Clashing Cartographies, Migrating Maps: Mapping and the Politics of Mobility at the External Borders of E.U. rope

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Abstract

The generative power of mapping speaks to the material effects produced by maps and their capacity to order particular social and spatial relations. By focusing on the role that maps and mapping practices play within the politics of migration - the contentious field of actions and relations which determines who can move and in what condition –, we show how cartography is in fact used both as a practice for the control and government of mobility as well as a tool for advocating, facilitating and even embodying, border crossing. We make this point by engaging two stories related to the mapping EU’s external borders in which we have been directly involved as researchers and activists: the first one concerning the mapping of migrants’ routes, the second looking instead at the surveillance of maritime borders. In both cases, we point to an on-going “clash of cartographies” in the current flurry of charting borders and flows, showing how cartography works on the ground for both the world of migration management and the struggles for free movement.

Keywords

Counter-mapping; EU borders; migration; routes, surveillance; activism

Because power, impotence, and resistance take place in space and assume specific forms within it, maps can lend a spatial perspective to political analysis.  
- An Architektur

Even though the map is not the territory, to make maps is to organize oneself, to generate new connections and to be able to transform the material and immaterial conditions in which we find ourselves immersed. It isn’t the territory but it definitely produces territory.  
- Cartografias Tacticas

We engage in mapping in order to render alternative images of spatial and social relations; destabilize centered and exclusionary representations and construct unorthodox imaginaries and practices of collective struggle.  
-Counter Cartographies Collective 3.Cs.
It is time to draw new maps, maps of resistance that can be used to attack the visible and invisible fences and walls, to tear them down or sail around them quietly, to hollow them out and to undermine them.

- NoLager

Introduction

Maps, migration, movements...these keywords speak of who we are and what this paper is about. The four authors have been engaging current shifts in migration management through active participation, both scholarly and on the ground, in different political projects against current EU border policy. While Maribel Casas-Cortes and Sebastian Cobarrubias were based in Spain conducting research on EU Border Externalization and participating in the activities led by the Sin Papeles in Zaragoza and no borders campaigns, Charles Heller and Lorenzo Pezzani were located between London, Geneva and Tunis, leading their research project Forensic Oceanography on the conditions leading to the deaths of migrants and the violations of their rights at the maritime frontier of the EU and co-developing the WatchTheMed platform.

After sharing our respective projects in a NoBorders Conference held in London in February 2012, we have continued a peer relationship of exchanging findings and projects lying at the juncture of the politics of mapping and that of migration. In this article, we bring our respective projects into a more sustained dialogue to probe the power of maps when dealing with human mobility. In that vein, we argue that mapping practices not only represent migration flows, but play a key role within both the advocacy for and enactment of freedom of movement and its denial through practices of control. This argument is elaborated through two different episodes where maps acted in conflicting ways, showing how actual maps and mapping practices circulate between both sides of this spectrum: from border control to practices that challenge them. The first part of our title “Clashing Cartographies” captures the terrain of struggle made out of mapping practices, of constructing different spatial knowledges of and about the multiple realities of migration. “Migrating Maps” in turn conveys our attention to the ways mapping practices and maps as objects are used, re-used, tinkered with, appropriated and re-appropriated again and again to do work for different ‘sides’ of this contingent struggle over mobility. We explore these ideas through a series of explorations of the construction, politicization, uses and cooptation of migration maps – including powerful institutional maps and equally powerful, if lesser-known maps by people documenting their own crossings, and by advocates for freedom of movement.

The first combat of cartographies focuses on three conflicting mappings about migrants’ routes – one by migrants themselves, who use maps to enable their unauthorised movement across borders; a second by an international organization that upholds the current migration/border regime, the International Centre for
Migration Policy Development (ICMPD), which uses mapping to enable states to control migrants’ movement; a third in which migrants “look back” at the ICMPD’s map by re-inscribing collectively their own migratory experience and trajectories onto it. The second clashing of cartographies is about maritime surveillance. On the one hand we document the practice of live mapping in maritime surveillance rooms such as those of Eurosur – the European Border Surveillance System, and on the other we point to the counter surveillance practice operated by activists and researchers, which aims to document violations at the maritime borders of the EU. We argue that these different mapping practices play a key role in the current recasting of borders and their enforcement, migration routes and hubs, in the context of the contested circulation between Africa and Europe. These mapping stories are framed by introductory notes on cartographic theory to point to the role of maps within the politics of migration, and a conclusion in which we reflect on the politics of research and knowledge production and point towards a further engagement with this rich spatial thinking about spaces of circulation.

The politics of mobility and control at the external borders of the EU as a problem of mapping

In recent years, critical studies of cartography have pointed out how mapping, far from a passive representation of the world, actively contributes to producing new ways of seeing and being, drawing lines that inscribe a difference, create an identity, and form a boundary. In this sense, by producing a borderline that ‘geo-codes’ social and natural worlds (Pickles 2004; Olsson 2007), mapping precedes the territory (Winichakul 1998). The realization that cartography constitutes a process of world-making in its own right has historically –and currently– provided to the powers-that-be a use of maps that can literally re-inscribe divisions in the territory and order the social (Harley 1989). Modern cartography has for example been fundamental in establishing and conferring legitimacy to the colonial division of the world, coupling the imaginary and practice of geopolitical borders to that of maps.

Nonetheless, the ability of mapping to intervene in a given territory is not one-sided, and one should always bear in mind the ambivalent politics of mapping and its multiple, at times opposed, methods and purposes. Somewhere else, some of us have outlined how maps work in many different ways according to the perspective taken, the coding they undergo, and uses to which they are put, and – particularly – by whom they are produced and for what purposes (Pickles, Cobarrubias and Casas 2013). In recent years, a variety of actors coming from movements of social justice have also re-appropriated the tool of mapping for their own goals (Holmes 2007; Walters 2008; Cobarrubias 2009; Mason-Deese and Dalton 2012; Stallman 2012).

The role that mapping plays in relation to migration and the politics of mobility at the external borders of the EU is a particularly telling example of the
generative power of mapping in terms of producing certain social and spatial relations, that is, real effects in the world. In the case of the EU border, cartography is in fact used both as a practice for the control and government of mobility as well as a tool for the defense, facilitation and embodiment of border crossing. The latter maps are used to advocate for and enact, in the face of legal denial, what movements and researchers call freedom of movement (Fadaiat 2006; Pecoud and Guchteneire 2009), or what in legal terms had been historically coined as Ius Migrandi, the “right to migrate” (Chueca 2007; 2008).

In this article, we wish to focus on the role that maps and mapping practices play within the politics of migrations – the contentious fields of actions and relations which determine who can move and in what condition – both in the service of the current border regime and to counter governmental practices of control.

**Mapping as intervention: a clash of cartography**

Since the unification of the EU and the emergence of a space of free(er) circulation within its boundaries in the mid-nineties for citizens of EU member states, the external borders of the European Union have been a laboratory in which new forms of sovereign and supranational government have been tested, forged and implemented to regulate the movement of non-EU citizens across them. In particular, a higher degree of freedom within the EU has been predicated on the policing of the movements of unwanted migrants from the Global South into EU territory. However, while the EU’s exclusionary policies is founded on the imperative of “defending” EU territory (and within it individual member states) against the populations defined as the EU’s unwanted outsiders, EU agencies implementing the EU’s policies of control have increasingly adopted a spatial imaginary that is not limited by boundaries, whether of EU member states or the EU as a whole. The focus is not at the point of border passage but follows the movement itself across borders. The space these agencies consider is increasingly a space where both national boundaries and the division between land and sea fade into the background and what is brought to the fore rather is migrants’ transnational movement across different geographical and political spaces, which these agencies seek to control. This shift is exemplified by border control terminologies such as “Routes Management” mobilised by the ICMPD in particular which revolves around the charting of clandestine migrant’s transnational itineraries from their countries of origin to and across the EU’s territory, or that of “Integrated Border Management” that is central to Frontex’s implementation of its mission to manage the EU’s borders and which involves operating before, at and after the border.  

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2 We use here the notion of “clandestine” in its etymological meaning of “hidden”.
3 The concept of Integrated Border Management was first defined by the EU Council in the “Council Conclusions on Integrated Border Management” following the 2768th JUSTICE and
we will argue in more detail below, cartography has played a key role in this new spatial imaginary and participated very concretely in the governmentality of migration in the extended, flexible and externalized borderlands of the EU. Projecting data that chart and quantify migrants’ movements at different nodes and points of passage has been crucial in the attempt to control their mobility. Similarly, surveillance systems monitoring the complex maritime jurisdictions at the borders of the EU are operationalized through various mapping interfaces, which are an integral part of the practice of detection and interception of illegalized migrants.

These different mapping practices and regimes of visibility through which border agencies have been capturing migrations are being highly contested by a set of diverse mapping practices conceived as tools for understanding, navigating and undermining the changing territory of the EU border. In this sense, certain counter-cartographies and movement mapping practices become a means to articulate new ways of inhabiting and subverting the border, directly intervening in the production of new spatial architectures (Casas and Cobarrubias 2007; Walters 2008). In recent years, there have been several maps that have critically analyzed, denounced and destabilized the current border regime, thereby attempting to recreate a different EU migration regime. For instance, Anarchitektur’s charts of the long and confusing procedures of deportation serve as navigational tools guiding the reader through the bureaucratic steps and many places to transit-through during a deportation process; others, such as Hackitectura’s reproduction of the Strait of Gibraltar, rather than re-inscribing a division of us/them (Europe vs. Africa), suggest new relations between the two shores that aid in reconceiving and recreating the border territory as a space of dense flows, facilitating connections. The MigMap series provide a non-static and dizzying understanding of the border regime matrix, destabilizing the official (and rather straightforward) discourse of EU migration policies. Finally, the border maps by Le Monde Diplomatique and the annual migration Atlas by Migreurope act as a mechanism of denunciation, deploying a critical visualization of the human rights violations of current

HOME AFFAIRS Council meeting Brussels, 4-5 December 2006. “Integrated border management is a concept consisting of the following dimensions:
• Border control (checks and surveillance) as defined in the Schengen Borders Code, including relevant risk analysis and crime intelligence
• Detection and investigation of cross border crime in coordination with all competent law enforcement authorities
• The four-tier access control model (measures in third countries, cooperation with neighbouring countries, border control, control measures within the area of free movement, including return)
• Inter-agency cooperation for border management (border guards, customs, police, national security and other relevant authorities) and international cooperation
• Coordination and coherence of the activities of Member States and Institutions and other bodies of the Community and the Union.”
migration policies (number of deaths at the border; number and location of migrant detention camps, etc.).

Figure 1. Hackitectura: Cartografía del Estrecho

The rise of these engaged and activist mapping practices contesting the more official cartographies of the EU and its border guard agencies, resituates mainstream debates and practices on migration, establishing competing visions and enactments of the border. What we are witnessing might be captured with the notion of “combat of cartographies” (Cobarrubias 2009, see also Holmes 2004) where the inertia to re-underline the b/order on the one hand and the need to delete barriers and redraw new lines of flow on the other hand, continuously clash.

Entering different frames, moving across fora: the migration of maps

These conflicting mapping practices, however, are not hermetically sealed from one another since they often rely on some of the same epistemologies, technical tools and the very maps they produce may “migrate” between different, and sometimes opposed, fields. In the process, the use their collective authors had initially intended is frequently reverted, pointing to the politics that emerges in the circulation and use of knowledge and representations, rather than what is contained in them. An identical map may participate in the shaping of radically opposed effects depending on the institutional context and discursive frame it is inscribed in. As such, part of the “combat” of maps concerns the reappropriation of existing maps and the subversion of their initial function. However, this circulation is not without risk for either “camp”, since even once re-inscribed within a different set
of discourses and practices, part of the initial power relations and epistemologies implicit in a maps’ production may persist. As such, a critical mapping practice demands a thorough understanding of the web of economic, scientific and political relations in which these maps are embedded and which shape both their potential usage and the epistemological frame they impose on the world. Only then is it possible to assess to what degree they may be subverted.

At stake in the tension between the clashing goals and effects of these contested maps is the production and instantiation of borders. How and what are the possibilities to re-inscribe or subvert borders through mapping practices? What if the borders are not in their usual location but have moved beyond national territorial boundaries? How would cartographies and counter-cartographies of externalized border practices look like when the actors operating within the border regime are not just the national surveillance agencies and migrants but a large array of transnational agents? We will probe these questions by discussing two “clashing/migrating” maps stories that emerge from our respective current research and mapping projects dealing with border externalization. While the first combat of cartographies deals with two different representations of migrants’ routes with diametrically opposite goals (finding one’s way vs. controlling journeys from point of origin); the second one engages the question of maritime surveillance, again with two very contrasting objectives (advocacy of migrants’ rights vs. stopping migrants on boats), although this time, with very similar cartographic techniques. Despite the distinctive graphic displays and immediate purposes of each set of maps, thinking these two examples of conflicting mappings together, helps us to better understand the role of cartography in this controversial terrain of managing human mobility in the Mediterranean and beyond.

From Embodied Routes to Routes Management

*Migrant’s desert map – collective knowledge of border crossing*

In 2005, during a field trip in Morocco, one of us was handed a CD containing photographs of captured migrants near Oujda, a border city with Algeria where many Sub-Saharan migrants enter the country – or are expelled from it. The collection of images further included a map of the Sahara and North Africa (figure 1), found in one of the migrant’s pockets. Hand drawn on a paper with a black pencil, it is composed of dots representing cities, connected by lines. With no clear directionality, this map does not display any arrows. Origin and final destination remain unknown, rather what seems to be traced is a series of possible paths (full lines) – the common routes taken by many sub-Saharan migrants – super-imposed on four nation-states territories (interrupted lines) that melt into a silent background. Not an individual trajectory, the map rather displays the accumulation of knowledge through several rounds of migrants’ efforts to move across different countries and eventually reach the other side of the Mediterranean. More than the
border-crossing point, what matters in this map is the very path that allows one to get to the desired destination, the multiple itineraries that will enable or not a migrant’s journey.

![Map of cities, routes and state borders in the Sahara and Maghreb](image)

Figure 2: A migrant’s hand drawn map of cities, routes and state borders in the Sahara and Maghreb. Still from Crossroads at the Edge of Worlds, Charles Heller, 2006.

This fragile map is both product and expression of the knowledge of circulation and border crossing that is progressively generated by migrants’ networks as tools for navigation. As Mehdi Alioua writes, the social network that is progressively constituted through the experience of migration “is what allows them to make the link between the stages, obtaining information about the spaces they intend to traverse and the ways to enter into contact with the collectives there who might be of help to them”. “Knowing how to cross borders”, he continues, “is a know-how that is built up gradually and tried out collectively at the different stages of the trip”(Alioua & Heller 2013). The knowledge of the border collectively produced and shared by migrants, forms a “mobile commons” that is central to their capacity to move and undermines the exclusionary logic of the border regime (Papadopoulos & Tsianos 2013).

This map, as the knowledge that it expresses and contributes to sharing, might be seen as the product of a “nomadic science”, following Deleuze and Guattari:

A distinction must be made between two types of science [royal and nomadic], or scientific procedures: one consists in ‘reproducing,’ the
other in ‘following.’ The first involves reproduction, iteration and reiteration; the other, involving iteration, is the sum of the itinerant, ambulant sciences. [...] With the legal [royal-reproducing] model, one is constantly reterritorializing around a point of view, on a domain, according to a set of constant relations; but with the ambulant [nomadic-following] model, the process of deterritorialization constitutes and extends the territory itself (1987: 372, our italics).

In effect, the space charted on this map does not pre-exist or represent circulation. This hand-drawn map does not reiterate and reproduce a set of constant relations, such as a clear-cut route to follow, straightforward directionality or an easy distinction between the border of one country and another. Rather the map comes into being through collective circulation within a space. Fixed state boundaries are secondary to the open space of circulation thus charted. This is an open map — had its drawer not been arrested, he or she might have added on to it many further points and lines. Its use by others could also result in many different stopping points or extensions of itineraries, in sense figuring the very “itineration” that Deleuze and Guattari speak of. However, while the concept of “nomadic science” is frequently laden with positive normative content, its clear-cut opposition to the “royal science” seems misleading. For migrants have no longer the monopoly over such a deterritorialised geographic imagination. As the I-map project described below exemplifies, states and intergovernmental agencies too have increasingly done away with rigid territorial thinking and instead perceive a continuous space traversed by migrants’ routes.

The ICMPD’s I-map: Interactive cartographies to govern transnational migrants’ itineraries

Those very same migrants’ itineraries have become the latest strategy of the EU border and migration control agencies, under the rubric of “border externalization policies” 4 and a recent approach called Migration Routes Management. This is aimed at detecting and managing the origin and spaces of transit of migrants. This displacement from targeting the actual crossing of a “border” in favor of the very beginning and actual itineraries of a migrant journey, re-orient border management away from a logic of line-defense to the control of nodes along an itinerary. This “migration routes” strategy is graphically captured by a cartographic initiative called the I-Map project born out of an

4 The EU has been developing border externalization policies since the 1990’s. Involving the cooperation of non-European countries, these practices promote control over movement beyond conventional national borders. These policies are usually carried out through: a) the outsourcing of surveillance to the national authorities of other states and/or b) the [consented] direct involvement /intervention of border authorities in third countries’ sovereign territories. The externalizing state operates jointly or independently in third states’ maritime and in-land territories with the goal of controlling migrants’ flows.
intergovernmental process called the *Mediterranean Transit Migration Dialogue*, promoted by the International Centre for Migration Policy Development, and in collaboration with Frontex and Europol. The ICMPD, the main coordinator of the I-map project, was founded in Vienna in 1993 to provide advice, develop policy, train state agents and execute projects on migration and asylum issues (see Hess and Kasparek 2010; Hess 2010). The ICMPD was one of the earliest institutions that proposed cooperation on border management between EU and non-EU countries\(^\text{5}\) and one of the key “implementation partners” of the EU in its border work with third countries, advising the European Commission, Council and various member states.

Almost like a digital version of the migrant’s desert map, the I-Map project is an interactive cartography that traces out multiple and overlapping migration routes. Initially focused on the border zones of Europe and Northern Africa, I-map is now expanding to wider regions of Africa, the Middle East, and Eurasia. The main impulse behind I-Map is to provide an informational and strategic response to the increasingly apparent movement of the border south and eastward, “delocalizing” from any one border point or line to a series of moving itineraries or “routes” (Bensaad 2004). I-Map was designed to develop a new sensibility among border and migration management agencies of the complexities of migrant flows. As an official from the EuropeAid funding office stated: “[I-Map] provides a tool for partner countries to exchange information, in this way a new vision of the migration question [emerges] that allows the border to be seen beyond a national frame or a sender/receiver frame” (EuropeAid interview, February 2011). The I-Map project advanced a new cartographic thinking of the border, based on controlling flows rather than (or in addition to) hardening lines.\(^\text{6}\)

I-Map attempts to follow the evolution of trans-Saharan and trans-Mediterranean migration routes from the early 2000’s to the present, including graphs of apprehended migrants and icons symbolizing bilateral or multilateral operations on migration management and interception. As one of the coordinators of the I-Map project at ICMPD has explained: “The animation in I-Map shows how these routes shift according to big political events or bi-lateral cooperation,” (ICMPD interview, Vienna, September 2011). I-Map is interactive in the sense that it is regularly updated and adjusted to the complex and turbulent flows of migrations streams themselves. In this sense, it is a kind of adaptive modelling tool to track uncertainty. I-Map in this way, has aided “European migration policy […]

\(^5\) ICMPD’s work on border cooperation with non-EU countries originates primarily in the East-West “migration pressure” felt by the European Community/Union members in the post-Cold War era (Arbenz 2009: 2). As one of the founders of ICMPD stated when reflecting upon the early 1990’s: “We in Europe feared a mass invasion of Russians” (Widgren 2002 quoted in Hess 2010: 101).

\(^6\) I-Map visualizations are available at: http://www.imap-migration.org/index.php?id=470&L
[to learn] to act in a flexible, deterritorialized and networked way” (Hess 2010: 111; see also Tsianos 2008).

Figure 3: I-Map 2012 MTM map on Irregular and Mixed Migration Flows.

In our view, the development of the I-Map as a cartographic tool should be seen as parallel or even in response to the developments of counter-cartographic theory and practice. As critical migration scholar Sandro Mezzadra has noted:

The unpredictability and randomness of the movements of the migrations are explicitly assumed as central challenges by the cartographers of the ICMPD, who in turn are attempting to lay down new instruments of knowledge suited to the definition of a new model of migration governance, more accurately corresponding to the needs of the “flexible” labour market. And they seem to actively make use of the numerous experiments of “counter-cartography” born in the last few years from the confluence of political activism and artistic practices in anti-racist and migrant movements. (2009:1)\(^7\)

\(^7\) This is not only suggestive. There is at least one case where a participant observer in ICMPD, contributing to debates about I-Map within the organization, was also a member of a counter-
In this reading, the need to map a non-static “subject”, such as contemporary migration flows toward the EU, provoked a re-engagement with a *nomadic* cartographic practice that follows and opens up the possibility of new lines in a territory laminated by national territories. Still, the goal is to facilitate control and not movement, but it is done through an extremely flexible and attractive networked aesthetics. While I-Map goes beyond the re-iteration of national borders, it is sculpting the contours of a new surveillance apparatus across the multiplicity of itineraries.

Copies of the I-Map are posted in Frontex and the border guard offices of various state bodies. The I-Map has an important security focus, centered on stopping or dissuading irregular migration (interview ICMPD September 2011; interview ICMPD April 2012). It is used by member states, neighbouring states, and neighbours of neighbours to harmonize their migration routes management practices. Yet I-Map, as part of an emerging “transnational b/ordering regime”, operates by seeking not so much to ‘end’ irregular migration but to play a part in harnessing and channelling its turbulence (as we have argued elsewhere, see Casas et all. forthcoming). Building upon the theses of *Autonomy of Migration*, I-Map acts as an apparatus of capture of the excess of migration flows, in a sense fitting nicely with the move in official EU language from migratory ‘control’ to migration ‘management’ (see Hess 2008).

This logic of identifying, tracing and acting on fluid migratory routes has been exemplified off West Africa by operations such as HERA run by FRONTEX, as well as SEAHORSE and WEST SAHEL run by the Spanish Civil Guard. These operations are carried out by transnational border guard teams, including European and African security forces. The goal consists of tracking and intercepting migratory flows (supposedly directed toward the EU) in countries labelled as “transit”, far from the EU borderline. It is this West African area that has seen the spread of rapid controls on migrant transit in recent years, as is celebrated in the official data collected by the Spanish security forces. Their tables show how the numbers of crossing attempts decrease over the years in certain routes, especially in the case of the Canary Islands dropping from almost 32000 to 2000 interceptions, which was interpreted by the Ministry of Interior as meaning that people from West Africa were discouraged to take the Atlantic route by the prospects of being stopped and sent back to the coast. This data led to a Civil Guard officer to claim “the Atlantic route [toward the EU] is closed…it should no longer appear on I-Map” (interview Civil Guard February 2012).
I-Map is certainly a tool of policing and an emerging aspect of a broader apparatus of control, cooperating with interventions such as the Guardia Civil’s Seahorse Operation with the highly praised result of ‘cutting off a migratory route’. Nonetheless, I-Map’s rendering of the dynamic character of migration, foregrounds the necessity of thinking border spatiality on a variety of scales and spatial configurations. This complexity is also embraced by other “nomadic” mappings of itineraries and flows although performed by and with radically opposite actors and goals. Itineraries drawn and narrated in first person by migrants and support networks, identifying how and where border control work so as to support freedom of movement, as shown by this example (see below) of organized migrants looking back at the ICMPD map. The conflict around how to think and practice borders and migration is fought through maps that are an integral part of practices that either enable or constrain mobility and conjure radically different visions of the world.

**Itineraries Otherwise: Looking back at the I-map**

The complexity of migration and the tensions around the politics of mobility came to the surface when an image of I-Map was shared with members of an association of undocumented migrants in Zaragoza, Spain named *la Red Sin Fronteras de Aragon*. Two of us were researching the I-Map and ICMPD to understand its role in externalization. Simultaneously, we were active members of *La Red* in Zaragoza, formed both by local youth (mainly unemployed or with temporary contracts ready to eventually migrate themselves), and North-African and South-Saharan immigrants trying to make a living in Spain. Since the I-Map focuses on the very journeys that many in the Red have embarked upon, we called for a screening and a discussion around this map to see where it would take us. As part of this open-ended meeting, the ambiguities and contradictions invisibilized by I-map were made particularly clear in the first comments reacting to the I-Map:

“This map erases all the migration movements within African countries, it shows only directions towards Europe”;

“If they get to control those routes, lines are going to multiply somewhere else”;

“This looks like an attempt to do the impossible: control something in constant flux”;

“This map is scary and frustrating, it makes you feel you are under big brother’s eye precisely when they make you try to be unseen”;

“The impression is that the journey is made in a ‘once and for all’ mode —straight forward-, without taking into account all the shifts, waiting times, etc.”

“It is a *tabu map*: no mentioning of all the earned money, personal resources and blood that people leave in these itineraries….”
(Participants from the Red Sin Fronteras, Zaragoza, November 3rd, 2011).

Figure 4. First workshop of “Drawing our own Map of Routes” in November 2011, Centro Social Pantera Rosa, Zaragoza, Spain. Source and/or photographer: MCC & SC

The reaction to the I-Map was such that this particular collective began to embark on its own mapping process. As a response to the I-Map’s visual attempt to reduce complexity and define their lives, a collective decision was taken: to do “our own map of migration routes”. A series of bi-weekly workshops started in November 2011 with internal debates, which questioned assumptions about legality, migrant mobility and the permeability (or not) of borders. Our simultaneous role as members of the collective and post-doctoral researchers engaging the ICMPD gave an interesting opportunity to develop a feedback mechanism where members of la Red Sin Fronteras could inquire into the thoughts and behaviours of some of the same actors that were trying to analyse those non-EU migrants in the collective as ‘objects’. On different occasions, and when la Red’s weekly agendas permitted, we would bring in bits of our research we thought
were pertinent to the collective’s work. On this occasion, the reaction was such that a collective mapping project was born.

Though the mapping project had clearly political and research components, we are hesitant to categorize it as a form of participatory action research. In the case of la Red, the impulse for research came from inside the group, after being frustrated with the misrepresentation of their own migratory journeys. There was not a group of visiting experts proposing a study nor a clear demand. The tone from the beginning was to challenge the harmful representation of migration as a dangerous criminal activity that had to be tracked down with such (intended) cartographic ‘precision’. The response of “mapping on our own terms” emerged almost as an impulse of migrant pride, speaking out, or getting out of the closet; the closet in this case being clandestinity. The ‘migrant as expert’ on their own terrain of struggle resonates with debates of knowledge production among social movements (Escobar 1998; Choudry and Kapoor 2010). In this sense, remaking those routes required foregrounding the project on the feminist consciousness raising principle of taking experience as an epistemological basis (Haraway 1998; Malo 2004) and ultimately, feminist objectivity (Harding 1988). In this way, the map relied on personal accounts and personal drawings of itineraries, based on memories.

During the first workshop, the I-Map was projected onto paper taped on one of the walls of the Pantera Rossa Social Center. We then traced the continental contours using that ‘I-map base’ as a way of maintaining and deepening the visceral reaction that the I-map had initially produced in the collective. A series of icons and questions based on previous discussions were distributed to describe the itineraries taken by each member of the group. Further workshops and discussions allowed participants to share their story of the journey, through the drawing of the itinerary on that map, placing a series of icons along the route. The icons spoke about different modes of transport, time spent in each stop, levels of legality, forms of conviviality and support, and degrees of risk. This information, which puts migrants’ lived experience along their routes in the centre, does not appear in I-Map. See Figure 5.

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8 For example, when we reflect on how this reflexive research momentum unfolded, we noticed this experiment was not the traditional scenario of a Participatory Action Research project, where outside researchers in solidarity with a given population, put their research to the service of the group (Fals Borda 2006; Hall 2005). In such participatory and action oriented research there is usually a process to democratically articulate concrete goals, using objectivity to support people’s claims. In that scenario, the object/subject divide is rearticulated, giving voice to the object, although ultimately under a framework of scientific authority (Mountz et al 2008).
| _____tierra | ¿En que lugares has vivido? ¿Por qué via has viajado (tierra, aire o mar)? |
| _____aire | A quels endroits as tu vecu? Par quels moyens (terre, air, mer)? |
| ~~~mar | ¿En qué lugar/lugares dejaste mucho dinero? |
|          | Où est-ce que tu as laissé beaucoup d’argent? |
|          | ciudad detalles |
|          | ¿En qué lugar/lugares pasaste más tiempo del previsto? |
|          | Où est-ce que tu as passé plus de temps de ce que t’avais prévu? |
|          | ¿Qué lugar/lugares fue un “oasis”, un lugar de descanso, donde te sentías seguro? |
|          | À quel endroit te sentais-tu sure? |
|          | ¿Qué lugar/lugares fue como un desierto, duro y largo de atravesar? |
|          | Quelle partie de la route a été dure et longue comme un desert? |
|          | ¿En qué lugar/lugares sentiste peligro? Quien te puso en esa situación? |
|          | Où est-ce que tu t’est trouvé en danger? Qui t’as mis dans cette situation? |
|          | ¿Encontraste vallas o muros? |
|          | Est-ce que tu as trouvé des mures fermés? |
A final product was never achieved, nor necessarily desired. The mapping experiment provided a space out of the norm, an intimate collective parenthesis for sharing stories rarely listened to, or only shared as a story of “drama” or even “shame”. As these workshops progressed, the mapping became a way of situating intense personal narratives into a collective critique of borders. Conversations emerged not only about the institutions that made the map but also about implicit hierarchies of mobilities within La Red and how these affected a collective effort of struggle. This referred not only to the difference between “regular” and “irregular” but also different types of “irregularity” and “regularity” (i.e. who had access to a visa or someone else’s visa, those who did not, those who were legal but had lost rights in the context of the current economic crisis, and so forth). Implicit or undiscussed feelings of “guilt”, or assumptions of “heroic migrants” were brought into the open, explored and challenged. In a sense these internal hierarchies were understood as a result of the bordering being carried out. The mapping was an exploratory moment to identify and describe how those mechanisms of border
control and border management actually work on real bodies. The mapping process achieved a kind of research exercise of the border system from within, in first person, unfolding a powerful re-subjectification effect on the participants and a critique to current practices of transnational bordering.

Thus the mapping of routes plays a key role in the politics of migration. Migrants chart their own routes as they move, as a tool to navigate through space and evade the repression of states. States and international organizations in turn chart their turbulent movements so as to better control them. The mapping of routes across an open space affected by but not restricted to state boundaries is not in itself liberatory. But the maps so produced cannot be restricted to this single and repressive use. Subjected to the critical gaze of migrants, it becomes a tool to contest once again the denial of the right to mobility across boundaries and its multifarious consequences. In these three cases, there is a similarity in process. A mapping endeavour which deterritorializes the fixed boundaries of states and aids in producing new subjectivities: of migrants in movement and struggle; and of border agencies reimagining their spaces and spheres of “policy implementation”. Yet despite this similarity in process we can see a radical difference. On the one hand a mapping process that supports a politics of mobility control and management, the dizzy cartography of I-Map ultimately serving to solidify a new set of bordering processes. On the other hand, mapping processes that are oriented toward freedom of movement and the opening of itineraries and routes (both subjective and geographic at the same time).

Finally, the politics, process and ultimate goals of these three kinds of “routes maps” – the informal clandestine route, I-Map, “Our own Map”- are diametrically opposed. A similar simultaneous production of conflicting notions of migration will flourish in the following combat of cartographies when dealing with maritime surveillance.

From the promise of full spectrum visibility to a disobedient gaze

Monitoring the Pre-Frontier: Eurosur’s Situational Picture

The militarized border regime in the Mediterranean Sea is another emerging example of a highly cartographed/surveyed space. As we have already argued, monitoring, quantifying and mapping illegalised migration is central to the practice of border control. While part of this work occurs after the facts – as in Frontex’s maps which are a way of visualising past crossings to chart “risk analyses”, there is a highly technologized practice of live mapping of the border to the function of surveillance. Optical and thermal cameras, sea-, air- and land-borne radars, vessel tracking technologies and satellites constitute a vast and complex remote sensing apparatus that constantly beams electromagnetic waves in the attempt to detect vessels at sea and sort the “bad” traffic amidst large quantities of “good” mobilities. In this sense the liquid Mediterranean is doubled, supplemented by an
The current objective of different agencies aiming to govern the sea and the movements that cross it is to assemble these various technologies so as to achieve the most complete possible “integrated maritime picture”. This is both a technological and institutional challenge, since it requires the interoperability of agencies operating in different countries (both within and without the EU), spanning different fields of activity and using different technological platforms. In the field of migration, while this process has been ongoing since at least 10 years now, it is currently speeding up and taking a new consolidated form through Eurosur – the European Border Surveillance System.

Eurosur is an information collection and exchange system intended to provide precise “situational awareness” so that border guards can “detect, identify, track and intercept” irregular migrants. The system is intended to make it impossible for irregular migrants to enter EU territory undetected and, in theory, save their lives should they get in trouble whilst at sea. Formally launched in February 2008 by the EU Commission, the Eurosur initiative has a complex genealogy. One of its possible origins can be found in 2003, in the infamous Feasibility study on the control of the European Union’s maritime borders submitted to the EU Commission by CIVIPOL, a semi-public consulting company to the French Ministry of the Interior. The report argued that: “There is a growing need for surveillance of all kinds of vessels in European coastal waters [...] It would now be technically feasible to combine all the available data (all types of information picked up by every kind of fixed and mobile sensor) in a given area, in order to establish a centralised overview of the area.” It was proposed that such an assemblage be operated by linking up data provided by national centres in a “European Intelligence Centre.” The ensuing maritime picture would make it possible to carry out “classic tracking and interception operations” (CIVIPOL 2003). This initial idea of linking up sensors and national centres to produce an overall maritime picture was further developed and consolidated after 2005, following the creation of Frontex. In 2006, the agency led the BORTEC feasibility study to establish a “surveillance system covering the whole southern maritime border of the EU.” From report to feasibility study, from proposal to regulation, the Eurosur initiative progressively took shape, with the Eurosur Regulation adopted on 22 October 2013 and the formal beginning of operations on 2 December 2013.

According to its regulation adopted in October 2013 from which the following description and quotes are extracted,9 Eurosur links the national

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surveillance systems of EU Member States and neighbouring countries and provides additional high-tech sensors in order to increase the “situational awareness and improve the reaction capability of national authorities controlling the external borders of the EU Member States.” The stated aim is to prevent cross-border crime, reduce the number of irregular migrants entering the Schengen area undetected and reduce the deaths of migrants at sea. To this effect, Member States are obliged to designate a National Coordination Centre – there will be 24 in total – which will compile information on their external borders and transmit regular situational reports, known as “National Situational Pictures,” to other Member States and to Frontex. Frontex will then use this information to construct a “European Situational Picture” and a “Common Pre-Frontier Intelligence Picture” – the “Pre-Frontier” designating an expansive area that begins at the external borders of the EU but which has no external limits.

Central to Eurosur is thus the live map dubbed “situational picture”, i.e. “a graphical interface to present real-time data, information and intelligence received from different authorities, sensors, platforms and other sources, which is shared across communication and information channels with other authorities in order to achieve situational awareness and support the reaction capability along the external borders and the pre-frontier area”. This live map may be seen as similar to what Karin Knorr Cetina has called, with reference to financial markets, a “scopic system”: “When combined with a prefix, a scope (derived from the Greek scopein, “to see”) is an instrument for seeing or observing, as in periscope. (...) A scopic system is an arrangement of hardware, software, and human feeds that together function like a scope: like a mechanism of observation and projection (...)” (Knorr Cetina, 2009, p. 64). The maritime scopic system is increasingly mediated by the spatialising of the data on maps displayed on monitors, which allows border authorities to respond to the detected “threats” by deploying their assets or, as we will see, refraining from doing so. This sensing apparatus and the mapping interfaces that assembles it produce less a representation of illegalised migration than they are consubstantial of the border itself. For if the border only exists in its violation, the latter must first be detected either by human perception or its various technological extensions.
This networked knowledge and mapping practice has a deep aesthetic dimension in that its politics hinges on conditions of visibility and invisibility. Through this dispositif, border agencies attempt to shed light on practices of illegalized border crossings, while as we have argued above, migrants in turn do everything they can to move “under the radar”. This binary however does not account sufficiently for the complex and ambivalent nature of this field of (in)visibility. As we shall see, instead of designating two discrete and autonomous realms, visibility and invisibility should be understood here rather as a topological continuum. First, the maritime picture produced by the surveillance dispositif described above is far from producing a totalizing picture, since it runs up against the limits of the vast surface of the sea that must be monitored and the small size of boats usually used by migrants. Surveillance thus operates in a “patchy” way, focusing its attention on particular routes but leaving much maritime traffic uncharted. It is through these many visibility cracks and gaps that migrants may move. However, in trying to escape border control, migrants face a dilemma: moving undetected may also mean dying unnoticed at sea. In situations of distress, they may do everything they possibly can to be detected and on the contrary states and other actors at sea may selectively close their eyes on their distress – for

example if migrants are in another state’s Search and Rescue zone (SAR). Finally, light shed by border surveillance technologies focuses on the violation of the law performed by the unauthorized movement of migrants’ bodies across borders, but leaves in the darkness the political violence on which the border regime is founded in the first place as well as the legal violations it produces on a structural basis. It is precisely this “partition of the sensible” – to use Jacques Rancière’s terminology (Rancière, 2006) – which critical human rights activists have recently attempted to subvert, partly by using the same sensing and mapping tools as those of border controllers.

**WatchTheMed: Watching the Watchmen**

It is in the context of this critical understanding of the aesthetic dimension of the maritime border regime that in 2011 two of us initiated the Forensic Oceanography project. Since then, this project has critically investigated the militarized border regime in the Mediterranean Sea and the conditions that have caused over 20,000 registered deaths at the maritime borders of Europe over the last 20 years with the aim of supporting the struggle for migrants’ rights carried out by various groups through advocacy, litigations and activism of different kinds. The objective, then, has not only been to understand the contemporary forms taken by the government of migration across the sea and the role of surveillance within them, but to intervene within this field in the aim of contesting the migration regime and its deadly effects through our research. While we sought to position ourselves in opposition to the migration regime, we did this partly by appropriating some of the very remote sensing and mapping tools mobilised for surveillance, and shift their use from the detection of acts of unauthorised border crossing to that of documenting the violations of migrants’ rights that are the structural outcome of the migration regime and seeking accountability for them. Using surveillance technologies against the grain, we first investigated the so-called “left-to-die” boat case – an incident in which 63 migrants lost their lives while drifting for 14 days in the NATO maritime surveillance area imposed for the military intervention in Libya. Relying on the detailed testimonies of survivors, geo-referenced data, satellite imagery, and a model of the vessels drift path based on wind and current data, we documented the unfolding events and repeated contact with several actors

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11 See the “left to die boat” case below or a recent incident that has cost the lives of over 200 people: http://watchthemed.net/reports/view/32
12 “The notion of forensics mobilized in the title of the project does not allude only to the application of scientific techniques to a judicial context, as in the traditional definition of forensic science, but refers more widely to ‘the art of the forum’, understood here as “any space and assembly in which legal and political claims are presented and discussed. The project does not aim thus to operate only within narrowly defined legal arenas such as tribunals but rather to foster modes of political engagement that would operate across different spaces and media.” (Pezzani and Heller, 2013)
were reconstituted with precision. This reconstruction was in turn the basis for a number of legal complaints filed against states for failing to assist people in distress at sea which are still ongoing (Heller and Pezzani, 2014). In seizing upon the tools usually mobilised for surveillance, we thus redirected the “light” that they allow to shed on the maritime frontier from the acts of “clandestine” crossing back to the act of policing and the violations the latter produces. In this sense, we sought to exercise a “disobedient gaze”, one that reverses the partition of the sensible imposed on the maritime environment by the border regime and draws up the map of violence the governmentality of migration tries to keep in the shadows (Pezzani and Heller, 2013).

Based on the methodologies we developed in the production of the report on the “left-to-die” boat but involving a broader collaboration between activist groups, NGOs and researchers, we have participated in the launching of a wider mapping platform in 2012, “Watch the Med” (WTM, http://watchthemed.net/) as this initiative is called. WTM is an online mapping platform of the Mediterranean designed to monitor the activities of border controllers in this area and map with precision the violations of migrants’ rights at sea in the attempt to determine which authorities and actors at sea have responsibility for them. In doing so, WTM uses surveillance against the grain in several ways.

First, to reconstruct events concerning migrants at sea and the violation of their rights, WTM relies on remote sensing technologies such as satellite imagery, vessel tracking data and geolocalised data from satellite phones. However, these technologies are not used in the aim of detecting “threats”, as usually happens within the sensing and mapping dispositifs mentioned above, but the violations perpetrated through the practices that seek to govern mobility at sea. For the vast process of imaging and “dataization” of the maritime space to the effect of surveillance also constitutes a sort of digital archive which is partly accessible to the public and that can be interrogated and cross-examined as a witness. By interrogating survivors as well as “technical witnesses” and spatialising the data that emerges from these sources, WTM is able to monitor the situation at sea, asking some of the following questions: in which SAR zone was a vessel in distress and which state was responsible to operate rescue? Which vessels were in vicinity? If it was rescued, were the passengers brought to a territory in which they could apply for international protection or were they pushed-back? WTM then operates as an online and participative maritime control room, albeit with the opposite aims of border controllers. In addition to the repurposing of technologies usually used

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13 WTM’s network now includes: Afrique Europe Interact, Boats4People, Forschungsgesellschaft Flucht & Migration, Welcome to Europe. It was initially developed by Charles Heller and Lorenzo Pezzani in the frame of the Boats4People campaign. It has been supported by: Medico International, Pro Asyl, Stiftung:do, Forensic Architecture and GiSCorps.
for surveillance, WTM relies on a dense “human infrastructure” of activists, researchers, migrants and their families, who report incidents.\textsuperscript{14}

Second, WTM turns the knowledge generated through surveillance means into evidence of responsibility. For with the capacity to know what happens in the maritime environment that border agencies claim to have a complete picture of, comes a degree of responsibility for the deaths at sea. As such, by indicating the areas that are being monitored by different technologies, WTM indicates possible failures if an incident occurs within this perimeter – as is the case with the 3\textsuperscript{rd} of October 2013 wreck that cost the lives of over 360 people and that occurred less than 1km from the coast of Lampedusa, one of the most densely monitored locations in the Mediterranean (fig 7).\textsuperscript{15} To determine the extent of surveillance over a given area, WTM relies on, amongst others, existing maps made public by a surveillance industry that must always boast its technological capabilities. For example, the map of radar coverage of the Italian coast indicated in figure 8 has been used as the base for the radar coverage layer of WTM.

\textsuperscript{14} The reach of WTM’s “human infrastructure” has been recently boosted by the founding in October 2014 of a sister project, the Alarm Phone. The latter is an independent emergency phone hotline run by human rights activists, seeking to support migrants who find themselves in distress while crossing the EU’s maritime borders. For more information, see: http://alarmphone.org/en

\textsuperscript{15} The map indicates the location of the wreck as well as coastal radar coverage (orange), the patrol area of the Guardia di Finanza (black line), and the limits of the Italian Search and Rescue Area (red line).
Finally, WTM is weary of the totalizing claims of surveillance and counter-surveillance alike. The recent Lampedusa incident provides a case in point: while there have not been any indications to date that the boat was detected by the various layers of surveillance it passed through, this failure precisely points to the fallacy of the argument that more surveillance deployed in the frame of Eurosur will help save lives in the future.

The partly shared tools, epistemologies and actual maps that we saw circulating in our first “story”, are thus also at work here. Maps and mapping practices circulate and are repurposed to the opposite use than that intended by their initial authors. In confronting WTM and the maritime control rooms of border guards, we may ask who operates the “royal” and “nomadic” science we evoked above? Border operations are increasingly decoupled from the line delimiting state borders and operate in a fluid way, expanding and retracting from within and without the state’s borderline. This is particularly true in the frontier space of the sea. Here states extend their sovereign claims by operating police operations beyond the limits of their territory, but also retract themselves from their
obligations to operate rescue and disembarkment (Mann 2013). The maritime territory constitutes then a space of “unbundled sovereignty” in Saskia Sassen’s terms (2006), one in which sovereign rights and obligations are disaggregated from each other and extended across complex and variegated jurisdictional spaces. Facing these mobile and fleeting bordering practices – which are certainly no less violent for that – the aim of Forensic Oceanography and WTM has been to “reterritorialize” them, in the words of Deleuze and Guattari. We have sought to inscribe as precisely as possible events occurring across the liquid geography of the sea, locating them within specific jurisdictional zones and boundaries (such as SAR zones) so as to point to various responsibilities for them. While the fragmentation of juridical regimes at sea often allows for the evasion of responsibility, we have here sought to mobilize it strategically towards the multiplication of potentially liable actors and of forums where they could be judged and debated. In this sense, while defending the objective of freedom of movement as the only alternative to deaths and violations at sea, we have had to mobilise borders against themselves, thereby performing a kind of “strategic territorialism” – to paraphrase Gayatri Spivak’s “strategic essentialism” (Spivak, 1985). In other words, we have paradoxically needed to re-affirm the rigidity of borders and jurisdictional boundaries that states seek to evade in the aim of contesting the violence of borders and enabling the free movement of people across them.

Figure X: WTM Map of the 3rd of October 2013 wreck, less than 1km from Lampedusa island. http://watchthemed.net/reports/view/31.
Reflections on Research, Mapping and Migration

This paper starts by mentioning current shifts in migration management, and arguing that mapping practices not only represent migration and border control, but play a key role within both the defense and enactment of freedom of movement and its denial through practices of control. The two clashing/migrating map stories described show how actual maps and mapping circulate between both sides of this spectrum. Cartography as such, is used, re-used, tinkered with, appropriated and re-appropriated again and again to do work for different ‘sides’ of this contingent struggle. A “combat of cartographies” might capture that terrain of struggle made out of mapping, of constructing different spatial knowledges of and about the multiple realities of migration.

While the territorial imagination has long been associated with state control and the routes criss-crossing it with emancipatory practices, we showed that practices of control increasingly mobilize deterritorialised and mobile spatial imaginaries and practices – which are no less oppressive for that. Conversely, when bordering practices are increasingly mobile and disseminated, expanding as a function of specific interests but also retracting when trying to shed responsibility for violations the policing of mobility produces on a structural basis, attempting to re-territorialise practices of control – to pin them down to a given space, time and actor – may be a productive strategy.

Within this contentious field, counter-mapping practices do not only seek to provide another, different map of migration, simply re-appropriating state tools of representations and using them for different means. Rather, by looking at the mechanisms of border control and at the transformation of transnational space “in the light of the spatial disarray enacted by migrants”, counter-mapping practices refer here to “an analytical gesture which engages with the very limits of (political) representation at stake in the attempt to ‘map’ the spatial turbulence generated by migrants’ unexpected presence, or by their being out of place” (Tazzioli 2015: 3). The long tradition of counter-mapping teaches us how cartography goes beyond representation, and when practiced among movements, the practice of map-making facilitates forms of collective power. So when putting together a map, this very process can lead to well-founded forms of grassroots networking and self-organizing (see Stallman 2012). There are even specific forms of counter cartographies linked to more formal processes of activist research, when researchers themselves are also part of the very organizing process, what some have called militant mapping (Cobarrubias 2009) or when linked to the specific political tradition of autonomy, autonomous cartography (Dalton and Mason-Deese 2013). This might lead us to explore how politics is enacted through research practices that involve both a self-positioning within a given struggle and the collective development of counter-mapping for a given side.
In narrating both stories, neither migration nor the mapping thereof, were observed from a bird’s-eye view, or through the lens of a far away telescope that provides impeccable precision. Rather, we told these stories from our involvement in them. Militant research/investigation is precisely that kind of gaze from within and against, constituting a situated and antagonist mode of inquiry. Taking sides, we have attempted not to lose for that our capacity for critical reflection on the very practices we take part in. We have, in this sense, sought to practice a form of “critical proximity” that refuses the scientific imperative of disengagement to achieve the “critical distance” deemed necessary for thought. Our research is grounded in the Arendtian attempt to “think what we are doing” (Arendt 1958) but also turn thinking into a way of doing, blurring the very distinction between research and practice, embracing knowledge production as the situated and transformative act of being, doing and thinking along and within struggles for free movement for all.

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