mapmaking that subverts conventional notions in order to actively promote social change. The object of critique ... is not cartography per se (as is generally meant by the overlapping term critical cartography), but rather social relations (2007: 7).

In other words, the radicalism of a counter-mapping practice does not consist in the fact of breaking with the map trope but to use its frame and its language with the intent of the parrhesia, or in the words of Foucault, to tell (or make visible) what is perceived as the truth despite dominant powerful forces. Map-activist experiments, thus, do not have to question the ontology of the map but they can work to reveal its relation with political issues (Kitchin 2011). Moreover, mapping practices can avoid to be discussed in their representational features while being instead treated as means to wrestle with the present, playing under the same system of the master rules. In a sort of 'inverse surveillance', the operational space in which the technology is used by certain governmental apparatuses for storing, displaying data and act on a coercive way can be exploited by other actors to prefigure and activate alternative political spaces. There is another caveat, however, to be discussed. Radical cartographies are, as Trevor Paglen writes, "a departure point or a tool that can aid in analysis but do not speak for themselves" (2007: 11). This suggests to reflect on the fact that the cartographic language must be defetished, addressed as incomplete, not all-encompassing, and not always selfevident knowledge. Therefore, it requires an interpretation of what is displayed as a warning to remember that the time of theorizing has to remain central. If the reader remembers, the integration of maps with the commentary of their producers is an aspect that has been seemingly underlined by Laura Canali.

The last different nuance between mapactivist projects and critical cartography's work is perhaps due to the fact that the mapactivism to which I refer has nowadays especially at heart issues of migration crisis and border control, pressing problems of our present that have not yet made inroads into the realm of academic geo-cartography if not in a tiny niche of scholars, who at turn blame such lack of interest (Casas and Cobarrubias 2007; Pickles and Cobarrubias 2009; Tazzioli 2014). Moreover, when such arguments are afforded by geographers, they are more often seen as a replication or a counter-gesture of the cartographic gaze, without fully considering the sort of 'destabilization' through which such practices could be also explored, following the path signalled by certain post-representational and visual studies' theories. For instance, in the *Journal of Political Geography* we could find statements of this kind:

A question that haunts critical cartography is does it really make good sense to analyze cartographic practices from the point of view of the crisis of representation in an age that witnesses an unprecedented expansion of surveillance, mapping and cartographic visualization in all walks of life. (Hakli in Herb 2009: 335).

This comment might suggest that is useless in the field of geopolitics to deal with issue of performance and performativity of mapping, as well with the search of other ways of theorizing mapping practices because it is more urgent, first, to deconstruct the regime of surveillance in which we live. However, I am aware that counter-posing ontologies might run the risk to leave ontological thinking intact. The question, therefore, needs also to turn around practices of mapping rather than just to the map or the surveillance itself as tropes of thought. A visual-aesthetical approach should now consider that maps are constructed relationally, then the question should rely on the relations within which it is embedded such instability. The question then is how maps act relationally, not their reality. Under this new theoretical light, the power of critique can be exerted then through various investigative lines. As counter-migratory and digital practices instruct us, we can explore the agency of operational mapping and counter-mapping and at the same time thinking about the different powerful visibilities enacted by each of these practices. In particular, the counter-mapping event involves activists, academics, artists (and figures who summarize the three souls together) who choose to communicate with and through the maps to take a stand, take action and prompt critical and alternative talks, looks and gestures on the issue migration and on border crisis.

Let us take in consideration two examples. The first one might be offered by *Liquid Traces*, a video-performance realized by Charles Heller and Lorenzo Pezzani from the Center of

Forensic Oceanography at Goldsmiths which illustrates the stages of a Left-to-die boat case. By using the traces left by those same technical tools exerted for monitoring and intercepting migrants' movements, they try to reconstruct the various steps of a shipwreck occurred on the Lybian coast in 2011, proving the responsibility of states and NATO for the failure to rescue people in distress at sea (see Heller and Pezzani 2014). Another interesting case is offered by Watchthemed. It is a digital platform where are daily posted texts and calls that activists receive from people who left their countries behind to face the danger of drowning. Migrants use satellite phones, as we have already said, and activists act as mediators, calling national rescue agencies, or private actors for rescue initiatives, and eventually involving mass media. The website welcomes the viewer with the screening of a map where are reported events of crossing, shipwrecks, injuries, and death. The viewer is at first faced with red dots, buffering zones, which swell depending on the number of signalled events. In both cases, maps are used as evidences to intervene in legal, political and public debates and to practically help migrants in affording their risky journey. Not surprisingly, as Propen signals, "the map is a helpful, supplemental device to non-experts when they must make decisions that require spatial understanding" (2007: 237).

In conclusion, once linked the issue of visualization to that of migration, many disruptive patterns of multiple practices, intentions, and networks come to the surface, signalling what we might call a 'forensic turn' in mapping. Here, the map-maker assumes the role of the investigator. It comes to a "shifting triangulation—as argued by Weizman—between three elements: a contested object or site, an interpreter tasked with translating 'the language of things', and the assembly of a public gathering" (2014: 9). Such forensis will find a specific explanation in the following section. For the moment, however, there is a question that we left pending in the previous paragraph that is now looking for an explanation. I wondered, indeed, if another idea of number is necessary, if another conception of the calculus is possible. Now, if we look at those mapactivist practices, the dimension of counting, detecting, storing and showing data is not dismissed at all. What comes to the surface, though, considering again the spatial and visual regime of numericality, is an ambiguous spatial practice. From one hand, the operational cartographies can be contextualized as promoting a sort of haptic space (a prensive space), dictated by mechanisms of migration trapping, monitoring and containment. In a Deleuzian perspective (1988), the haptic becomes a word better than tactile because it does not oppose two organs of sense but supposes that the eye itself could enact a function which is not merely visual; on the other

hand, the numeric spatial culture unleashes a apprehensive space in the attempt to re-floating with a forensic gesture the human costs of the era of border control; hence committing activists, artists and academics in counter-visualizations animated by a parrhesiastic attitude. The map, moulded by those kinds of projects, is now a trace of a submerged event, now a surficial archive of the current epoch, now an evidence to grip to foster public debate, now an orienting tool to help people in their journeys. It might condense, while reducing it into its specific ontology, the emotion and the position of its producer, as we saw for the map drawn by the cartographer of Limes. In this perspective, the digital project of migratory counter-mapping proposed as exemplary and the other one that we are going to explore in the next section, even participating in the visual spatial regime introduced before, the ocular violence of the numeric, stands out from a purely operational cartography as that signalled by Frontex. It does because, as Heidegger (1927, US 240: 121) would say, the calculation here has not to do with the enumeration (counting) aimed at controlling and subjugating, but with the recognition (reckon) of a lack, that of invisible traces that would otherwise be dispersed. In this sense, we now better perceive the ferments of a critical politics which challenges the operational one: "A critical politics understands the positivities of power and uses those posititivities to push and struggle for increased human capability without necessarily falling into the trap of increased domination" (Crampton 2003: 176).

Once again, here we are dealing with a power to and not with a power over, an act in concert and not with a tool of subjection. The kind of visibility enabled by these two visual spaces, prensive and apprehensive, is ideologically very different. In the former, there is an interest in making visible informal phenomena, perceived and constructed as illegal and clandestine, to act on them, to make predictions. Again, it is an exercise of governmentality. The second one is called to make the invisible enter the sphere of the visible, to signal the irruption of those wastes/leftovers that could generate a backlash and could undermine the truths of powerful actors. The first is an operation of tracking, the second of tracing. The tracing is one of the scenarios in which those who, at this point, we could certainly define forensic map-activists move.

Bleeding maps. The forensic turn in cartography

I have left pending the map-trace that I presented at the beginning, "The Mediterranean is no longer liquid, no more poetic" (Canali 2015), as a symptomatic image where the poetic strains, dirtying the cartographic medium, a personal ethical and political message, and I tried to explore further mapping practices, projects that we are discovering very different both in the promoted intention that in the way they demand to be seen. More specifically, once the regime of visibility in which operational cartographies and mapactivism operate has been contextualized, I now try to clarify how the latter deals with the Mediterranean necropolitical space that the Limes map has allowed to introduce at the opening, a territorial trap where "contemporary forms of subjugation of life – succumb – to the power of death" (Mbembe 2003: 39). To kill, to be left to die, to be about dying, to survive in the space of exception engraved by the Mediterranean Sea, makes louder the question of how activist cartographers should take trace of such necrotic events and for what audacious, moral or insidious ends. Thinking through the necropolitics on the terrain of wet migratory cartographies brings into light a famous quote by sociologist Arthur Koestler, reading: "[t]he statistics do not bleed. People do" (1968: 34).

I believe it is crucial to translate and rethink this reflection for mapping products when they focus, for better or for worse, on the sovereign power of migratory regimes as fundamentally concerned with death-making. Paraphrasing the previous sentence, we could certainly say that "maps do not bleed. People do". However, in the case of showing death at sea, what would happen if contemporary digital maps bled? And what would be the aesthetical, ethical and political consequences when maps, and not just only the bodies shown in the photographic archive of the current moment, started to bleed themselves?

There are many projects (some have been already mentioned), more or less related and in dialogue with one another, interested in mapping the deaths and injuries of migrants occurred in the attempt to reach the Fortress Europe. I will focus, in particular, on one of those platforms committed in the collection and display of death database, *The Migrants' File* (MF). It is a consortium of more than three hundred journalists partially funded by the non-profit *Journalismfund++.eu*, and concerned with the idea of investigative journalism as "the action of publishing true, exclusive information that required thorough analysis to produce" (Kayser-Bril, interview 3 November 2016)<sup>103</sup>.

<sup>&</sup>lt;sup>103</sup> Nicolas Kayser-Bril is a data journalist, co-founder of the platform Journalism++ and member of the Migrants' File consortium. The excerpts are from a structured interview, conducted via email on November 3 2016.

The project has been particularly inspired by the work of the documentary filmmaker and activist Gabriele del Grande, one of the firsts engaged in counting the death at sea <sup>104</sup>. In a very pragmatic view, they argue that to set up a political action is necessary to corroborate discourses with facts. The principle leading their work is indeed to assemble and analyse data on deaths of migrants from 1 January 2000 to the present to provide 'evidence' of a phenomenon on which the EU countries prefer to keep quiet and silent<sup>105</sup>. These facts are finally constituted—needless to say—by cartographic visualizations resulted from the output of their relative databases. Specifically, MF journalists normally use platform as CARTODB to visualize their data and the effort of Open street map's contributors. However, GIS expertise has been mostly needed for geolocation and to decide for the optimal database structure to use (Kayser-Bril, interview 3 November 2016).

Therefore, if we argued that the symbolic map of Laura Canali shuffled from the indicative to the subjunctive, here again maps are shown in their informative, thus indicative, function. Indeed, as MF argues: "[i]n the last three years, we collected data and used it to shed light on government policy in a domain that was driven by emotions rather than facts" (The Migrants' File, online). Rather than being seduced by the earlier already discussed figural cartography, their data are used as proofs and incontestable evidences of real facts occurred. In this sense, they work in the realm of veridicality, where the witness seems to be attributed to objects.

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<sup>&</sup>lt;sup>104</sup> In his blog, Fortress Europe, Gabriele del Grande introduces his work in this way: "Fanno tutti a gara a contare quanti ne sbarcano, pronti a gridare all'invasore. Ma quanti sono quelli che non sono arrivati? Muoiono giorno dopo giorno. Anno dopo anno. E i loro corpi finiscono nell'oblio delle coscienze, seppelliti in fondo al cimitero Mediterraneo. Mangiati dai pesci e accatastati sopra le tubature dei gasdotti che sembrano a volte l'unico ponte rimasto tra le due rive. Da anni Fortress Europe cerca di documentare questa strage. I numeri parlano da soli!".

<sup>&</sup>lt;sup>105</sup> In the moment in which the author writes, the Migrants' File platform has declared to be discontinued in his effort to trace the death of migrants at sea. On June, 24 2016 the funds on which it was based on their daily work are in fact terminated.

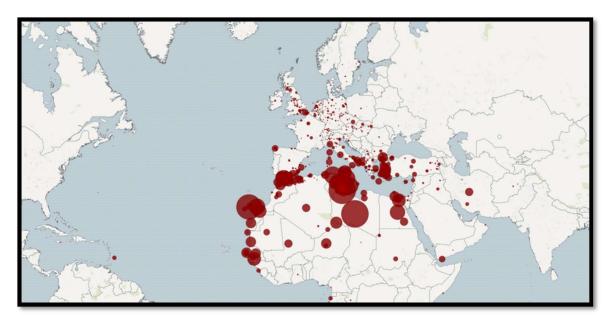


Figure 20. Bleeding map of people dying in the attempt to reach Europe. Source: The Migrants' File<sup>106</sup>.

This is a way of action that has been experimented in several niches of historical studies and spatial history as well, nowadays possible mostly thanks to the use of GIS<sup>107</sup>. One of these examples is offered by Martin Gilbert (1982)'s *Atlas of Holocaust*. It provides a graphic testimony of the genocide, mostly of Jews, occurred between 1933-1945. The author chooses to show the path of a family towards death, giving to readers a clue of the extent of the phenomenon. In essence, he seeks to show what the numbers of death mean and signify as "it makes us question the received history of the Holocaust by putting the event in our faces-on the map" (Dorling 1998: 285).

Moving from the printed version of the *Atlas of the Holocaust* to the digital ever-changing mosaic of The Migrants' File, we might find ourselves shocked by the presence of information that European policy-makers can no longer ignore and on which cannot pretend to remain silent. The crowdsourcing of data has indeed showed that the number of sourced dead and missing migrants is 50% higher than current estimates (Journalismfund.eu, online).

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<sup>&</sup>lt;sup>106</sup> The data assembled by TheMigrants' File have been also used by Moritz Büsing to produce an online interactive temporal map of the bleeding caused by 15 years of border control policies: <a href="http://15years.morizbuesing.com/">http://15years.morizbuesing.com/</a>

<sup>&</sup>lt;sup>107</sup> In the field of Historical GIS (see Gregory and Ell 2007) current debate focusses on the best visualization modalities to address the spatiality of historical phenomena, especially regarding Holocaust Studies. GIS visualizations are used in the work of Beorn, Knowles, Cole, and Giordano, *Geographies of the Holocaust* (2014), or by Charlesworth's *The topography of genocide* (2004). They discuss different methodologies in order to let enter in the frame of the map the trauma and suffering of people and not just to visualise spatial relations and aggregations.

More suitably, the investigative aesthetics configured in these 'apprehensive' spatial practices allow a clarification of the concept of forensis (Weizman 2014). According to Weizman, a forensic approach requires the investigation of a crime scene. In our case, the body of the crime is dispersed in the sea, a liquid mass that we usually think formless and indomitable but leaves traces in the same instruments used for the monitoring of migration flows. There is another semantic meaning endowed by the word forensic. It recalls the 'forum', the political arena "where the results of an investigation are presented and contested" (Weizman 2014: 9). A forensic speculative gesture includes both the search for a not visible trace that later materializes in the production of an evidence as well as the analysis of the practices that make possible the creation and circulation of such evidence. The Migrants' File, for example, in a methodological way, exploits the so-called "open source intelligence", used by the secret services, and able to collect the information in newspapers, on websites, in government publications as well as in the "gray literature". However, these databases themselves are dumb and to be activated must be integrated from the word, from other images, other events as they can produce a political action. The map is then a mode of access and intervention on the world but it cannot stand on its own. The evidence, in fact, "asks for a decision, for a reading or an interpretation" (Weizman 2014: 45). Intuition and interpretation might transcend the available information while following their own logic. Therefore, it is instrumental to look at the specific use and at the manifold events that condition and influence such consumption. The death archives are transformed and take value in their continuous implementation and in their circulation, in the movement that we have already defined "visual economy" (Poole 1997). As the same MF activists have noted: "[o]ur data was reused by hundreds of news outlets, by artists, NGOs, activists and governments alike" (Migrants' File, online). Information then is destined to flow and be consumed in different ways. It can be transformed into maps, artwork, 'rugs' and manifestos as we are going to see below. For example, newspaper such as Agence France-Presse, Le Monde and the New York Times have mostly used the data to produce maps. However, the data was taken even by artists, one of which, Zach Litash, created a copper plate of the location of the events in the database (see figure 21). It was also presented at festivals and exhibitions and, most importantly, used by the International Organization for Migration (OIM) to start their own database on the topic, Missing Migrant Project (Kayser-Bril, interview 3 November 2016).

Such circulation and always different transposition of data can be further grasped in other two events. In the so-called visual economy, the list of the dead in the Mediterranean becomes now a long carpet trampled by the representatives of the European Parliament. In 2015, indeed, activists have exhibited an endless paper roll with 17,000 names at the Brussel's site of the European parliament: 17,000 names of African migrants drowned in the sea from years 1989 to 2014, and they partially collected the numbers and the identities through the platform; in other cases, the bleeding maps have been transposed into the manifesto to grip during the pro-refugee public petitions.



Figure 21. Zach Lihatsh, 2016. Iron Cartography. Courtesy of Kayser-Brill.

In such social rites, those data are mobilised to awake conscience, so that one can be affected morally by the visual enumeration of death if there is a relevant political consciousness behind. In summary, the search for traces, the production of evidences, the circulation of those witnesses in the large political forum open a space of visibility 'for all to see' and thereby resulting in a call to a militant responsivity.

In this respect, projects like *Migrants' File* are platforms that address the issue of visibility that we have introduced in the previous paragraph. If the concept of exposure is one of the salient features of Western visual culture, we can guess why invisibility's rhetoric needs to be built in a dialectical way. If a phenomenon to exist is to stand out, to be revealed, reclaimable against, the invisible is downgraded into the sphere of non-real because it has no exposure

value, no interest (Byung-Chul 2014: 27). The reaction to this situation commits the thinker to a dual critical gesture. On the one hand, there are those scholars who are interested in shaping a phenomenology of the invisible, giving value and weight to the non-reclaimable, to the untraceable. In this sense, the unmappable is recognized as a symbolic and ontological space itself, an antechamber which can generate thought at the very moment in which it remembers us of the limit of what we do. The obscurity is then meaningful and needs to be retained and to be protected by the interference of the Exposure. Put differently, the worship value of those images is given by their mere existence and not by their visibility (Benjamin 1973). On the other hand, the exposure culture seems to offer for those looking for a strong political response a ransom to their invisibility rightly as the entering the visible realm. "In other words, the emphasis on visibility is a continual reminder of the power invested in invisibility – the power which is possessed by the investigator, the viewer, or infection carried on the air from unknown and unseen sources" (Demos 2013: 153). Viewed from this angle, then the point is no longer making everything visible but to make the invisibility understandable, to describe and to expose something, to return the evidence of what is kept hidden, to introduce it into the world of presence. If the first posture is dear to many philosophical and literary currents, in hindsight, digital mapping projects rather respond factually to this last call to visibility: an "exposure call" made permissible just by the act of mapping.

However, since we are dealing with the enumeration of bodies, a critical position demands also to specifically understand what are the intentions, methods and contexts in which the exposure to/of death occurs and the responsibilities inherent in the translation of complex migratory phenomena and stories into cartographic spaces. In particular, when otherness and the invisible are tied together, as it happens in the low exposure value assigned by Western culture especially to black migrant bodies, we are faced with an ambiguous situation. Those subjects find more than a hindrance in entering the mainstream visual agenda of Western societies because they lack recognized status and are neglected as full participants in the public sphere (Bal 2011). Or, if they do, they end up occupying a not human position, not as persons but in the guise of a numerical epidemy. This way, they are anyway kept inhibited of manifesting. The invisibility, in short, becomes: "the contingent blockage which prevents the 'proper' realisation and assessment of a claim" (Anderson and Harrison 2010: 168).

As Katherine Mc Kittrick admits, considering the inherent relation between the production of blackness and the politics of the number addressed during slavery: "[t]his is where we begin, this is where historic blackness comes from: the list, the breathless numbers, the absolutely economic, the mathematics of the unliving" (2014: 17). This reflection also establishes a strong connection between the logic of number and that of death. The archives of the dead migrants might recall at first glance the mechanism of the slave list, to which McKrittick refers to, where black bodies were reduced in number and commodity, often listing their defects caused by violence and physical torture. In this light, as we saw with Appadurai (1996), in providing a common language, numbers were able to translate and tame into western language the undecidable nature of the otherness. Similarly, McKrittic (2014) reminds us that the enumeration of bodies is a purely Western control and taxonomic mechanism. Contextualized in the current mediatic moment, these enumerative practices can obviously be criticized for the reification of the stories and the humanity of these people. The creators of MF platform seem likewise aware of this critique but they defend their standpoint: "[d]espite some voices claiming that these databases dehumanize refugees, counting casualties is one of the only ways to assess the effect of the policies of European governments" (The Migrants' File, 24 June 2016).

Furthermore, Kayser-Brill argues: "[t]hat by focusing solely on human stories, one can lose track of the actual magnitude of an issue and force readers to use a wrong frame of analysis over a problem" (Interview, 3 November 2016). Certainly, the intent of my argument is far to whether or not justify the activities of The Migrants' File, that everything may look except the new masters and colonizers transposed in the digital age, but to understand just within which regime of visibility these actors, who are aware of their privileged point of view, operate. It is, as I believe, a counter-visibility which exploits the power of numericality, the evidence of the data, the synoptical gaze endowed by mapping as it is faithful—instead of running away—to the Exposure principle. Under these coordinates, we can understand why for data journalists: "[s]ystematic measurement is the only way one can get a clear picture of an issue as a whole" (Kayser-Bril, interview 3 November 2016). Hence, despite the critical awareness that the numerical imagery is also a colonial imagery, as we said before, countermapping activities do not always propose an alternative language but they indulge within the venter of the beast in the attempt to fight and turn dominant powers from the interior. They speak the same and mainstream language of hegemonic forces, because by proposing another language the power itself would remain insensitive and deaf to their claims. Under such

circumstances, it is not necessary to criticize relentlessly the number but to begin considering and harnessing it differently. McKrittick herself, referring to the archives of the life and death of blacks in the Middle Passages, claims as still necessary:

to hold on to the numbers because "it's the evidence of what transpired" and "the bones actually ground you." The numbers set the stage for our stories of survival—what is not there is living. The numbers, the arithmetics of the skin, the shadow of the whip, inspire our insurgency as they demonstrate the ways in which our present genre of the human is flawed. Indeed, numbers, like the archives, are truthful lies that can push us toward demonic grounds, a place not where one must choose between white supremacy and oppression, but rather honors the ways in which blackness is archived as a violent beginning and, to be sure, does not consider this beginning as inevitably tied to trajectory that leads to something rightful or natural or ethical (2014: 23-24).

Violence takes a fundamental role, if not entirely absorptive, on the way in which the other has been encountered by the Western subject. A story that so much in the past as in the present cannot be overlooked and that has been exerted even through calculative practices. This reflection, fairly and humanely acceptable, however, leaves open a wound, we could say an ethic one. The underlying problem is that, in fact, to tell the other is to some extent impossible and anyway subjected to fierce criticism, in the sense that the self arrogates the right to speak of and on the behalf of another subject, as the postcolonial critique teaches us (Alcoff 1992). Despite postmodern claims of "speaking nearby" (Ti Min Ha 1989), the fact remains that what is not breathing, so without soul, is easily to be countable but difficult of being sayable. On the other hand, how could we be sure that the inverse operation narrating, telling a story of a person instead that simply count it as the evidence of Western violence— would be more ethical? To what extent we can fairly claim that is not equally violent to recover the life-stories of those bodies in order to be consumed by the public grief? In short, what is the limit that I must put on the account of myself and on the other's account? And how could we be sure that in assuming this disposition—the story first—we are not simply repeating instead that re-imagining the systems of values of Western wordling, which assigns to verbalization and to the biography a good and positive value as opposed to the negative, abstract and deathful geometry of data and bits?

I would argue that the logic of the number is certainly a tool of objectification but it is because it has an ontology different from both the word and the image. It needs a careful and critical exploration, as it comes to accept the fact that mapping, being an intersection of number, word and image, endows a different and hybrid way of seeing the events, and not for this fact to be seen always as violent or inhuman in respect to humanist account of space

and subjects. For example, in his media activity, Kayser-Bril admits that "the stories must be told using human elements" but he also considers the fact that "the sheer volume of stories in the database allows for another way of looking at these human tragedies" (Interview, 3 November 2016). Above all, mapping seems more appropriate to let take a position on the evidence of what it reproduces. In this respect, as Herb contends:

Mapmaking requires authors to specify points and areas, and to give some indication of the course of a line. While this invariably reduces the complexity of the human and physical world, it offers the chance to see fundamental spatial relationships. Writing is more flexible, allows ambiguity, and makes it possible to dance around clear statements and definitions. So, while writing can better convey complexity, it can also seduce authors not to take a strong stance and take refuge in eloquence and high-flying theoretical pronouncements (2009: 334).

However, the promise and the extent of this consideration can only be answered if we look at the context in which these practices emerge as well as at their users' intentions. It is certainly tremendously important to unfold the regimes within which humanity is formed and transposed arithmetically and geometrically, but it is equally crucial to understand why certain projects, mainly driven by activists, decide to take account of the black migration visibility precisely in these numerical terms. Can they just be blamed of exerting a double violence or can they be rather mobilised to denounce the material and ocular violence of European border policies?

In addition to the effects that such projects are seeking to create, we must not forget that any act of mapping, as selective, presents a set of problematics deserving further investigation. These can affect both the time of data construction than that of visualization. Searching data into all official and verified news sites assumes that migratory events that have not been 'registered' as well as the missing bodies will be overlooked. All this makes, in numerical terms, the amount of lost bodies very limited and incalculable. As claimed by the collective *The Migrants' File*:

there is no getting around the fact that some individuals and events cannot be documented since no evidence offers confirmation. This sad reality cannot be redressed, rendering all fatality estimates conservative. The true numbers of dead are doubtless higher than recorded (online).

To wad the information abyssal, the consortium has decided to integrate their data with the testimonies of survivors, which, once verified, are inserted into the database. This procedure allows also to include deaths resulting from depression, police violence, escape attempts. As regards the display of the geography of death through the cartographic frame, one of the critical points is that a map generated by the MF's database can submit incidents occurred away from European borders whereby a boat turned down during the journey from Libya to Italy can be geo-localized in Libya and not, for example, in the sea. Therefore, if a map has an influence on the perception of a spatial phenomenon, in this case this can be misleading and would require experts who reflected at the bottom of the most appropriate visualization mode. This codification has indeed some limitations that must be recognized and not blamed for this. There is an incalculable element in the life and death of each one, that neither a number nor a word or an image can never communicate in its entirety and depth. Finally, the insistence on the ordinary and the mundane is of peculiar importance. The ongoing and daily project affects the fixity of the map, blamed to freeze in its frame a phenomenon of the moment, inevitably bound to change over time. Here it comes, instead, to constantly changing visualizations, continually updated data, which also contrast the spectacle of death, mediatized (especially through the images) only in special moments that recall the great tragedies: "particularly because the broader media often ignores the issue until another large-scale emigrant tragedy thrusts it back to the top of the news cycle" (The Migrants' File, online).

In this perspective, the apprehensive space in which the participatory mapping of the collective is operating brings back that conception of the frame presented at the beginning of this chapter as a slow and stratigraphic accumulation. A continuum that includes and incorporates retensions and protentions. A machine that patiently records the spatial chronicle of contemporary world and does not forget its traces, whereby configuring, in all its evidence, the spatial arrangements in which the current necrotic power is consumed and justified.

## Affective/effective cartopolitics

Beyond the intentions, practices and processes through which those visual archives of death take shape, it might seem impossible to discard the symbolic moment, the manifold modalities through which the image generates its meaning: the visual frame through which the necropolitic migration materializes. This is one of the reasons why, in order to make leaking the spatial and visual architecture through which the necropower shows itself, I choose to engage with the sort of "reading sideways" promoted by Jasmine Puar as the linking together of "seemingly unrelated and often disjunctively situated moments and their

effects" (2007: 117). Following the Baroque principle that consists on bringing closer things at first glance distant, and in turning away of things at first look close to one other, it seemed appropriate to me, although blameable to be a schizoid decision, trying to make the desultory migratory visuality regime of the Mediterranean emerge through the frame of the map, better of very different maps, actors and systems. The triadic architecture endowed by the distinction between a figural, an operational and a forensic mapping practice suggests, more specifically, to recognize the sphere of such mapping examples' applicability limited to a specific mode of envisioning and acting upon the world. This aspect can be unleashed by contextualizing and, in a second step, extracting them from their usual contexts in order to start a confrontation with other concepts and practices. Many other examples from cartographic migrations could have been cited and discussed to substantiate this counterresponse to the generalization of the map trope, but those examples should have provided a glimpse of some of the prospects. In particular, the three cartographic categories have been proposed to understand how an image generates its meaning and activity, how it is able to produce its own atmosphere of affectivity and operability. This interest, once transposed into the visual tyranny inaugurated by the era of the border, it has opened to a sort of haunted space. The reader could have been expected this, since having to do with migration policies today, means inevitably uncovering a space of death (Mbembe 2003) or, if you prefer, of slow death (Berlant 2007). And the ghost, more than other figures, is primirarly a symptom of what is missing. Moreover, as Mirzoeff recognizes, the necrotic and haunted atmosphere is somehow linked to the phobia or philia of looking so that: "[w]hen visual culture tells stories, they are ghost stories ... The ghost is one place among many from which to interpellate the networks of visibility that have constructed, destroyed and deconstructed the modern visual subject" (2002b: 239). Herein, then, that provisional answer to the question—how the visual frame through which the migratory necropolitics morphs into is constructed and perceived?—showed the cartographic bleeding at work into our present.

Specifically, I would insist on considering three different ways of bleeding. Bleeding that pours out when we decide to hurt a map to make it talk. In the perspective I took, the focus on bleeding it is possible as it shifts to the complex, and, dare I state, the undecided nature of mapmaking, namely the idiosyncrasy of image-making, by revealing more, and simultaneously, less than we may assume. To avoid redundancy, we have already more than implied that once scanned the migratory event in the cartographic arrangement, it is inevitable that a new ontology is generated, a transposition of being into a thing, in which

the complexity of the physical and human world is translated graphically, to be made understandable, into numbers, categories and points. The question now is to understand how this bleeding mapping ontology integrates, interacts and collides with a humanistic and cultural vision of space. In the first case proposed, we could have been stunned (or not) by the geopoetic and symbolic cartography figured by Laura Canali. Such geopoetic moment gave most clearly back the idea of the map has having (and producing) an aesthetic, emphatic and affective dimension. However, we could contend that there is anything bleeding, that it is not immediately apparent. To disclose it, it has been necessary to accompany the map with a text, made of the comments and explanations offered by the cartographer herself and filled in the interstices by the reasoning of the author. The word is certainly important because makes complex the point of view and the position of the cartographer, integrating her visual talk with feelings and interpretations. This characteristic is considered central in the work of Laura Canali: "I think it is important – she says – they [maps] come always along with the text. To be sure that the reader is well guided, I would like that she/he always read the text" (Interview, May 6 2016).

In such pedagogical role, the cartographer of Limes stresses also the emotional and bodily relation with the map, foregrounding what we might call 'affective visualizations'. "Affective visualizations provides a multisensory ontology of the individual that proffers a very different understanding of the affective condition of contemporary technoculture" (Aitken and Craine 2006: 5). The main argument of Aitken and Craine (2006: 2) is indeed that often the geovisualized data is discussed more as "the product of a highly computer-literate mind" than as "the creation of a searching soul". The work of Laura Canali, involving reasoning, digital and analogue tools, embodiment and doubt, instead helps us to overcome this highly disparaging aspect of the cartographer activity as it gives us a vision of her work anything but technical, finding a right balance between the emotional and the methodological moment. However, the emotionality, the affective cartopolitics here considered has a different meaning than what is commonly understood as "emotional mapping" Indeed,

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<sup>&</sup>lt;sup>108</sup> I am referring for example to the artistic work of Katherine Prendergast resulted through the collaboration with geographer Catherine Nash in the *Atlas of Emotions* (in Nash 1998; 2005). Thy are wordless maps replaced by emotional place-names. Another interesting perspective on the emotional mapping can be found in the activity of Chris Nold (2004). He conducted several workshops in more than 24 communities, trying to record people's reaction to the environment. He deployed the wearer's Galvanic Skin Response (GSR), which is a simple indicator of emotional arousal in conjunction with their geographical location. On their return, a map is usually created which visualises points of high and low arousal. Finally, an example of the georeferenced emotion, of how the humanist sense of space is filtered and changed through GIS visualizations can be found in Hauthal and Burghardt (2013).

after dealing with the topic of emotionality in many of its forms in this research, my argument has now become mature enough not to pinch in a discussion on how to pour feelings, ethical statements and humanity inside the frame of maps but it mostly relies on how to account the feelings, sufferings, tiredness involving directly the cartographer, "the searching soul", when she crafts her own maps. In the case of Laura Canali's mapping activity, I return to stress the point that the map itself does not bleed, but the cartographer is certainly experiencing different disruptive feelings when she is asked to portray the necropolitical effects of migration policies on people.

I must say that for me many maps bleed, including those of Limes. Even when you make a map of Europe and you put the walls ... you know ... when you put the point on Calais, calling it the "jungle" near the town of Calais where everything is ordered, completely accurate. Or near Paris, the TGV, the tunnel where these desperate people try to escape... [she sighs] ... But, finally, the geo-poetry helps me to make them more human (Canali, interview May 6, 2016).

I am underlining this passage because in visual studies, especially of sociological imprint, often the risk inherent in analyzing this type of practice is neglecting the subjective and the emotional investment of those who produce images, while it is more common to focus on the effects that images generate on the observer. Yet, for many of those who produce the cartography of the present, or perhaps for those who think it critically, maps are something more than mere technical routine, and more than "a descriptive analytics of violence" (Mc Kittrick 2014: 18). On the contrary:

A map, unfortunately, gets inside you. At least when I draw it, when I conceive it, when I think of it, it has already come inside me. And, then, I greatly suffer, too. (Canali, interview May 6, 2016).

Undoubtedly, a single example cannot build a generalization or obscure other cartographic visual regimes. Therefore in the second category that I decided to discuss, calling it 'operational cartography', the discourse on the map changes in its method of approach. Again, we do not face, materially, the bleeding of the image. The maps do not bleed, rather they are a long way from expressing any kind of multisensorial phenomena. They are operating tables, a silent but effective geometry of lines and points. Yet, the cartopolitics here is not abstract but effective in the sense that such operational mapping, integrated with satellite and aerial photography, becomes haptic. It sticks to and attack bodies on the move. Here, the navigation reaches the apotheosis of its performativity in the way in which it not

only locates something/someone on the map but it enters the physical space by producing a material effect. Thus, even if it looks disembodied in its machinic and mechanic production of prediction and risks, the operational cartography is endowed in the system of necropolitics by affecting or causing the bleeding of subjects who intermittently enter or escape the screen of the map. The interlacing of the first two examples gives a clue of the different nuances (even oxymoronic) of meaning activated when we refer to a "performative" and "bodily" event.

In the last case, we entered the realm of a forensic mapping practice. Here, in the geovisualizations offered by the platform *The Migrants' Files*, maps are bleeding themselves, giving the spectator a conclusive and dramaturgic view of migration necropolitics. The map, here, is the result of a continuous overlapping of migratory events. It is not a simple archive of memory, which encapsulates something that has happened, as in the case of the Holocaust, and which can now be analysed through a historical perspective. It is an archive of the present that goes acted now, that need to be used to conduct legal and political actions and not only for the mourning. This strategy suggests, in terms of acts of seeing, a reversal of the initial point argued in the paragraph. That we must therefore look not only at the symbolic but also at the operative moment of every mapping praxis. An aspect that is often downgraded by intellectual and critical analysis.

In conclusion, although those maps are bleeding, showing the spaces of death and the concerted action of their human cartographers or users, they can bleed in different, sometimes imperceptible, ways. And, since these visualizations constitute a special type of iconography, they can be redirected to new aesthetic horizons, they can be redesigned and reconceived, re-acted and read differently<sup>109</sup>. The challenge of mapactivism in tackling the issue of migration, whose visibility is stifled in its flow and s-personalized in its stories, should be to mend both aspects: the ethics of representation and the moral action, the production of meaning and the technical accuracy, making sure to think through the consequences, the limits and the potentialities of such mapping operations and without discarding the human agency and subjectivity. On the other hand, a critical creator:

is always confronted with a situation of doubt, as if he or she were hearing the voice of an ironic sphinx asking them: what now? The work questions, calls, parasitises, exploits, annuls him or her – it is a monster! – but at the same time demands testimony,

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<sup>&</sup>lt;sup>109</sup> The geo-poetic gestures presented at the opening by Laura Canali may mark one of these directions. A path far from being exhausted, yet to be explored, criticized and improved. In this respect, she says: "I think those maps still require time, a future. They still have a way to go" (Canali, Interview May 6 2016).

solicitude, even to encounter the implied accomplishment, which always requires discerning what is feasible amidst the chaos of the world. (Pelbart 2014: 251)

Despite the doubts, at some point the map-maker as well as the critical theorist has to make choices, takes a stand and "discerning what is feasible amidst the chaos of the world". Once again, philosopher Pelbart returns to be helpful to sublimate incisively and poetically this claim.

## **CONCLUSION**

## Mapping Backwards, Seeing Forwards

Geography, could you be my world?/ Will you ever have the words, concepts and theories/ To encapsulate/ The precarious, exhilarating, exquisite, unequal world in which we live? (Madge 1997: 32-33)

The present dissertation is the result of a long and fermented rumination, perhaps already started with my Bachelor thesis in 2011, at that time strictly devoted to the relationship between mapmaking, feminist geography and literature. Since there, the support and the in "flesh" or "paper" encounter with wonderful geographers, cartographers, philosophers and artists helped me to write down a topography of stories, cases, and collective biographies that I hope can give now the sense of a multifarious theory and practice of mapping, so intense and profound to straddle and exceed the boundaries of different disciplines, 'schools' and single departments of geography (also because, sadly enough, in great parts of Italy they no longer exist). To start a dialogue between continental (as they call them) and Anglo-American theories of cultural and political map-making, two realms often blamed to work separately without febrile communication and co-influence (see Kitchin in Lévy 2015), I tried to set a bridge, rather unsafe, though.

Interrogating many of the innervations and liaisons between geography, cartography, visual culture and aesthetics from the late '80s until the present moment has been more a tactic to put geography in the position of having to renegotiate its relations with the mapping of the world, and, in the process, to rearticulate what is singular (as an inheritance of continuous theoretical fertilization and exchange) to its own capacities to analyse such events. I have not attempted to trace all the links that there are or there might be between them. My interest has been more in their shared and unsettling readiness to reflect also on the gaps and inconsistencies there might be sometimes in the geographic discourse, to hunt out the fault lines in its knowledge, and to encounter with the utmost boldness the ambivalence lurking within the loves, anxieties and desires geared toward map-making, suspended between refusal and libidinal attachment.

Every move I made was not meant as a disruptive and annihilating criticism of the map, when considered the hegemonic representation of geographical and geopolitical contemporary thought. Rather, I put my effort to defer from universalising and essentialising the "map" while drawing more emphasis on the need to study the differences between various mapping practices and theories. However, I cannot disdain that the deconstruction of powerful and ideological discourses is certainly a posture of self and outer critique, impossible to be dismissed. Howbeit, my hunch was that critical geographers may tend to replicate the same powerful and metaphysical vision they want to challenge, unleashing and freeing the power of specific silent and tacitous discourses without always fully trying to contextualize, understand and then re-scale it. My idea has been then to accentuate that the sphere of applicability concerning mapping practices must be acknowledged as limited to a particular mode of envisioning the world, or a particular dimension of the real. This theoretical atmosphere has been also underlined by Perkins and Dodge when they posit that:

Critical research tends, however, to ignore the diversity of contemporary cartographic media and underplay everyday mapping practices. Significantly, it has often been researched as a strangely placeless and disconnected activity, ignoring the geographies of cartography (2009: 1).

On the other hand, to put into practice my own sense of the geographies of cartography, it was first necessary to fathom what is meant by 'representing' in geographical postmodern thought and how representation is linked to several questions concerning spatiality. This has been intended, especially in the first part of the research, more as the story of "where" such concept has been produced and contested. Consequently, the effort has been to detect the reasons for by the map, more than other metaphors of the world, has attracted the attention and the apprehension of cultural geographers and critical theorists. To get into the depths of their readings and looks, the map has been dissected into several scenes and cases, and the analytical of such pieces has finally come to do justice to the Deleuzeian definition:

The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation (Deleuze and Guattari 1988: 12).

The catchy sentence suggests that maps are alive, still out there, simultaneously expressing and moulding relations and being the result of as many connections. But if it is

true that they are everywhere, attractive or bare, online or printed in books, journals and billboards, constantly changeable or simple snapshots of the moment, how could we see them both in a mosaic overview and in a closer light? How to engage with a twisted cartographic theory that can incorporate multiple dimensions and directions, senses and interpretations?

This question pushed me to follow a trail, the direction pictured by feminist geographer Madge in her *Ode to Geography*:

By looking within and without, upside down and inside out,/ Come alive geography, come alive! (1997: 33)

In particular, I have been solicited to translate and to retain the ferment and excitement of such livingness in an epoch in which cartography, more than geography, seems to have exhausted all its potentiality for cultural geographers, while maps and mapping projects are still a common and ubiquitous presence in our society. But I want to emphasize that the livingness does not forcibly mean that we have to twist the object 'map' in order to make it absorbing life and subjectivities, emotions and sensations within its frame; it suggests rather to treat it as it is embedded in our practices of life, as if it has more to do with our lives and deaths, even if pretending to say, in its alleged abstraction, less about them. The awareness of such livingness meant and means rediscovering multiple uses, circuits, referents involving cartographic imageries and practices in our biopolitical and necro-political present.

From the cases on which I focussed, mostly related to political issues, we might now be more attuned and sensitive to the different practices of seeing and sensing mapping. We might distinguish a legitimizing function, when maps are produced by specific institutions to streamline forms of domination and control. We can outline a resistant function, looking at those mapping processes generated by social actors who speak from or for devalued and marginalized subjects and communities to promote social justice. Finally, is it possible to open to a projectual vision of mapping in which other subjectivities, spaces and communities might be created with the intention of transforming social and cultural forms.

These aspects and many others may emerge if the geographical thought does not stop in one configuration or paradigm, but if it struggles to offer a continuous and murky comparison and slippery oscillation between different scenarios. Only a that point, for those who embrace geography in more radical and political terms, is it possible even to think of a set of tactics able to striate the demonic center of spatial representations.

Without any doubt, maps per se cannot create moral positions but they can reinforce or build a nascent one. The effort, hence, is not to limit deconstructive strategies to dissections of the map but to shape or find new cartographies of life. In this respect, if the reader were wondering why I have mostly focussed my attention on ghostly and necrotic spaces—perhaps perceived to be antagonistic to life—I would like to note that neither the necropolitics is out of such scope, as it is "a tool to make sense of the symbiotic co-presence of life and death" (Haritawom, Kunstman and Pasocco 2013: 2). In this perspective, migratory events and border control operations could not stay out of this story, since mapping has been specifically chosen in the present research "to enable communication about the things that concern us, to create out of such small steps a community of interest in the issues thus brought however dimly to light" (McKenzie 1994: IX).

Howbeit, the main problematic, now familiar to us, is mostly due to the fact that lots of such academic discourses linger in a modern understanding of maps as operational representations which null such performative livingness, because they are substantially condensed in two kinds of rhetoric; on the part of map-makers, in a progressive tale that asks if cartography's ontology and technology are perfectible (wrongly thought in the sense that they can substitute with their advancement more and more to reality); on the part of critical geographers, in a disenchanted and pessimist vision that turns maps back as always political and ideological means. The last posture, fortunately, exists as counter-narrative of the first. And the more the question becomes transparent and technocrat, the more is required to intellectuals to show its opacity as a sort of compensation. However, is it really admissible to reduce any cartographic operation within this dialectical opposition? Does this endeavour serve to explain the interest in mapping that animates activists, artists, anthropologists, humanists and—through their creativity—even many groups of cultural geographers?

In fact, in all honesty, especially in the last year, it might have started to deal the cards afresh. A new wave of works related to the cultural mapping seems to overwhelm the research of many scholars, and among them, to refresh the interest of some geographers. The argument given in this thesis shows, then, that mapping is overcoming the reservations of many critics, and in its re-winding, its depletion is starting to be re-explored. However, if not properly screened to critical scrutiny, if not filtered by the density of the theories and the looks that preceded it, contemporary mapping is likely to pass through an uncritical assimilation, being reduced to a fad of the moment. Hence, what is really important is not to

begin the tale of contemporary cartography in a kind of amnesia, although this may seem prolific and productive at earlier stages. Adopting a historical perspective—a transversal gaze—leads to understanding how and if geographers did really change the way to produce, read and critically analyse maps. In short, I am suggesting not to look or articulate mapping practices and knowledge only in terms of novelty, but to consider what it is critical of them, what turns to be problematic and troubling. And, in the exploration of the problematics concerning the geographical knowledge in relation to the cartographic one, has emerged as substantial the need of greater dialogue between the critical stance with the emphasis on the thinking and interpretative subject, and the sociological-assemblative approach that follows things, put emphasis on objects, and places them in different visual and material ecologies.

Put differently, it urges to find a balanced point of encounter between the cultural representational excavation, looking for symbolic ordering or larger power regimes in which mapping practices are inserted and made meaningful, and the non-representational radical processuality that leads us to see the map beyond figural meaning, as an ongoing and unstable construction, open and connectable, circulating in several networks and not necessarily sentenced to convey the power of hegemonic groups and individuals. The missed articulation of these two positions runs the risk of being unable to account adequately the strength or weakness that the maps assume in contemporary society, as they are whether or not able to move passions, opinions, emotions, interests, actions by moving and changing themselves accordingly. A conflictual reconciliation, although it may sound almost oxymoronic, means exploring the limits and potential of both approaches, but in the awareness that: "to look is an act of choice. As a result of this act, what we see is brought within our reach" (Berger 1972: 8). Indeed, it is clear that we cannot simply talk about something without recognizing our complicity with the system of presenting the world we are reffering to. In this sense, many of my questions and glances were formulated to meet specific theoretical issues that concern the Italian geography, a reason why they may be in tune or not with the theoretical tournament involving other disciplinary geographies.

Another important point must be stressed here. If the reader read the fourth chapter to then browse the following ones, he or she would actually guess that geography is a discipline constitutively visual, but not in a manner that the view is considered the first sense of its analysis, but because the propositions I launched to promote a reading of contemporary mapping demonstrate that there are many ways to see theoretically and phenomenologically, always hybrids, always synaesthetic, in which only to a matter of salience and convenience a

sense is marked over others. We could certainly admit that turning the experience of seeing into a "problem of analysis" (Mitchell 2002) can increasingly interest geographers who, from their part, have discussed differently the visual matter of their discipline but who seem not to have quite often been concerned about how "to show this seeing" (Mitchell 2002). On the other hand, even objects exert a pressure, are configured to be viewed in a certain way. This suggests to embrace visuality as a situated and embodied practice of looking where both subjects and objects co-influence, construct and activate the field of vision. In considering this, a visual approach is crucial nowadays to unfold the scopic regime that shapes our practices of (not) looking at maps. The underlined practicality demands maps to be analysed as more than always uncompleted representations of reality. It makes no sense distinguishing between reality and representation, because reality is constructed by our participation with subjects and things (maps, images, objects, etc.). Put differently, a map is a representation designed to be practiced, used, and consumed as all the representations do. Nevertheless, as an object configured in a certain way, it has different effects that should not be forgotten, nor disappeared. Such effects might vary according to the medium, technology, and discourse through wich maps are produced and experienced. Furthermore, maps are flowed and impure 'speeches', always consumed along with other devices and referents: images, writings, sounds, voices, physical and virtual locations. So, the map is never the unique means of representation of spatial relationships, even if it is always resulting from a spatial practice. This means that studying maps just as texts to be decoded and dismantled is inadequate. The time is ripe to shift the focus also on the practices within which maps are produced, consumed and distributed. We can, in the light of this, treat the maps as modulations of contemporary iconosphere that take on different functions, expressions and discourses. Indeed, whether one considers what might be called an operational cartography, whether one refers to critical cartography, mapactivism and artistic incursions, we must recognize their internal problems and the diverse regimes of (in)visibility that they stage. In this cauldron, visual studies can be a valuable support for the geographer in the attempt to unravel the spatial and visual practices in which the maps are created, and the effects they produce in both the producer and the viewer (Rose 2011). This implies that both the location of the creator and the viewer, as well as the content and the contexts of the image, and nonetheless the global imagery in which the viewer tries to make sense of the images should be constantly analysed (Mirzoeff 2011: 12).

In so doing, I would argue that if the contemporary map-sphere can be considered inherently visual, it can take advantage of a dual focus of attention by geographers. Maps can be scrutinized as sociological and cultural objects to investigate through visual methodologies by exploring the social, political, and cultural practices through which they become meaningful (Rose 2001; 2010). On the other hand, they can also be experienced and envisaged in terms of a political aesthetization. Outlining these two attitudes (visual and aesthetic, diagnostic and prognostic) that geographers might reserve towards the mapmaking, I wonder if we can overcome the false dualism representation/antirepresentation, by looking at map-making as an anthology of visual events. In particular, following Mieke Bal (2003) and Mitchell (2005), I tried to explore, especially adopting a cultural analysis to migratory cartographies, the kind of reasoning unleashed when we start to read every mapping as a visual event in which the discursive, material, affective and procedural dimension cannot be easily disentangled in order to contribute to a more honest understanding of any mapping. In short, if our ways of looking change according to the different events staged, we should also be aware that the properties and qualities that we try to tie to the map cannot anymore scientifically and univocally determined but they should be practically and specifically experienced. To describe different mapping and map-making is what Ingold asserts for the materials: "to tell the stories of what happens to them as they flow, mix and mutate" (2007b: 8).

To unfold such different modalities and stories, geographers should accept the challenge to cross the razor-line between visual and aesthetic cartographies, by simoultaneously seeing forwards and mapping backwards. While continuing to absorb instruments, images, and operational concepts from other authors and disciplines, they have over time built up a wealth of theories that they must brush up and challenge in order to explore the cartographies of the present, from which they seem to have been withdrawn in recent times. Once glimpsed the possibility to confront with an impredictable and hybrid space, new generations of cartogeographers might hope to become the heirs of this decisive turning-point. In this light, exhaustion and unexhaustion configure a performative hendiadys which just at the moment when it recalls an apocalyptic act of destruction of the past, it opens to a bet on the perfectibility of new research possibilities.

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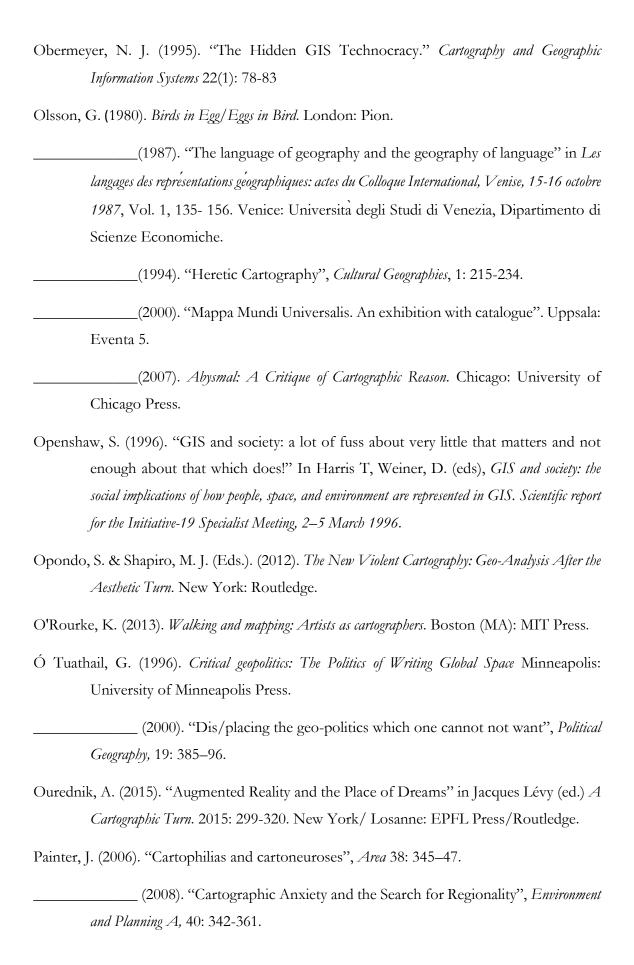
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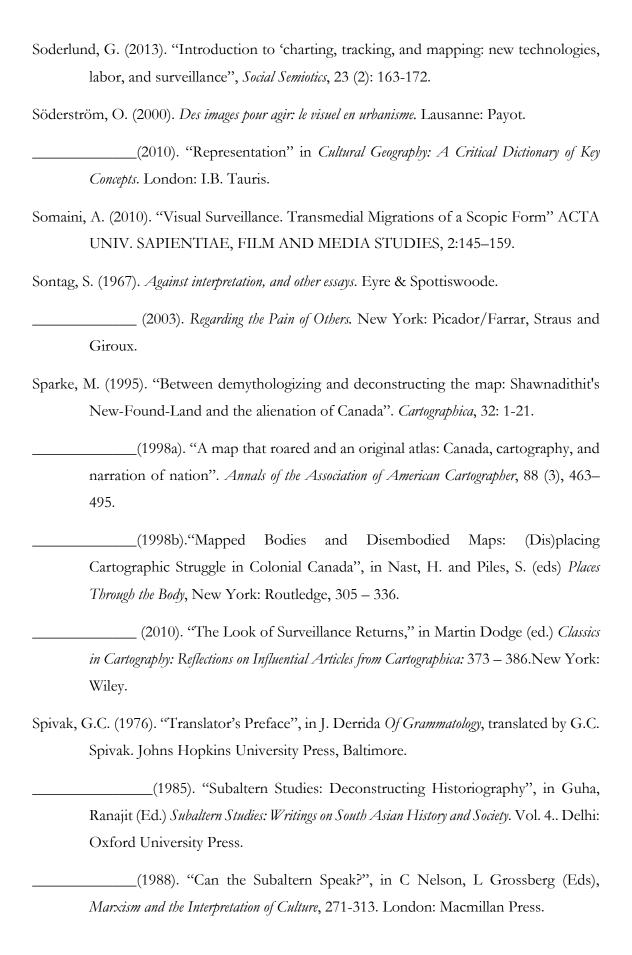
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