Journal of Research and Didactics in Geography (J-READING), 2, 7, Dec., 2018, pp. 119-134 DOI: 10.4458/1682-11



Extroverting Cartography. "Seensing" maps and data through art

Laura Lo Prestia

^a Dipartimento di Scienze Storiche, Geografiche e dell'Antichità, University of Padua, Padua, Italy Email: laura.lopresti@unipd.it

Received: September 2018 – Accepted: October 2018

Abstract

Drawing attention to the "extroversion" of geographic language, in this paper I explore the proliferation of mapping and its spatial fragments outside geography and, specifically, in the fabric of contemporary art. Art theories and practices consistently involve, as an effect of the spatial turn, cartographic textures and grammars by differently highlighting the manifold functions, mediations and materializations of maps. Inspired by the engagement, particularly of women artists, with cartography, I discuss the artistic exploration of mapping through various interpretative categories such as "spatial (de)generation", "temporal proximity", "ecologism" and "dataism/datactivism". Each notion often entails a distinctive practice of seeing (that is, observing and interpreting) and sensing (namely, feeling and materially experiencing) artistic mapping and data — which, woven together, may explicitly refer to what I term the practice of "seensing". This way, multiple insights to art maps' visuality, materiality and perception of space are given. In conclusion, I consider the pros and cons that an aesthetic encounter with mapping gives to geography and to its creative transformation.

Keywords: Mapping, Cartography, Contemporary Art, Visuality, Materiality

1. Introduction

Whether it is an exhibition in a gallery or a museum, the wall of a street, a participatory project, a digital platform, as well as the cover of a book or a "cartifact", we can all often come across a creative map in our ordinary lives. In truth, so closely bound have cartography and art become, especially in the last decades, that even the criticism, experimentation and creativity that

have recently informed some strands of map studies and qualitative GIS (Lo Presti, 2018 for an overview) would be more fairly comprehensible within the wider recognition that cartography has received both in popular culture and humanities. The map is in many contexts considered an aesthetic object, a mundane or visionary space, both poetic and *poietic*, where places, subjectivities and objects are newly discovered and navigated through unforeseen

¹ Map scholars usually adopt the word "cartifact" to allude to an ordinary object which, despite presenting a cartographic design, does not function as a real map.

motifs and relationships. As such, the graphical and cultural life of maps looks to have vastly outpaced the quiet and stable moorings of academic cartography, standing the chance to confront outer and hybrid mapping representations and practices, which are strongly grounded in popular, literary and artistic contexts.

In this paper, I motivate the sensitiveness to intercept the cartographic transformation and consumption that occur in those other cultural environments as a form of "extroversion", in the sense that geographers' attention and interests are directed – as the definition of "extroverted" in the Merriam-Webster dictionary suggests – wholly or predominantly toward what is outside the self [in this case, their discipline].

I aim to explore one of the numerous symptoms of this mapping extroversion in the heterogeneous use and eclectic conceptualization that is made of maps in contemporary art. In this changing context, art historians, artists and curators have contributed to a whole plethora of exhibitions, catalogues and books on geographic and cartographic themes (e.g. Harmon, 2004, 2009; Thompson et al., 2009). With the rise of the "spatial turn" in social sciences and humanities (Warf and Arias, 2009), art has indeed placed a thriving emphasis on space, place and environment beyond its long-standing devotion to landscape paintings.

As for the category of art historians, the field of visual culture, variously influenced by French philosophie de l'art, German bildwissenschaft and English visual cultural studies, pulled into focus manifold aesthetic, cultural and social analyses on the cartographic representations of both modern and contemporary art (Alpers, 1983; Bruno, 2002; Buci-Glucksmann, 1996; Castro, 2011; Didi Hubermann, 2011; Harmon, 2009; Rogoff, 2000). Most recently, the explosion of digital technologies and the transition of mapping tools into the virtual world have similarly attracted a thick blanket of art and media scholars (Kurgan, 2013; Mattern, 2015, Verhoeff, 2012). Even if it may be trivial to say so, the aforementioned speculative works could not exist without the "meat" provided by hundreds of cartographic imagery builders: the artists. When we shift the attention to them, the number of maps and mapping tropes to consider in our survey would grow exponentially. In this regard, Ruth Watson (2009) listed 24 map exhibitions from 1977 to 2009, shifting also the attention to aboriginal art. Catherine D'Ignazio (2009) and Inge Paneels (2018) have furtherly suggested to geographers other entry points to catch the lively entanglement between mapping and contemporary art, attempting to understand the reasons that brought so many art practitioners to use maps for their activity.

Lately, the category of "map art" has continued to proliferate as it ought to consider not only individual artists working with map-like visualizations, but also several exhibitions which have taken mapping as a central theme yet declined in different ways (that is, without strictly considering maps but also atlases, globes, land-scapes, territory, borderscapes, topology, GIS, GPS and so on).

Viewed in this way, we might argue that mapping is ubiquitous in art (Watson, 2009) as much as it is in everyday life (Cosgrove, 2006), notwithstanding that the familiar form and the ordinary uses of maps often become strangely distorted in the world of art. Yet the diversified possibilities in which maps are embedded in a wide range of creative and critical spatial practices are still far to be recognized both in art and geography. Such a cartographic onslaught requires us, in this sense, to pause and understand various functions and dysfunctions, epistemological possibilities or aporias, political messages and sensorial stances that recurrently affect, decompose and recompose the simultaneously biased and beloved "cartographic reason" (Farinelli, 2009).

By and large, the cartographic object richly adsorbs several shapes, content, information, visions, suggestions, narratives and counternarratives which constantly inspire new research, artworks and activism. For instance, maps are chosen by artists to experiment with a geoaesthetic filled with revelation, emotion, trauma and delight. For activist purposes, geovisualizations can be deployed as analytic and synoptic tools to foster critical awareness of the political, social, and economic issues facing our present; for others, mapping is also seen as a narrative process that encompasses alternative explorations of the city or the natural environ-

ment, disclosing new ways of story-telling that may not even include any palpable cartographic tool. The map, in that case, may intermittently vanish and materialize through poetical and political walking or through much more cognitive and playful wayfinding (Butler, 2007; Careri, 2006; O'Rourke, 2013; Pinder, 2005).

Even though such "outward" mapping gained ground without always putting an explicit dialogue with the subject area of geography, throughout time it has nonetheless solicited geographers' interest. As I have partly discussed in a previous contribution for this journal (Lo Presti, 2018), some of them have seriously considered artistic maps, particularly those produced in high art, as vivid entry or breaking points to their theory. In this sense, art has often offered eloquent figures to support the geographical reasoning and stimulate spatial imageries, be such images advanced to enhance the critical deconstruction of the map (Crampton, 2010; Wood, 2010) or, more recently, to illuminate much more material, intimate and multisensorial consumptions of cartography (Rossetto, 2017 and 2018). Lastly, we can also count some collaborative art projects on cartography which have involved geographers and cartographers as art curators and collaborators².

For the most part, however, engagement with art often comes down to a curious and ludic stance, more so because it is not centered on uncovering the distinct spatiality and specialty of the art system, nor on recognizing its legacy and historiography, thus risking to "[un]respect the integrity of disciplinary art and practice" (Tolia-Kelly, 2012, p.134). An instance of this smug yet distanced posture engendered by professional cartographers toward creative mapping can be grasped in the following words: "We *smile* when we see a map used in an artistic way as if it's an acknowledgement of the value of maps to society. Our world is such an important place that as custodians of the way in which we portray it, we

are excited by the array of interesting ways in which maps can be used artistically" (Field, 2009, p. 287, my italics).

Smiling and excitement, though, cannot always be the unique expressions that artistic maps deserve. This is the reason why this contribution calls geographers to acknowledge "moments of mutual respects" and "creative learning" (Hawkins, 2011) with artists, but also of emotional involvement and critical engagement, by carefully contextualizing different modes of looking, criticizing, feeling and even absorbing the experiences of mapping practices that are no longer under their control as they involve other actors (graphic designers, artists, activists), but also different themes, protocols, audiences, materials and spaces of display. To grasp the special spatiality of art worlds, we expressly embrace should a composite methodological stance that takes into consideration both the ways that artists conceive their mapping work and the modes in which, in such transitivity, geographers are asked to interpret it.

In particular, as little attention is usually paid to the (self)ethnographic and theoretical methods of comprehending art objects (Bal, 2003), I suggest channeling our attention to two main acts: seeing and sensing. The first move – the seeing– discusses the possibility to acknowledge the position of the researcher/observer in the act of looking at visual objects. If "looking is inherently framed, framing, interpreting, affect-laden, cognitive and intellectual" (2003, p. 9) - as Art historian Mieke Bal pointedly asserts - this means that the researcher, when she looks, can intersect different modalities of thinking about maps in art. All the more, I contend that those interpretations should be also fairly laid bare through the analysis. For instance, the geographer might be attracted by a map for what it represents to them, by focusing on the meaning of the image while decontextualizing it from its context of production as much as its space of display. Yet art practices, and the way in which they are designed

² In 1992, Denis Wood organized the "Power of Maps" exhibitionat the Smithsonian Museum; "Mappa Mundi Universalis" is the art work created by geographer Gunnar Olsson and artist Gunnael Jensson for the Biennale of Uppsala in 2000; Martin Dodge and Chris Perkins curated "Mapping Manchester" in 2009-2010.

[&]quot;Whose map is it?" refers to the *Iniva* project involving both geographers and artists curated by Harriet Hawkins in London. In March 2018, MAPS-SPAM was exhibited at the Italian Geographical Society (Villa Celimontana).

by contemporary artists, may considerably require more than a representational approach. Many art objects ask to draw the attention – rather than an elucidation of the internal meaning of the image – to their usability, affectivity, spatiality, materiality and becoming. The gesture of sensing encourages one to consider closely also these other characteristics, which are often downplayed by the disinterested criticism of the intellectual approach. As a result, the seeing and sensing modalities, slowly or disruptively uncovered through the aesthetic experience of the artwork, can be experienced through what I define the practice of the "seensing". The wordplay is useful to underline the conceptual and experiential modes through which the perception of the work of art, be it a map, occurs. Through "seensing", I posit that more needs to be done to articulate the visual experience as both the intellectual and emotional, attentive and fleeting, symbolical and material. As such, the "seensing" might fruitfully attract geographers and cartographers' attention and experimentation with maps through a "a variety of perspectives [...]in order to think better about the objects they are studying" (Holly, 2005, p. 192).

In addition to this methodological clarification, another stimulus moves this intervention as it is difficult to ignore that, at the crossroads between geography and art, artful mapping can be variously co-opted by geography, contemporary cartography and GIS. That is to say that the attention drawn to the "extroverted" use of cartography does not stand as a merely dispassionate move. Many cartographic "reveries" can be actually investigated to destabilize and challenge – and at turns to help to reimagine – the inward scientific cartography and the spatial relations it aims to portray or enact. In short, artworks "at their expense" become a sort of meta-maps for scholars (both cartographers and geographers), who may muse on how, by comparison, the cartographic tool is used in their discipline and what horizon the dialogue with art can extend or shrink.

2. The event of the map: the visual, the material and the spatial in contemporary art

The proliferation of avant-garde movements such as Dadaism (1916-1920) and Surrealism (1925), the shock provoked by Fluxus (1962) and Conceptual Art(1965) and the consequent contestation of the traditional art system gave the field of contemporary art the sense of a boundless laboratory of intervention, no longer ruled by any historical imperative (Danto, 1998) and where "no topic, no medium, no process, no intention, no professional protocols, and no aesthetic principles are exempt from the field" (Weintraub, 2003, p.8). Yet, while not dismissing the established meaning of art history altogether, it is nonetheless true that any object of art potentially results from the commingling and overlapping of various techniques, media, languages that end up multiplying and blurring its meaning of departure. To make sense of such complexity, several questions often guide visual scholars in the analysis of contemporary artworks and, to the same extent, they might be helpful for the "extroverted" geographers; e.g. What happens when people look at images? Is the material, through which an image is made of amenable to influence the message that the artist aims to convey? Does the space in which the image is conceived by the artist (the studio) or exhibited (the museum or the public space, for instance) play a role in the final seeing and sensing of the artwork?

In paying attention to the issues of visuality, materiality and spatiality of the image, those questions encourage one to see art objects as simultaneously products and processes, that is, multifaceted events, whose elusive and ephemeral sense can be caught in the concrete and contextual experience that either the artist or the viewer construct of the object. Concerning the importance of grasping the event of seeing in its happening, Bal suggests 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" (2003, p. 9).

Consequently, we might argue that every act of looking may trigger a visual event, an intense interaction involving both the artist's subjectivity and emotionality in relating to her work and the viewer's sensitivity to accept, recode or reject the image's scope and swarm of meaning. In capturing and amplifying a particular detail of the work, the observer activates, in such an idiosyncratic way, other feelings, meanings and interpretations with respect to the original cultural sphere in which the map has been conceived. Because anyone could respond differently to the seduction of an image, the combination of the practices of seeing and sensing could let more reflexive visual methodologies enter the realm of artistic geographies.

To have a clearer picture, it would be actually appropriate to consider the intimate viewing experience as both personally and socially constructed. In this respect, the visual theorists Sturken and Cartwright argue that: "[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, p. 45).

To better understand the way in which images attempt to relate to their audiences, first it is important to comprehend the intention of the artist. As for the use of maps in art, we should ask who the artist is, which strategies are used to create a map and what purpose drives the artistic creation. Secondly, more attention should be paid to the materiality of the map because art is predominantly a "techne", it is the ability to create and shape objects. Therefore, the form and the membrane of the medium (paper, textile, glass, dust, wood, aluminum) and the way in which the artwork is concretely located in the artistic site are never random as they are chosen for their evocative qualities to vehiculate the message of the artist. Moreover, the tangible matrices of the artifact motivate or retain different interactions and fruitions of the object; finally, as has been already argued, a focus on the effects that mapping produces for me or you, as observers, who are immersed in the midst of the "seensing" experience, is paramount in our reasoning.

Ultimately, acts of seeing (which might be

perceived as more rational and conceptual) and sensing (which recall nearness, emotion and sensoriality) mutate following the personal background of the viewer but also the devices and spaces through which the map comes into sight. For instance, if we watch an isolated map attached to a wall and extrapolated from the flux of other images, our "seensing" could be different from the experience of maps in the context of installation art and performance art. These other genres often drive the body of the spectator into a new perception of space, where an immersive way of looking at the maps and mappings is developed in contrast to a detached, contemplative and symbolic interpretation of the artwork. Arguably, when mapping is not involved in performances and installations, moving away from a traditional (semiotic, iconological and formalist) conception of the visual analysis may not be straightforward. In other words, each map, depending on the way in which it has been arranged, may ask to be investigated differently. Significantly, convoluted game of looks and bodily movements seduces us in considering that a geographical posture looks beneficial to unravel the spatiality and the relationality emerging from the interaction between the artist, the map and the viewer

Once having provided the geographer with some coordinates suggesting "how" to look at art without overlooking personal and disciplinary backgrounds, another question, related to the content of map art, is left open; "what" to look at. Given the richness of map art, in the following sections I provide a personally motivated selection of the several mappings that are experienced in the artistic milieu, by tentatively suggesting some categories such as "spatial (de)generation", "temporal proximity", "ecologism" and "dataism/ datactivism". Being conscious that a true line of demarcation between those artistic practices cannot always be drawn because of the hybrid artistic traditions such works recall and the similar themes they may address, I will try to highlight, very subjectively, the predominant function that conglomerates them. The plotted course serves insofar as to make their richness clear and productive, wherever geographical and nongeographical maps are formed, transformed and informed by the artistic use, appropriation, collection, creation and contestation.

3. Spatial (de)generation

In my personal encounter with cartography through art, what has incessantly struck my imagination are the modes in which maps are conceptually and physically handled and altered by artists to deviate from their original and intended function. In contemporary art, where norms and conventions are often defied, maps are in many instances torn, burnt, dissected, sawn, slashed, as much as they are rendered unreadable according to the material used to create them. This is why I want to refer to them as instances of a "spatial (de)generation", which can also play on the absence of names, places, scale and legends. Moving away from the common thinking of the cartographic representation as a geometrical and inert source of spatial certainty, artists go in search of an epiphanic short-circuit. Needless to say, different meanings and gestures, even very disturbing ones, are negotiated and evoked in the process of manipulation; furthermore, in an intriguing way, the degeneration, deterioration and collapse of maps disclose more intimately the wide range of feelings and passions that viscerally bind (beyond the expression of smiling) art cartographers and viewers to them.

Concerning this aspect, we might say that the artists interested in the uncanny moulding of the map are also those who engage, critically and iconoclastically, with the art object for what it symbolically represents. The force of this kind of cartography emerges, in fact, through an act of material destruction and decomposition that may metaphorically annul or enhance a conventional feature of the map (e.g. orientation, location, boundaries, objectivity). Moreover, what often lies behind an act of map destruction may be the perilous acknowledgement of its power or, reversely, the will to unmask its weaknesses. Further, acts of cutting, spoiling, sewing, crumpling maps are aimed to conceptually and emotion ally provoke the viewer.

On this take, we can introduce "Mappa Lopo Homem II" (Figure 1) by artist Adriana Varejão. The artwork represents the 1519 map of the famous Portuguese cartographer Lopo Homem, illustrating the Americas connected to Asia by an imaginary land, called "Mundus Novus". The Portuguese cartographer, believing that Asian peoples had similar characteristics to the

Brazilian ones, became convinced that only the presence of a continuous land could justify this resemblance. Revisiting such visionary terrestrial contact in a historical and political viewpoint, the artist reflects on the systematic project of violence and coercion that concretely led African, Italian and Japanese people to cross and settle in Brazil, adapting to old and new slave labour trades.

When I experienced the image, what really touched me, and consequently affected my reasoning, was in fact the presence of a vivid wound standing out on the membrane of the map. The calm imaginary looks therefore shattered by the corporeal cut, which transforms the pictorial space into an aberrant object of conflict and death. For one thing, the clot seems to link the representation of the map to a broader problematic of brutality, presumably insisting on the connection between the development of cartography and the colonial exploration. In truth, the worn and bleeding surface of the map does not merely mimic a bruised territory, but more radically unearths the constraints and sufferings felt by the bodies that moved on that space. The destruction becomes a performative strategy that can cause, as Rambelli and Reinders adeptly explained, "transformations of the semiotic status of those objects. Operating on the materiality – on the body – of a sacred object affects and modifies its symbolic status – its meanings and functions in its cultural contexts" (2012: X). In this vein, the first suggestion that the art of degeneration may give to geography is to return the sense of a "plastic" cartography, meaning by that, a serious engagement with the concrete materiality of the image (Harmon, 2009).

The open wounds lying in the fragile body of the map are instead sutured by Ariane Littman in "Surgical Operation" (2004, Figure 2). This time we enter the hybrid space of the performance art. In the penumbral rooms of a former hospital in Jerusalem, the artist, along with other actors, sets up a surgery in which she proposes to mend a series of maps of Jerusalem, which show the various checkpoints, barriers and road networks around the city. The surgical operation lasts seven hours, following the deafening rhythm of breaking news on terroristic attacks and fights concerning the Second Intifada. The estranging and ritual gesture of violating, cleaning and then

suturing the skin of those maps mirrors the idea of amending the sick body of Israel. In so doing, the artist epitomizes the figure of both a destroyer and a creator, who is aiming to purify the mutilated and corrupted territory of the entire nation from its faults, thus freeing "a moment of release and catharsis" (Gray, 2013, p. 22.). In her intention, the ongoing deconstruction and reconstruction of maps strives to give the idea of a correlation with the political violent context of everyday life (Littman, Interview, September 17, 2018).

Compared to the previous artwork, this performance allows us to gaze into a new conception of space. This time the artist is present and "consumes" her images, demanding attention be paid to her bodily practices and her visceral bond with maps. Consequently, the audience is immersed in a broader sensory experience. People are forced to observe, strangled and displaced, the arrival of the maps on a stretcher as much as they are pushed to follow the alienating operation which is executed on them³. As Littman has further explained: "They [the audience] were there and not there. We had broken the 'stage' division, they were amongst us, but not part of what we were doing" (Interview, September 17, 2018). In this spatial arrangement, the eye of the viewer is not exclusively driven toward the content of any of such maps, even though the fact those maps represent the militarised city of Jerusalem gives the key for contextualising the message of the artist. However, it is the broader theatrical scene, where maps are treated as "metaphorical patients", namely human bodies that could really suffer and die at any moment, to construct the visual event as a disturbing space where to muse on the inherent and the ambiguous power played by cartography, now seen as a political and intimate, corporeal and abstract,

spatial actor. This example engenders a conceptual critique of political cartography as one that can be concretely staged through a strong anchorage to the materiality of maps. In this sense, when referring to the cartographic degeneration, I literally translate the iconoclastic attitude into a material act of destruction, to gauge the role the materials and gestures play in the artistic meaning-making (du Pereez, 2008) and in the construction of the cartographic practice and its political message. However, an overview of the spatial degeneration in art would certainly need a wider range of examples, and I should also clarify that the "torture" inflicted by artists on maps is not always ideological-driven and it is not just about cutting and sewing. Viviane Rombaldi Seppey decides, for instance, to crumple an everyday object: a common paper map (Figure 3). The map ceases to be useful, as it can no longer show locations. Stripped of its semantic value of departure, it is reduced to its crude materiality: a piece of paper, crumpled and ready to be thrown away. Yet, the title "The world isn't flat" offers a new interpretation. The compression actually transforms the flat surface into a globe where distances are reduced in an illusionary way. By considering the manipulation of the map in a constructive and generative sense, the artist looks to finally positively recode the act of destruction. She sensitizes us to acknowledge how the difference between flatness and volume is merely one of a changing perspective. By re-orienteering our attention, we are apt to discover new details.

Ultimately, each of those spatial degenerations is paradoxically very creative as it unleashes new and unexpected meanings. Several interstices of thought are tangibly opened; there, the power of maps is revealed, emotions stride the map, the geopolitical collapses into an intimate space and maps eventually crumble.

³ The performance can be accessed at the following link: https://www.youtube.com/watch?v=v_UWYkb 9084&t=8s.



Figure 1. Mapa de Lopo Homem II, 2004, Adriana Varejao. Source: ENCICLOPÉDIA Itaú Cultural de Arte e Cultura Brasileiras. São Paulo: Itaú.



Figures 2 and 3. On the left, Surgical Operation, 2004, Ariane Littman. Source: Courtesy of the artist. On the right, The World isn't Flat, 2014, Viviane Rombaldi Seppey. Source: http://www.vivianerombaldi.com/04.Maps/01.Inthe-Making/01.htm.

4. Temporal proximity

In its cornerstone "For Space" (2005), Doreen Massey criticised Western modern cartography in

the terms of a "spatialization without temporality", a device able to visualize the spatial distribution of phenomena but unable to grasp their actuality and becoming, that is the life fermenting on its surface.

Geographers have long wrestled with the idea to englobe time in their maps, forgetting to acknowledge that when maps perform a narrative function, time in effect becomes the predominant agent of space. As such, on more than one occasion, maps have proven to be amenable to telling stories, even very personal ones, to instilling emotions, thus to move us and move themselves. Especially thanks to artistic languages, which were also constant features of the many Middle Ages and Renaissance maps, the cartographic surface accommodates space and time and their different possibilities of coalescence and coevalness.

Better said, maps do not have to forcefully represent time in their content, but they can bear meditations at the flowing time, offering a palimpsest where the paths of the personal existence can be traced and commented. Not only can maps "take" their time, but time can also take. grab and devour them. In this sense, the temporality of maps can be also understood in the terms of an atmospheric agent (if we think about the notion of "tempo atmosferico" in Italian) that leaves its physical mark, as a sign of wear, on the cartographic artefact (Rossetto, 2018, p. 11). In any case, art constitutes a visual, verbal and material interface that can emphasize the conceptual and visual temporal-spatial relations that are conceptually envisaged by many geographers (Hind at al., 2018).

Devoting most of her activities to the crafting of maps, the artist Joyce Kozloff has recently released a series of works entitled "Girlhood" (2017), held at the DC Moore Gallery in New York, in which she drew, painted and assembled what might appear as beautiful and colourful, but also very childish, maps. One in particular (Then and Now, 2017, Figure 4) depicts a historic map assembled with drawings made when Kozloff was a little girl. Combining the contemporary painting made by the artist with a corpus of drawings found in her parents' house, the pictorial map becomes an intricate collage where two distant temporalities co-author the making of space. In this regard, as the artist puts it: "the young girl and the adult woman began to shift back and forth within the pictorial space" (Kozloff, 2017). Curiously, the edge of the historical map, usually dedicated to the cartouche, is now filled by a series of dolls that, abandoning their ludic function, actually provide an overview of the American dressing style of the 50s. This way, besides the interest in juxtaposing different moments of the artist's life, the map emerges as an historical artefact of material culture. Moreover, by interrupting the direct link between cartography and politics, the artist provokes us to intentionally bring our attention to more innocent feelings such as memory, nostalgia and the pleasure that maps can joyfully express. Seen in this manner, the cartographic texture opens up to a space where the artist can daintily and tenderly think about the passing of time.

The close relationship between mapping and time is returned through a diagrammatic pattern by the artist and cartographer Laura Canali in "Il filo del tempo" (Figure 5). The work has been published on the website of the geopolitical review Limes and exhibited from June 14 to July 26, 2016 at the Chiostro del Bramante in Rome. When I visited the exhibition in the company of the artist, she handed me an account of her life flicking through the lines of the mapping she had produced. The diagram, digitally printed on scratched aluminium, represents the upheavals that Canali's time line has undergone. This was perceived almost "linearly" during her childhood and "messy" and "knotty" during her adulthood. The turning points of her life are visualized by coloured balls, which are left, as the cartographer puts it, "free to flow to me" (Canali, 2016). As a result, in the chaos of geometric signs, tangled lines and sinuous dancing silhouettes, that are created by the lines of the map itself, the artist attempts to portray her life as a doodle, a jumble which represents the deepest traumas of her intimacy. This "cartographical psychology" (Norment, 2012, p. 3) emerging through the metric of lines and points is nonetheless deeply human and emotional as it invites us to take a sneak peek at her intimacy though maintaining a formal distance. The abstract schematization of feelings indeed works more as a therapeutic gesture which does not suppose any act of annihilation or destruction, as we saw in the previous section.

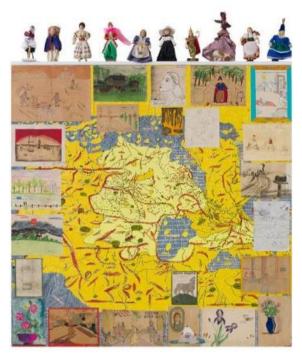


Figure 4. Then and Now, 2017, Joyce Kozloff, Source: https://www.artsy.net/artwork/joyce-kozloff-then-and-now.

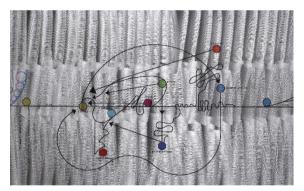


Figure 5. Il filo del tempo 1, 2016, Laura Canali. Source: Courtesy of the artist.

5. Ecologism

Starting from the Land Art of the late 1960s, attention to and care for the environment, beyond the self-care of the artist, have been another valuable element of the relationship that art has established with the geographical space. Many artists today intercept the contemporary and scientific debates on urbanatural issues, ecologism, sustainability and climate change, by proposing themselves as human "probes", silent observers of natural forms and trackers of their

upheavals. In this case too, the materials, languages and media are multiplied in the artistic experience to try to sense the ephemerality and complexity of the landscape. Significantly, maps are often the favoured or even contested forms used to explore and communicate scenarios of changing ecological futures.

For example, *Inlansdis*, the term used to technically refer to glacial formation, is an installation made by the artist Dacia Manto and exhibited in 2004 and 2009 to represent the continuous change of ice in the Antarctic continent. Aimed at criticizing the anthropological impact on the natural ecosystem, she crafted a map of the South Pole through the use of superimposed ecological fabrics (Figure 6). A non-digital map, however, might be conceived as a snapshot of a single moment of the geological life of the Antarctic, which cannot imprint in its surface the constant evolution of the landscape. The confrontation between immobility and movement is in fact intentionally sought after by the artist through the conception of a system of fragile and precarious maps that are stacked one on top of the other to disrupt the idea of stasis. In this regard, she discussed her relationship with the map considering her interest in cartography as a sort of fascination for "this gap, that is, the chasm that opens up through our perception, through the body, between the exact reconstruction of the boundaries of a place and the same experience that can be done through the senses" (my tr. Foschi, La Stampa, 2014, Interview).

Environmental artists often perceive the nature as an uncanny, disorienting and sensory ecology, whose experience can be more authentically returned through a genuine and unmediated sensorial contact with its spatiality. In search for an intimate encounter with the natural landscape, inhabited by a vast range of non-human presences, any technological means, like the map, can in a first incursion be seen as a noise, an intrusive object which distances the artist's claim for contingency.

In those cases, walking often becomes the preliminary act to grasp natural changes, precisely because it suggests an action always in the progress, slow and cultured in its making, of which the map constitutes a trace or an enduring mark. In this context, the body of the artist stands

as the favoured research instrument while the map acts as a coadjutant, both *in absentia* and *in presentia*. For instance, according to the Situationists, Land artists and continuing up to the contemporary psycho-geographers, ambling has often been felt like a way of experimenting with several practices of de-territorialization and reterritorialization that escaped the cartography imposed from above. To challenge the official planimetry of ordinary life, many artists, through movements and promenades, attempt to craft new maps documenting the subjective experience of the urban or the natural movement into new strangely familiar settings.

We can well understand the value the map takes on in condensing and absorbing the density and complexity of artistic multisensorial explorations in another work by Dacia Manto, "Chi ama la montagna le lascia i suoi fiori" (Figure 7). After her creative residence at Taibon, in the Dolomites, Manto documented her walking research of the mountainous landscape through an intricate installation made of pictures, books, paintings and maps. The artwork is primarily constituted by a topographic shaper, consisting of half cartographic paper fragments and another half of wavy lines of graphite spreading neatly on the floor. In the new assemblage provided by the artist, various maps are cut and rearranged to recall the corrugations of the relief topographies and, as such, emulating the sinuosity of the landscape. Yet they also take on the appearance of a natural element, evoking the autumn leaves fallen on the ground. The viewer's perception is also altered by a space of slippage since the volumetric matter of the map slowly dissipates into a spiral of geometric lines. As such, the making of space becomes a game of media transformations in which it is up to the observer to decide which movement to follow: the one that from the graphite drawing leads to the construction of the "natural" landscape or the other that from the paper map ramifies the spatial referent in a vortex of enigmatic lines.



Figure 6. Inlandsis, 2004-2009, Dacia Manto. Soucre: Courtesy of the artist.



Figure 7. Chi ama la montagna le lascia i suoi fiori, 2012, Dacia Manto, image by Giacomo de Donà. Source: Courtesy of the artist and Dolomiti contemporanee.

6. Dataism/Datactivism

The investigation of the intricate relations between the visuality, materiality and spatiality of map art objects cannot be made without a mention of the digital. Mapping and data visualization are increasingly exerting a profound fashion on artists, graphic designers and activists. For instance, the experience of walking, envisioned in the previous section through the poetic lyricism of abandonment and evasion is instead shown in its artificial, urban, mechanic and repetitive nature when it is translated through data analytics. The work of data artist Laurie Frick, called "Floating data", results from GPS' tracking and the use of hand-drawn maps to make visible her ordinary pathways through the city (Figure 8). They are consequently transformed into material patterns that somehow nullify the fleetingness of movement. In this new context, art

takes advantage of the most advanced GPS technologies and data visualization software to track human trajectories. The data collected by Frick indeed show that our experience of the environment is made through repetitive paths and spatial domestication: "We go the same places, we repeat ourselves, and occasionally we visit someplace new. People think their movements are boring and they just make the same track from home to work, back and forth, over and over" (Frick, http://www.lauriefrick.com/floating-data/). Her research is also interesting because it also gives us a clue of the materiality of the data. Despite the virtual space has been long treated by human geographers and social scientists as an immaterial and unreal horizon, digital artworks alert us that the information should be reinterpreted as "a sequential state of matter produced by materials and apparatuses, by technological devices in which the separation of form and matter is entirely devoid of meaning" (my tr. Bontems at al., 2008, p. 110).

Playing with data, as the former Dadaists used to play with words and images to make a critique of their world, these artists can be referred to as "dataist" who are prompted to trace the invisible network of internet, goods, and the vanishing experience of imperceptible things and events through cartographic, diagrammatic and topological patterns. For instance, a massive amount of data circulating on the Internet can be gathered to visualize new configurations to understand our present. Or artists can additionally collect their own data and even for their own sake – considering the case of Laurie Frick – often relying on GPS, mobile apps, and on the software realized by other scientists.

When data are rendered visible and tangible, emerging through the surfaces of several materials, they furtherly challenge our common perception of both the virtual and the physical space. The work of Richard Vijen, "Connected by air" (2018, Figure 9), reframes, for instance, the ceiling's view of the sky of Palermo, by replacing the architectural perspective of the "da sotto in su" with a digital screening. Housed in Palazzo Costantino on the occasion of the Manifesta biennial of contemporary art, the projection performs a view from above, one that is not aimed to chart the terrestrial territory but the ungraspable aerial atmosphere. The air is

digitalized by a textural network of trajectories, points and lines which reveal the many data and objects such as air traffic, satellites and wireless signals which cross the natural sky at every second.

Even though the aesthetic foregrounded by those projects is not strictly enforced by truly political concerns, they steadily delve into the potential of mapping to achieve awareness of complex phenomena which may often be kept out of the light. Given the capacity to make the nonvisible understandable and manageable, most artistic practices, projects and exhibitions which exploit the power of data are indeed directed at activist ends. They are artfully designed to counter dominant narratives. Conscious of the power of art to produce "affect", that is, to move the audience emotionally by altering their perception of the events, and the potential of activism to challenge power relations, thus to create an "effect" (Duncombe, 2016, p.440), many art practitioners combine appealing visualizations and political messages by experimenting with the possibilities offered by new digital technologies. An example of this digital activism is given by the Forensic Oceanography, a platform created by the Centre for Research Architecture at Goldsmiths (London, UK) to investigate the main causes of migratory casualties in the Mediterranean Sea. For Manifesta, they featured at the Palazzo Forcella De Seta in Palermo a trilogy of work called "Liquid Violence". One of them, "Death by Rescue" (2016, Figure 10), consists of a monitor based on the floor that reconstructs those shipwrecks which have been purposely left uncharted by the European authorities.

Making use of satellite images, radar, optical sensors, GPS and reconstructing the testimonies of the actors moving on the sea, the collection created an aesthetically refined cartographic documentary. In this new event of seeing, the viewer faces a floating mapping architecture which, on the one hand reproduces the motion and voluminosity of the sea, while, on the other hand, transforms the water into a digitized mass of information. In this way the altered aesthetic of the Mediterranean Sea and its shifting from a liquid and a fathomless body of water to a militarized cartography of wet flesh is visually staged.



Figure 8. Floating data/Walking, 2012-2014, Laurie Frick. Source: http://www.lauriefrick.com/walking/.

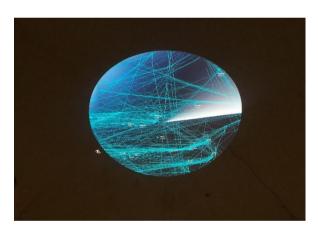


Figure 9. Connected by Air, 2018, Richard Vijen. Source: Photo of the Author. Courtesy of Manifesta.

7. Conclusion

Making order amidst the different understandings of maps and mapping in artistic practices is a difficult task, perhaps an impossible one. In other words, when we enter the realm of contemporary art a linear discourse about the multifarious conditions and codes through which maps are seen and sensed cannot be afforded. The growth and pervasiveness of the map trope provide concurrently heterogeneity and homologation. Artistic works may advance by imitating, experimenting or contesting what other artists did and do so that, playing the part of the art historian,

we should contend that those cartographies are not even so "original" because they speak to their beaten art traditions. But adopting the geographer's viewpoint, the map consumption in art may raise a different awareness. Art may break conventions of cartography, challenging the audience to think maps, and the phenomena they are entangled with, in new and unconventional ways; or it might be the case that, even in the artistic use of map-making, standards and conventions of maps are replicated. This more often means that the examination of creative mapping may restate what we commonly think about maps, without necessarily pointing to new pathways of investigation. To be clear indeed, we should not forcefully decant artful mapping as a better way of thinking and engaging with cartography. If always in search of new and creative ways of mapping otherwise the world we inhabit and study, the "undisciplined" geographer might be disturbed by this gloomy consideration. Yet it is precisely the extended interest posed by artists, graphic designers and activists in cartography that should reassure geographers on the fact that cartographic imageries and practices have still something to say and spur on in our society. And, even if maps might be appreciated "as they are", perhaps avoiding the danger of a progressive tale, there is always more space we need to create to better think and understand what it is that they are precisely doing in our world.



Figure 10. Death By Rescue, 2016, Forensic Oceanography (Lorenzo Pezzani and Charles Heller). Source: Photo of the Author. Courtesy of Manifesta.

In its ups and downs, pro and cons, the confrontation with mapping through art looks unavoidable and fruitful for geographers. It is a stratagem to put geography in the position of negotiating its relations with the mapping of the world, and, in the process, to articulate what is singular (as an inheritance of continuous theoretical fertilization and exchange) to its own capacities to analyze such events. For their part, artistic maps and mapping performances offer powerful visions that not only make matter intelligible but also render many abstract conceptualizations tangible.

Depending on the context, such imageries can be investigated by geographers and cartographers to critically deconstruct the ideological and political implications that some maps possess; however, art maps can also introduce reflections concerning materials and materiality, as well as sensoriality, relationality, affectivity, processuality that equally inform the production and consumption of any map. In addition, through the contamination and dialogues with artistic practices and languages (Hawkins, 2011), geographers might be more tempted to weave creative mapping methods into their research and teaching, so that art, rather than being treated as a source of study, becomes also the method through which the research takes shape (Lo Presti, 2018).

For those reasons, extroverting cartography becomes a useful posture of research. Not only does it foster the shedding of light on the different understandings of mapping and maps that can emerge from the encounter with art theories and aesthetic ambiances but also the consideration, in the process of discovery, of the advantage that a geographical analysis, and its attunement to space, offers to artistic practices.

Under such circumstances, we may conclude by considering the two movements of the geographical gaze, that is, the reflective stance and the look geared toward the outside, as not mutually exclusive. It is thanks to this new dual angle that we can better understand that the geographical works on the visual consequently become visual works on geography. After all, moving on the blurred line or in-between different fields of knowledge is the ideal condition to deconstruct, crumble and rebuild our languages, hopefully with new insights, thematic

profundity and research practices.

Acknowledgements

The Author thanks Edoardo Boria and Tania Rossetto for their comments and useful suggestions on an earlier draft of this paper.

References

- 1. Alpers S., *The art of describing: Dutch art in the seventeenth century*, Chicago, University of Chicago Press, 1983.
- 2. Bal M., "Visual essentialism and the object of visual culture", *Journal of Visual Culture*, 2, 1, 2003, pp. 5-32.
- 3. Bontems V., Petit P. and Stiegler B., Economie de l'hypermatériel et psychopouvoir (entretiens avec Philippe Petit et Vincent Bontems), Paris, Mille et unenuits, 2008.
- 4. Bruno G., Atlas of emotion: journeys in art, architecture, and film, New York, Verso Books, 2002.
- 5. Buci-Glucksmann C., *L'œil cartographique de l'art*, Paris, Galilée. 1996.
- 6. Butler T., "Memoryscape: How audio walks can deepen our sense of place by integrating art, oral history and cultural geography", *Geography Compass*, 1, 3, 2007, pp. 360-372
- Canali L., "Come nasce 'Il filo del tempo 1', Limes online, 2016, http://www.limesonline.com/rubrica/fusioni.
- 8. Careri F., *Walkscapes: camminare come pratica estetica*, Turin, Einaudi, 2006.
- 9. Castro T., La pensée cartographique des images: cinéma et culture visuelle, Paris, Aléas, 2011.
- 10. Cosgrove D., "Art and mapping: an introduction", *Cartographic perspectives*, 53, 2006, pp. 4-5.
- 11. Crampton J.W., *Mapping: A Critical Introduction to Cartography and GIS*. Malden, Mass, Wiley-Blackwell, 2010.
- 12. Danto C.A., *After the End of Art: Contemporary Art and the Pale of History*, New Jersey, Princeton University Press, 1998.
- 13. Didi-Huberman G., Atlas ou le gai savoir

- *inquiet. L'OEil de l'histoire 3*, Paris, Les Editions de Minuit, 2011.
- 14. D'Ignazio C., "Art and Cartography", in *International Encyclopedia of Human Geography*, Amsterdam, Elsevier, 2009, pp.190–206.
- 15. Duncombe S., "Affect and Effect: Artful protest and political impact", in Nielsen K. E. et al. (Eds.), *The Democratic Public Sphere*, Aarhus, Aarhus University Press, 2016, pp. 433-452.
- 16. du Preez A., "(Im)Materiality: on the matter of art", *Image & Text: a Journal for Design*, 14, 2008, pp. 30-41.
- 17. Farinelli F., *La crisi della ragione carto-grafica*, Turin, Einaudi, 2009.
- 18. Field K., "Art in C'art'ography", *The Cartographic Journal*, 46, 4, 2009, pp. 287-287.
- 19. Foschi G., "Sentire sottopelle la voce della terra. Intervista con Dacia Manto", La Stampa, February 23, 2014: http://www.lastampa.it/2014/02/23/blogs/culturanatura/sentire-sottopelle-la-voce-della-terra-intervista-con-dacia-manto-u1bEAd6HIewsvj LsmndoAL/pagina.html.
- 20. Frick L., "Floating Data", http://www.lauriefrick.com/floating-data/.
- Gray L., "No Construction without Destruction: Ceramics, Sculpture and Iconoclasm" in Walden J. (Ed.), Art and Destruction, Newcastle upon Tyne, Cambridge Scholars Publishing, 2013, pp. 9-34.
- 22. Harmon K.A., You are here: personal geographies and other maps of the imagination, Hudson, New York, Princeton Architectural Press, 2004.
- 23. Harmon K.A., *Map As Art, The: Contemporary Artists Explore Cartography*, Hudson, New York, Princeton Architectural Press, 2009.
- 24. Hawkins H., "Dialogues and doings: sketching the relationships between geography and art", *Geography Compass*, 5, 7, 2011, pp. 464-478.
- 25. Hind S., Perkins C., Gekker A., Evans D., Lammes S. and Wilmott C., *Time for mapping: Cartographic temporalities*, Manchester, Manchester University Press, 2018.
- 26. Holly M.A., "Interview with Micheal Ann Holly", in Dikovitskaya M. (Ed.), *Visual*

- Culture: The Study of the Visual After the Cultural Turn, Cambridge (MA), The MIT Press, 2005, pp. 193-202.
- 27. Kozloff J., "Biography", 2017, http://www.joycekozloff.net/biography/.
- 28. Kurgan L., *Close up at distance: mapping, technology and politics*, Cambridge (MA), The MIT Press, 2013.
- 29. Lo Presti L., "Maps In/Out of Place. Charting alternative ways of looking and experimenting with cartography and GIS", *Journal of Research and Didactics in Geography (J-READING)*, 1, 7, 2018, pp. 105-119.
- 30. Massey D., For space, London, Sage, 2005.
- 31. Mattern S., *Deep Mapping the Media City*, Minneapolis, The University of Minnesota Press, 2015.
- 32. Norment C., *In the Memory of the Map: A Cartographic Memoir*, Iowa, University of Iowa Press, 2012.
- 33. O'Rourke K., *Walking and mapping: Artists as cartographers*, Cambridge (MA), The MIT Press, 2013.
- 34. Panneels I., "Mapping in Art", in Kent. A.J and Vujakovic. P (Eds.), *The Routledge Handbook of Mapping and Cartography*, Abingdon, Routledge, 2018, pp. 517-552.
- 35. Pinder D., "Arts of urban exploration", *Cultural geographies*, 12, 4, 2005, pp. 383-411.
- 36. Rambelli F. and Reinders E., *Buddhism and Iconoclasm in East Asia: A History*, London and New York, Bloomsbury Academic, 2012.
- 37. Rogoff I., *Terra infirma: Geography'svisual culture*, Abingdon and New York, Routledge, 2000.
- 38. Rossetto T., "Luigi Ghirri's Cartographic Portrayals: A Review through Map Theory", in Spunta M. and Benci J. (Eds.), *Luigi Ghirri and the Photography of Place: Interdisciplinary Perspectives*, Oxford, Peter Lang, 2017, pp. 121-142.
- 39. Rossetto T., "The Skin of the Map: Viewing Cartography through Tactile Empathy", *Environment and Planning D: Society and Space*, (online first) 2018.
- 40. Sturken M. and Cartwright L., *Practices of Looking: An Introduction to Visual Culture*, Oxford, Oxford University Press, 2001.

41. Thompson N., Kastner J. and Paglen T., *Experimental geography*, Brooklyn, New York, Melville House, 2009.

- 42. Tolia-Kelly D.P., "The geographies of cultural geography II. Visual culture", *Progress in Human Geography*, 36, 1, 2012, pp. 135-142.
- 43. Verhoeff N., *Mobile Screens: The Visual Regime of Navigation*, Amsterdam, Amsterdam University Press, 2012.
- 44. Warf B. and Arias S. (Eds.), The Spatial

- Turn: Interdisciplinary Perspectives, Abingdon, New York, Routledge, 2009.
- 45. Watson R., "Mapping and contemporary art", *The Cartographic Journal*, 46, 4, 2009, pp. 293-307.
- 46. Weintraub L., *Making Contemporary Art: How Today's Artists Think and Work,* London, Thames & Hudson, 2003.
- 47. Wood D., *Rethinking the Power of Maps*, New York, The Guilford Press, 2010.