Moving Bodies: Creative Infrastructures of Identification

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Abstract: This article empirically analyses how the unknown bodies of migrants who died in the attempt to reach Europe are managed and potentially identified. Shifting attention away from the border, the paper provides a new angle to the crisis unfolding in the Mediterranean, investigating the practices developed in order to know and attend to the dead migrant's body. More specifically, drawing from 6 months of ethnographic fieldwork conducted in Sicily in 2016 and 2017, the article presents an ethnographic account of the emergent Italian forensic infrastructure. It does so by looking at movement. The movement of bodies towards identification. The pursuit is informed by Science and Technology Studies (STS); the focus is on material practices aimed at the eventual identification of unknown bodies. Taking stock from recent debates in the anthropology of infrastructure in which scholars critique the idea that infrastructures are passive architectures comprising circulations, the paper proposes an alternative perspective on infrastructures, arguing that infrastructures are processes of constant and creative adjustment and that these ongoing changes are the effect of circulation.

Keywords: circulation; anthropology of infrastructure; identification; dead bodies; migration crisis

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I. Introduction

Se questi morti sono soltanto nostri, allora io voglio ricevere i telegrammi di condoglianze dopo ogni annegato che mi viene consegnato. Come se avesse la pelle bianca, come se fosse un figlio nostro. (Giusi Niccolini, Mayor of the Islands of Lampedusa and Linosa, "Appello all'Europa", 2012)





This piece is about infrastructures in the making. I'll give away the end at the very beginning (spoiler alert!). Contributing new threads to anthropological studies of infrastructure, the paper argues that infrastructures are processes of creative adjustment and that these ongoing changes are the effect of circulation. More specifically, foregrounding the circulation of bodies in the infrastructure whose purpose is identification, I show the infrastructure is enacted through the very movement of bodies and bodily material. By the end of this journey I hope that what movement *does* will become clear. But now let's start from the outset.

In summer 2016, at the beginning of my fieldwork, the word *infrastructure* was not part of my vocabulary. My object of research, I explained, are the procedures and activities involved when the dead body of a migrant is found, recovered, investigated, and buried. My focus is on the identification apparatus supporting the forensic and scientific practices mobilized to give a name to the unidentified migrants who died on their way to Europe. Such a cumbersome speech wasn't very helpful. I had to develop better communication strategies. I started using the term *forensic infrastructure*. It was all there, in two words: the kind of organization that must be in place to know and attend to the dead migrant's body.

The topic was indeed not popular. Amidst the putative "refugee crisis", whilst political (and academic) attention was on the European frontiers and border management regime, I studied an aspect of the phenomena that was largely overlooked: the management and identification of migrants deceased in the attempt to reach Europe. Engaging with the first qualitative study on the Italian forensic infrastructure, I investigated the initiatives taken to attend to and eventually identify the dead migrant's body. The aim was to uncover the trail followed by a body with no name. A *how* question triggered the research, and echoes in this article. What kind of path does the body of a dead migrant travel, and how does this route come about?

The pursuit is informed by Science and Technology Studies (STS); the focus is on the material practices aimed at the potential identification of unknown bodies. Attending to forensic work in practice, in fact, reveals the traits of motion, uncertainty and flux that most define and characterize the complex scientific endeavor of identifying a body without a name. Whereas on paper identification procedures follow a linear trajectory from the place where a dead body is found to its burial, on the ground, the supposedly fixed infrastructure loses its extraordinarily defined features, exposing a reality filled with ambivalence. In investigating the socio-technical landscape required to manage and potentially identify the bodies of dead migrants, this manuscript aims to take this very ambivalence on board, unravelling the movement of a deceased body through its identification route within the forensic infrastructure.

It is important to stress from the outset how the theoretical framework

of this paper challenges the rationalistic assumptions of the 1970s studies in which infrastructure was seen as a passive "substrate" and takes its cue from emerging and innovative models that highlight the relational nature of infrastructure, exploring its agentic and ontological potential (Star and Ruhleder 1996; Karasti et al. 2016; Jensen and Morita 2016). In fact this manuscript provides an empirical analysis on the emergence of infrastructure, answering the question of how infrastructure comes into being. To answer this question I draw from M'charek (2016) the concept of circulation, or movement, two terms that from now on will be used interchangeably. Movement is to be understood no longer as a simple transmission of people and things from one place to another, rather it is herein engaged as a performative event that co-shapes humans and things as they move through space and time (M'charek 2016, 29). Contributing new threads to STS interest in this field, the piece sheds new light on our understandings of infrastructures, showing how infrastructures emerge creatively through the doing of movement itself. I start by introducing the problem of border deaths. The paper then familiarizes the reader with the issue of forensic identification making use of the protocol as ethnographic and heuristic device. Next, I situate the topic within recent debates in anthropology of infrastructure. After clarifying the theoretical and methodological stance, the analysis is fleshed out empirically, providing ethnographic accounts of the Italian forensic infrastructure.

2. Dead bodies at the border

In recent years the intensifying flows of migrants attempting to reach Europe have been receiving increasing attention. The numbers are indeed unprecedented: the pro-democracy uprisings of the so-called "Arab Spring" in 2011 significantly mobilized cross-border movements as people fled violence, persecution and political turmoil. For the most part, the European response to the migration's upsurge took the form of security and militarization. Whilst the human flows have been framed primarily as a threat - through a rhetoric of invasion and emergency- a collaborative effort at a European level was made to protect the borders, not the people (M'charek 2018). Interventions focused firstly on the containment of migrants, asylum-seekers and refugees in the Southern Mediterranean, and, secondly, on intensifying border control and surveillance policies through the mobilization of a border enforcement agency, Frontex (Carrera et al. 2012, 4).

Politics of border externalization were set up to prevent arrivals particularly in the Mediterranean Sea, on land along external EU borders and within third-party states such as Libya, Turkey, Moldova and Ukraine (Jones and Johnson 2016). The "collateral" effect of such policies

was to produce a segment of the world's population who risked their lives to get inside Europe (Van Houtum 2010). The construction of barriers did not stop people coming, it simply directed them elsewhere, forcing them to choose more dangerous and deadly pathways each time. 20,000 migrants have died seeking to cross the Mediterranean since 2014 (Dearden et al. 2020). From 2017 to 2019 the deaths recorded are 5,600, of which more than 4,300 died on the Central Mediterranean route, most typically departing from Libya and aiming to reach the Italian territory (Robins 2019). Despite a decrease in the absolute number of deaths and disappearances recorded on the Central Mediterranean crossing, the probability of dying while crossing the Central Mediterranean has increased (Dearden et al. 2020).

Despite the repetitiveness and magnitude of the deaths around Europe's southern borders, the dead receive little or no attention from state authorities. Questions relating to who the dead are or their origins are seldom raised, little is known about them or their names – the cause of death is not even counted or registered officially by governmental organizations. There is no established common practice for collecting information on migrant deaths between States, data on irregular bordercrossers is limited, and there are no official death tolls (Laczko and Brian 2016; Last et al. 2017). While the management of borders and their protection is implemented through a collaborative effort at the EU-level, the issue of identification and management of the dead is left to chance, dependent on the competences and individual abilities of local public authorities (police, the public health system, courts, cemetery attendants) in the place where their body is found or brought from the sea (Tapella et al. 2016). Politically ignored, deceased migrants are left unattended and unidentified.

Slowly but gradually attempts have been made to counteract the inaction of states and fill the information deficit. The Mediterranean Sea is at the heart of the epidemic of death and Italy is the country of first arrival on several routes across the southern external borders of the EU (Last et al. 2017). By exploring the ways devised to manage and know these bodies along Italy's southern borders, this paper offers a different understanding of the human crisis unfolding in the Mediterranean. If the insistence on borders implies a disconnection between realities, a "here" and a separate "there", conveying the idea of divided worlds, the bodies of the people who have died while attempting to reach Europe show that the problem is not outside, but it is *our problem* as well. Making the people, rather than the borders, the matter of concern (Latour 2004), may well start with thinking bodies as agentic participants and remind us of the power asymmetries of the European Union's border management regime.

3. Identification

Pointing attention to the regulatory gap surrounding dead bodies at the border, the first Conference on the management and identification of unidentified decedents, with an emphasis on dead migrants, was held in Milan in 2013¹. Two years later experts from the forensic community met again in Barcelona². The main objective of these meetings was to start an international dialogue on the problem of unidentified dead migrants. The agenda included: 1) to share information on migration problems in different Mediterranean countries; 2) to improve communication, cooperation and coordination between the different entities involved; and 3) to identify "best practices" at regional, national, and international level. There indeed is no easy way to identify an unknown body.

Following international regulations, identification is based on the comparison of *post-mortem* (hereafter PM) data, which is information taken from the corpse to be identified (medical and/or dental information, fingerprints, DNA, clothing, and circumstantial evidence) with ante-mortem (hereafter AM) data, which includes information relating to the missing person before his or her disappearance (medical and dental history, distinctive features and unique characteristics of the person, clothes and other personal items worn by the missing person when last seen). Matching PM and AM data may lead to the identification of an unidentified body (ICRC 2013; ICRC 2017; Cattaneo and D'Amico 2016). Making this comparison, however, involves a rather complex work of coordination, made even more complicated in the case of migrants who have died while traveling: if PM data can be collected directly on the unidentified corpse, the collection of AM data has to be done with the families and acquaintances of the dead, whose country of origin is often unknown.

Subsequent to the conferences, Italy is so far the only country to have adopted at an institutional level specific protocols for the identification of deceased migrants (Piscitelli et al. 2016). This initiative did not come out of nowhere. In October 2013 two shipwrecks occurred in front of the Island of Lampedusa where it is estimated that more than 600 lives were lost (Robins 2019,19). On that occasion the Italian governmental office of the Extraordinary Commissioner for Missing Persons joined forces with academia to identify the victims retrieved from the sea. A couple of years later, the night of April 18, 2015, a vessel carrying migrants sank in the waters between Italy and Libya, leading to the deadliest shipwreck ever

¹ Supported by the University of Milan, the Italian Red Cross (IRC) and the International Committee of the Red Cross (ICRC).

² "Second Conference on the management and identification of unidentified decedents, with an emphasis on dead migrants: the Experience of European Mediterranean countries" supported by the ICRC and Spanish Red Cross.

recorded: 28 survivors, about 800 drowned. The mass disaster stretched the capacity of the Italian state to respond, again. Later that year *Operation Melilli* – named after the nearby coastal village – was launched, to recover and identify the victims' bodies. A task force – comprising forensic pathologists from twenty Italian universities, experts from the ICRC; engineers; professionals from the Navy, the police, the fire brigade; and local governmental authorities from Syracuse – was created ad hoc (Piscitelli et al. 2016). A protocol was designed formalizing the collaboration between the government and University³.

Starting from the protocol devised for *Operation Melilli*, the paper examines the emergent Italian forensic infrastructure. As an organizing device the protocol helps forensic practitioners to standardize a procedure through which data can be linked to a body and finally a person. The protocol does not simply describe the work that goes into identifying dead bodies, it also orders and organizes that work (M'charek and Casartelli 2019). In a similar way, by focusing on how the protocol acts as an ordering device, I use it as an ethnographic device (M'charek and Casartelli 2019, 741) to unravel the complicated and contradictory process of identifying dead bodies.

Even though the *Melilli* protocol refers specifically to the victims of this shipwreck, the document is representative of how the identification of unidentified bodies is assumed to work in general. Indications provided are fully in line with the DVI (Disaster Victim Identification) protocols of Interpol (designed for mass disasters) and the ICRC International Committee of the Red Cross (ICRC). The document describes the whole set of forensic activities to be carried out on the unidentified body to optimize the collection of PM data. A well-preserved cadaver, for instance, is photographed with metric references, from all angles. Then clothing and personal belonging are removed, described, and registered. Distinguishing signs or marks, like tattoos, scars, and implants are recorded. When possible, fingerprints are always taken, x-rays and a 3D scan of face and skull are made. Through an autopsy the biological profile of the corpse is construed. From all cadavers a DNA sample (could be a tooth, the femoral diaphysis or a piece of the iliopsoas muscle) is retrieved, and if present, a hair sample (Protocol 2016).

The document lists the identification procedures a corpse undergoes to collect PM data. The process implies the allocation of a multiplicity of specialists, radiologists, forensic anthropologists, odontologists, and geneticists. Different instruments and apparatuses operate together. The process involves epistemological, technical, as well as legal and bureaucratic aspects. All the information collected must be transcribed, orga-

³ The Melilli protocol sanctions an agreement between the Ministry of Education, University and Research (MIUR) and the office of the Government's Extraordinary Commissioner for Missing Persons.

nized and stored. Doctors communicate with authorities, authorities communicate with technicians, technicians with undertakers. Different realities and worlds are entangled and connected to one another. This complex intertwinement, collaboration, and distribution of such diverse practices is something that we may call *forensic infrastructure*, and precisely the object of this investigation. But what exactly is an infrastructure? And why is the term useful? The following section answers these questions.

4. Roads

No prior boundaries exist to define infrastructures (Star and Ruhleder 1996). Infrastructures are complex systems, characterized by ambiguity, incomplete information, cooperation by different individuals and often bring together a diversity of actors, organizations, and perspectives from academia, industry, commerce and the general public (Karasti et al. 2016). Infrastructures were first conceived as a "substrate":

Something upon which something else "runs" or "operates" such as a system of railroad tracks upon which rail cars run. This image presents an infrastructure as something that is built and maintained, and which then sinks into an invisible background. It is something that is just there, completely transparent (Star and Ruhleder 1996, 112).

A common metaphor associated to this perception of infrastructures is a road which allows the movement and traffic of cars. Once they are built, roads are "out there", time quietens and cars glide along the way. Accordingly Larkin defined infrastructures as "built networks that facilitate the flow of goods, people, or ideas" (Larkin 2013, 328). One wonders, however, whether this exhausts our understanding of infrastructures. Drawing from literature that highlights the relational nature of infrastructure. I endeavor to explore infrastructure's agentic and ontological potential (Star and Ruhleder 1996, Karasti et al. 2016; Jensen and Morita 2016). Rather than passive backgrounds underlying social action, as they are conventionally viewed, the article conceives infrastructures as generative systems, that both organize flows and spin out new relations between them (Jensen and Morita 2016, 3, emphasis original). Infrastructures have world-making capacities, they give form to culture, society and politics (Jensen and Morita 2016, 3). Situating my research within these conversations, this article goes beyond, or perhaps, behind, the issue singled out by the Authors. Focus will not be on what infrastructures are able to generate, but on exploring the very emergence of infrastructures.

In order to do so, I borrow the concept of circulation, as delineated by M'charek (2016). Ever since Mauss (1924) anthropologists have stud-

ied the movement and analyzed the cultural meaning circulations transmit as they traffic people and things. Moving beyond mere transmission, the analysis will look not just at the things that move, but at the very *doing* of movement. Circulation will be hence engaged as a *performative* event that brings about identities and changes humans and things as they move (M'charek 2016), showing the effect of circulation in the very making of infrastructure.

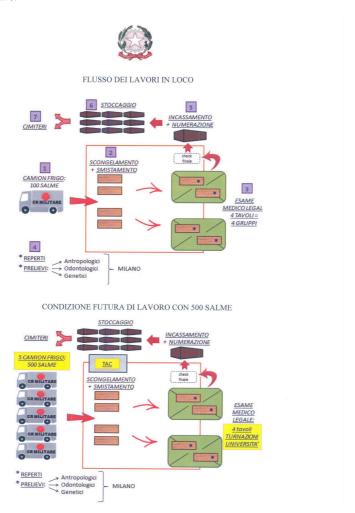


Image 1. "Work flow on site", Technical Annex, guidelines for managing the unidentified bodies of the shipwreck of April 18, 2015.

Movement is indeed implied within the forensic infrastructure. Let's take a look at the following picture. Image 1 (see the next page) is taken from the Melilli protocol and describes the trajectory the bodies were to follow for the purpose of identification. The diagrams order temporally the work-flow and the division of labour among the different practitioners (M'charek and Casartelli 2019, 744). Starting from a refrigerated ICRC truck (1), the body bags were moved to an area where they were defrosted and sorted (2). Then they were transported to tents where autopsies and external examinations took place (3). The anthropological, odontological, and genetic samples retrieved were sent to Milan (4), whilst the corpse would be boxed in numbered coffins (5), stored (6), and then distributed to cemeteries around Sicily (7). The second diagram shows how this order is not expected to change even under working conditions where 500 bodies are expected.

As we can see the circulation of bodies is entailed in the whole process, yet somehow lacks specification. The protocol presupposes a linear road along which the body travels from the refrigerated truck to the autopsy table to the grave, easily changing hands and available for examination (M'charek and Casartelli 2019). Seemingly bodies appear on a mortuary slab and are smoothly moved from site to site and from hand to hand, readily subjected to several identification activities. Samples are retrieved, stored at room temperature and transported to laboratories where they are subjected to further analysis to complete the biologic profile of the corpse. For every corpse a photographic digital archive is created, and information fluidly travels and is transcribed on international forms both Interpol and ICRC. Each corpse is followed by a legal practitioner, an anthropologist and an odontologist (Protocol 2016). Referred to as a "road-map" (Piscitelli et al. 2016), the document is illustrative of the tendency to engage infrastructures as systems which regulate the traffic of things, people and information. On paper, the forensic infrastructure is a fixed design in which dead bodies are smoothly managed and moved for the purpose of identification. In reality, however, the movement of an unknown dead body is far messier⁴.

Once we start looking at movement empirically, the established route slows down, accelerates, bends sharply, or disappears. Zooming-in on the circulation of bodies and bodily material entailed in the identification infrastructure, I will take you on the route the body follows towards its identification. Exposing the detail of forensic activities in practice this article shows the very different configurations this road takes on the ground. As bodies start moving the road starts changing. As will become

⁴ STS has long been interested with the theoretical and methodological challenge of mess. Nowhere is the endeavor greater than in the messy world of large-scale collaborative science projects. See Buyuktur and Jackson (2014), and Law (2004).

clear in what follows, infrastructures do not emerge *de novo*. Much infrastructural work has already been done and made durable in time. A focus on circulations, however, offers a new perspective on infrastructural activity. Infrastructures have erroneously been seen as a stable "matter that enables the movement of other matter" (Larkin 2013, 329). Instead, this research will show that it is the opposite: the very movement and circulation helps to shape the infrastructure. It helps to shape the matter and the specific version thereof.

5. Rammendo

Following the movement of the body and bodily material in the road towards identification I engage with a methodological genre developed within STS called *material semiotics*. This approach looks at reality as a dense *material–semiotic network*. That is, we are caught up in sets of relations that have to do both with meanings and materials. Nothing exists outside the enactment of those relations, therefore, to understand reality we must explore the multiple webs and the material semiotic practices that carry them (Haraway 1991; Law 2004).

With these conceptual and methodological arguments in mind, the analysis attends to forensic procedures unravelling the mundane practices of the identification endeavor. In the Melilli protocol we have encountered various versions of the body: as a corpse, as a tooth, as a bone, more bones, a DNA sample, a garment. The infrastructure to identify an unknown body indeed entails a wide range of virtual, technological and physical crafts that take the human body to construct meaning in relation to its identity. If reality is *not independent of the apparatuses that produce it* (Latour and Woolgar 1986) the technologies that use the body as a means for identification produce very different renditions of the body. The body, once again, comes in many versions (Mol 2002). Tracing out the diverse ways in which the body is made knowable I suggest the identity of an unidentified body is not a fact to be revealed, but an intervention on the body that comes about in practices. A photograph, a fingerprint, a 3D scan.

At this point I would like to elaborate on a visual metaphor, that of embroidery, in Italian, *rammendo*, that is particularly apt to articulating the qualities and complexities of the identification endeavor I describe. During my fieldwork the moments of concretization of the forensic infrastructure were far from obvious. Characterized by invisibility, mess, and ambiguity it was not easy to assess and circumscribe my research object. Drawing, *inter alia*, on Haraway (1991) Law (2004), and de La Bellacasa (2011), methods don't just describe social realities but also help to create them. Reality does not precede the mundane practices in which we interact with it (Mol 1999, 65). Law and Singleton (2005) employ the meta-

phor of fire to describe a pattern of presences and absences. Construing through a material semiotic approach my research object, I observed and became part of something evoking a darning of torn pieces, moments, words. The word *rammendo* signifies both the work performed with the needle on the fabric and the operation, the *practice* of darning, the one in and out movement of a threaded needle. The job is not glamorous, its ontological existence is not taken seriously (Pérez-Bustos 2017, b).

Similarly, identification of unidentified migrants is a careful work in relation to bodies and materialities. Collecting forensic evidence from a dead body is a meticulous work of care and shares the invisible status that characterize some textile craft activities. Like mending a destroyed cloth, it takes time, patience, and handiwork. A forensic pathologist, a friend, told me a Sicilian proverb that she related to her job: "you eat onion. Your eyes weep, and others get angry" 5. By shedding light on the practical and affective commitment with the becoming of these bodies, this paper aims to make an intervention, becoming part and co-constructing a rammendo of different designs and colours sewn together.

Ethnographic material comes from 6 months of ethnographic fieldwork carried out in 2016 and 2017, following the movements of deceased bodies of migrants back and forth between laboratories, cemeteries, and mortuary slabs. Nineteen semi-structured interviews were carried out with forensic pathologists and anthropologists. Furthermore, key actors of the forensic infrastructure, including activists, ICRC volunteers, police officers, lawyers, undertakers, politicians, a representative of the International Commission on Missing Persons (ICMP), and the Italian Extraordinary Commissioner for Missing Persons were interviewed. Whenever possible, observations were made in forensic laboratories. In addition, fieldwork included a day of participant observation in the military hangar in Melilli, where identification activities of Operation Melilli were taking place. I worked closely and befriended some coroners from the Universities of Palermo and Catania, getting to know them, seeing how they work, exchanging points of views, and sometimes observing autopsies and external examinations of corpses. This paper is based on very different ethnographical cases of identification, that are more or less part of standard practice. We start from Operation Melilli, the retrieval and identification of the bodies drowned the 18th of April 2015.

6. Operation Melilli

Whilst the protocol overlooks the retrieval of the corpses, as if it were indifferent to the identification work *per se*, I believe it deserves our at-

⁵ Personal Conversation with coroner, January 2017.

tention. Operation Melilli started with the deployment of the Navy's underwater special operation unit⁶ recovering 169 corpses scattered in an area of 1,805,000 m² on the sea (Trucco and Ibba 2016). In the meanwhile, the intervention strategy for the retrieval of the vessel and the bodies inside was planned. 9.5 million euros were financed by the Presidency of the Council of Ministers for the operation. The underwater enterprise was entrusted to a private company, the *Impresub Diving and Marine* Contractor. All steps were carefully organized. A preliminary inspection of the wreck was carried out through a Remotely Operated Vehicle equipped with sensors to assess its exact position (370 meters below the sea level), and the geological characteristics of the seabed. A robotic underwater unit was designed and built for the occasion. The cyborg was controlled from the surface through a futuristic co-management console from which most of the underwater operations were handled. The support able to accommodate the equipment and technical personnel for the execution of this unprecedented operation was selected in a Multi-Purpose Supply Vessel, the *Ievoli Ivory* (Trucco and Ibba 2016).

In fact, the high-tech aspects of the enterprise were not always suitable to real conditions. Prohibitive weather and sea conditions represented a substantial limit to the continuation of operations as an optimal weather window of at least five days was necessary for the robotic arms to pull the boat up. Recovery operations started in April 2016, a year later the shipwreck. When dealing with the movement of bodies climatic factors must be taken into account, and not just to plan the retrieval of the corpse. The conservation of a dead body is crucial as it provides precious PM information, and it largely depends on the interaction of the body with environmental conditions. During the long time spent in sea water, the bodies underwent a conservative cadaveric phenomenon called saponification, in which the body is encased in a waxy material called adipocere slowing down the decay process: the internal organs and external features of the corpses were hence discretely preserved. Once removed from wet or moist conditions, however, the decomposition of the body would resume quickly.

To mitigate the tissue alteration that the putrefaction process entails, when the vessel reached the surface it was kept at a temperature around 5°/10° through the use of liquid nitrogen. The nitrogen also helped to drive away sea birds targeting the bodies, until the wreck reached the port of Augusta, where a NATO military base had offered to temporarily host the ambitious project to examine the bodies with the aim of identifying them. The medical and forensic activities were organized in an enormous hangar inside the NATO headquarters. The ICRC provided three

⁶ GOS Gruppo Operativo Subacquei.

⁷ Sources are contradictory on the exact amount spent to retrieve the wreck.

refrigerated trucks, two tents for autopsy examinations and forensic procedures and a refrigerated container to store all biological samples and personal effects. A military base was transformed into a forensic laboratory. Still, the bodies were unavailable. Trapped inside the boat, the presumed 800 bodies had to be taken out: a hole was made on the hull. A group of firefighters was specially trained by the forensic pathologists to ensure that no element useful for identification was dispersed during the removal of the corpses. Recovery operations were particularly complex because the boat's holds and engine compartment were narrow, difficult to reach, with very small accesses. The firefighters took care of one another. They entered two at a time. One would collect the body, the other would check on the colleague, ready to intervene in case of need. With the help of shovels, the firemen collected 7 bags of objects useful to the recognition but not specifically attributable to any particular body, 36 containers of bilge sewage possibly containing some clues, and 457 body bags of *commixtio tremens*, that are commingled human remains.

As we can see, cadavers do not simply appear on an autopsy table ready to undergo the collection of PM data. Migrants' bodies are found in various places: washed up on beaches, trapped in fishing nets or in rocks at the bottom of a cliff, clumped in ships holds, scattered at sea (Tapella et al. 2016, 57), or hanging from trees⁸. Operation Melilli points at the work it takes to *move* a dead body from where it is found, as it cannot be left as litter in the sea or on a beach. Indeed, there is no easy way to move 800 corpses from 370 meters under the sea. The kind of work necessary is varied: ranging from the creation of sci-fi robots to the work of care that induces a firefighter to look after his colleague, to wipe dirt off his face or quench his thirst whilst securing body parts⁹. Each of these details is not trivial but essential for the movement of bodies. Diverse qualifying efforts are required to move a dead body. Although such operations may not immediately seem to be linked to the identification effort, they are a crucial part of the forensic infrastructure. Once bodies start moving, they impose modes of relating to them. They help to produce the kind of infrastructure through which they can be transported. Although taken for granted, movement is key to identification.

7. Emergence

Operation Melilli unfolds a bricolage of different actors that enable the corpses' transit, both human and non: politicians, vessels, soldiers,

⁸ Personal conversation with forensic anthropologist, January 2017.

⁹ In the documentary "Lontano Dagli Occhi", Domenico Iannacone interviews the firefighters who retrieved the bodies of the victims of April 18.

shovels and liquid nitrogen. As bodies move many things start moving with them. Looking closely, we see old and new elements intervene in the enterprise. This was not the first time a large-scale pilot study to identify dead migrants had been undertaken in Italy. The approach was framed by the shipwrecks of 3 and 11 October 2013 (Robins 2019), that provided the experience operationalized in the intervention strategy deployed in Operation Melilli. The technology used had a history as well: the private company supporting the Navy in the operation had tested its technical capacities in the recovery of the Albanian vessel A-451, sunk in the Adriatic Sea on March 28, 1997, at a depth of 800 meters, where Albanian migrants lost their lives (Trucco and Ibba 2016). These two occasions laid the foundations for testing and refining the technology used in Operation Melilli. We see how infrastructural work is not built anew but emerges incrementally over time, developing from existing infrastructures that both enable and constrain their form (Star 1999). New elements may become part of standard practices, others, may not. To clarify another example is provided. The same summer, not so far away, in the court district of Trapani, another vessel was being perforated. A coroner I spoke to recalls the episode:

I was expecting a call for that night... I had heard the news. There was an unknown number of corpses on a boat rescued in international waters, then transported to the port of Trapani. Our duty was pretty straightforward: the prosecutor had ordered to complete autopsy operations and attempt personal identification of all the corpses in 48hours. There were rumors about deceased migrants trapped in the hold. It was impossible to check the accuracy of such rumors due to all the migrants on the main deck, waiting to be transferred on KBV 001 Poseidon. Even once we reached the deck, we couldn't see anything in the cargo. It was very hard to look inside, extremely narrow, low in height and without ventilation. After 150 Migrants had been transferred we found an unconscious migrant and started CPR, without results. There was no heart activity. We continued for around 20 minutes before we had to redirect our priorities to all the other migrants who were unconscious or in very bad shape. When more migrants were moved we were finally able to investigate inside the cargo. A colleague crawled inside the cargo. He found a body with vital bodily functions and determined all the other migrants were deceased. The migrant who showed signs of life was reallocated. When all the unconscious migrants were stabilized we decided to recover the deceased bodies. To be able to do so, we had to open the deck. We opened two big holes, one in the bow and one in the

stern¹⁰.

The case described in the ethnographic vignette is different from the previous, and indeed less notorious. However, the issue is akin: the retrieval and identification of deceased bodies. In this circumstance, legal action triggers the bodies' recovery. There currently is no fixed regulation in Italy through which authorities must proceed to identify a cadaver. As clarified by Tapella et al. (2016, 58) identification is too often dependent on the initiative and know-how of the individuals who conduct the forensic investigation. In fact, there is no legal obligation to perform an autopsy or to identify a person who was not a victim of crime. The performance of a full autopsy is at the discretion of the *Pubblico Ministero* (Public Prosecutor), who appoints the judiciary police and the coroners to conduct the forensic investigation into the identity of the cadaver and the cause and circumstances of his/her death. While identifying the bodies of drowned migrants departs from the criminal justice context, both systems aim at standardized procedures, that are thought to guarantee proper handling from the start. As a device, a protocol helps forensic practitioners to achieve a level of standardization, setting out a procedure through which data can be linked to a body and eventually a person. The question is how that work is done on the ground, where standard procedures do not hold (M'charek and Casartelli 2019, 740).

In this specific case the Prosecutor had ordered the coroners to carry out autopsies and external examinations in 48 hours. Their first concern, however, was to take care of the migrants who still showed vital functions. Only when the stabilization and relocation of all the passengers, almost 200 people, were completed, the doctors could dedicate themselves to the deceased bodies. 52 bodies were retrieved from the cargo storage and transferred in a refrigerated van. As previously mentioned, refrigeration is essential as cadavers are not immune to the summer's heat and decomposition rapidly advances. Also, a refrigerated van keeps the smell of the corpses under control. By chance, that night, the forensic team acquired a refrigerated truck confiscated from the mafia during a criminal investigation occurred a few days before¹¹. The van temporarily joined the chain to facilitate the transportation of bodies. That night the forensic team transported all the corpses to the cemetery where the requested examinations were performed. Under such circumstances, the lab moved to the gravevard.

The example of the truck accidentally confiscated from the mafia is significative, as we see an unexpected actor become part of the forensic

¹⁰ This case was also part of a Power Point presentation presented by Antonella Argo at the IX National Conference of the Italian Group of Forensic Pathology, October 2016.

¹¹ Personal conversation with coroner (January 2017).

infrastructure, then disappear. Looking at the how the movement and circulation of bodies comes about in the identification endeavor, discloses an infrastructure that is more fluid and flexible than what we may think, a process that adjusts according to specific needs emerging in a particular time and place. A *creative* infrastructure, we could say.



Image 2. The forensic team whilst unloading the refrigerated van



Image 3. Photograph of the whole team during forensic operations in the cemetery

8. Creativity

You've got to be domestic right? Ok... so we used a coffee cup to clean the teeth of the cadavers and whiten them like the odontologist explained, we put some bleach so they became a little cleaner... 'cos she was annoyed (by the fact that) they were all dirty 'cos it's not like we had time to brush all the teeth one by one, right? I mean, there was no time to do what one would have probably done in the case of one single body... so I said let's put them... you see... I had kept the coffee cup... by chance... I said let's put them in the coffee cup... (the coffee) offered by those who provided the coffins, those men, the undertakers, how can I call them?

The fragment reports part of my conversation with Paola, a forensic pathologist participating in Operation Melilli. Incongruously with the media portrayal of the enterprise, the collection of PM data was carried out in a situation of financial dearth and paucity of material means. Whereas for the sci-fi retrieval of the ship 9.5 million euros were provided, no funds were allocated for forensic operations. The identification effort was seen as an act of humanitarianism, a contribution of expertise that permitted universities to engage publicly with the issue of deaths in the Mediterranean Sea. At the same time, it provided ample opportunity for research and training (M'charek and Casartelli 2019, 748). In the excerpt above Paola is describing how a coffee cup becomes a tool for identification procedures. Teeth are of particular importance in the identification process. When examinations on the body are impossible or insufficient for the identification of the cadaver, the odontological inspection and the comparison of the anatomical and pathological peculiarities of the buccal cavity can give more decisive results. Faced with the necessity to ensure properly cleaned teeth were quickly handed to a bothered odontologist, Paola ingeniously places them in a bleach filled coffee cup.

On another occasion, one of the forensic anthropologists was annoyed that while cleaning the bodily remains, small bones kept disappearing in the sink. After a year under the sea the bodies had commingled together. One of the aims of the forensic work was to understand how many people were on the boat, and the bones were important traces in this process of counting. Although the bones were not registered one by one, they were taken into account in order to understand the magnitude of the disaster and to create a registry of the number of victims. The disappearance of small bones down the drain complicated matters. One day she came up with a solution. Part of her lunch was a fresh ricotta cheese. Walking back into the hangar she put the ricotta basket into the sink and was happy to find that it fitted perfectly. It thus became a sieve to catch the small bones (M'charek and Casartelli 2019, 272). The two examples describe

ways to adapt the infrastructure, revealing a situated and continuous process of re-composition, in motion. The infrastructure adjusts to the body's needs. Far from stable and *a priori*, the infrastructure is tinkered with (Mol et al. 2010) all the time and different elements are tailored to conform for the body's circulation to keep going. We find that existing infrastructures, such as the coroner's lifetime experience, adapt to new and difficult working environments. Next unusual ecologies, like a filter from a package of cheese are enrolled to ensure the bodies' circulation and become crucial devices in the forensic infrastructure.

This is not to imply that the making of the infrastructure is vague or random. Far from it. When asserting the infrastructure comes into being through the interaction and adaptation of various elements I do not mean any kind of feature can appear to facilitate the bodies circulation. Rather I highlight the creative process that is infrastructure, in which different actors change and fine-tune to solve contingent demands. Long-established features readjust through the body's circulation. A military hangar becomes a forensic lab to receive 800 corpses. Everyday objects, such as a coffee cup, intervene to allow teeth to be adequately treated. Or less "trivial" interventions, like a van confiscated from a criminal scene helps to transport bodies ensuring their preservation, becoming part of the identification infrastructure. As novel entities emerge, they may dissolve into the background, like the hangar provided by the Navy in the port of Melilli turns into a military base again once identification activities are completed, or vet again become durable. I wonder where the coffee cup might now be.

In the following ethnographic vignette, I am inside the hangar, helping with the registration of clothes. When the firefighters accessed the cargo of the vessel, scattered clothing and objects were found, probably the passengers' luggage, randomly gathered in bags separated from the corpses. These personal belongings were not immediately ascribable to any corpse but were classified anyway, after which they were recorded and photographed. I was instructed to take notes as the bags were opened. This was not an easy task: words were dictated to me at a particularly high pace, flies were going in my eyes and inside my mouth. The job was quite demanding for a newcomer.

I shoo away the flies from my face, nose, and hands. I'm taking notes for myself, when I can, on my arm. Some garments are more intact, lending themselves to a more meticulous description, others are reduced to shreds. My pen is dirty and smudged. Smudged with rotten remains. The coroner starts speaking very fast, and I concentrate on writing in capital letters in a readable calligraphy:

BAG 04, CARGO 11/07 TIME 11.27. YELLOW PLASTIC BAG AT THE OPENING OF WHICH CLOTHING IS FOUND.

INCLUDING

BROWN JACKET WITH EXTERNAL LATERAL POCKETS

ANTERIOR AND INFERIOR (EMPTY). INSIDE COVERED WITH FAKE FUR.

BRAND: UNREADABLE

SIZE: XL

BLUE AND WHITE SHOE WITH SYMBOL

BRAND: NIKE

SIZE: 41

The coroner opens a sweatshirt and I see something falling out, it rolls on the floor. I lean over to look, it is a bone, I indicate it to a man from the scientific police who picks it up and puts it on the table with the other remains. I will register it under the entry "dispersed find", a piece of cervical, C2.

Movement is capricious. By falling down C2 evokes the contingencies in which bodies move. As the bone inscribes the ethnographer into the forensic infrastructure, it indicates the quality of the infrastructure's emergence: an adaptation of the different elements that allow the movement of bodies. C2 tells us something else as well: by moving within the infrastructure, bodies move and change, and also change things and people around them. Circulations are so much more than a transmission from point *A* to point *B*. Movement means change.

9. Change

In Operation Melilli the firefighters had been trained by forensic pathologists not to leave out any useful information when they crawled inside the vessel to retrieve the corpses. This is particularly important because when a body is found it is the body itself that is the source of data, and everything around it. This is the case not only in cutting-edge operations such as the one occurred in the Port of Augusta:

Port of Catania, 3 a.m.

Click. Click. Taking pictures are two operators from the scientific police. Click again. A young forensic pathologist joins in. She knows what to do. She has done it before. It is crucial to immortalize the body as soon as possible, shoot the face while it is still there. She puts on her gloves and helps them drag the body, clumped amongst others, closer to the moon light penetrating from the hole on the roof. Noticing the presence of a foam coming out of the corpse's mouth, she slightly turns the head so the picture fully captures the froth. Click. Then she cleanses it with a tissue. The cadaver is reproduced more than once from repetitive angles. They look inside the clothes and in the near surroundings

for any information apparently connected to this cadaver. She collects the fingerprints. An operation that usually goes beyond the tasks of the forensic doctor, being relevant to the Scientific Police. Fingers are well preserved, they all probably died just a few days ago. The corpse with all its personal belongings is moved inside a body bag. Time for the next one.

The moment the corpse is found, evidence is sought mainly in the circumambient of the body. The search involves the corpse, the clothes, the close environment. Often evidence is secretly secluded in necklaces or in the hair! *Don't ever forget to check the pockets.* As soon as the body is found, everything counts as a factor. The body itself, skin and flesh, but also all that is outside: personal effects, documents, jewelry, sim cards, phones. What is missing is also important: fingers devoid of nails, children without parents. The body reaches its amplest peaks as contextual information is taken. Proof is everywhere as evidence is sought in the background and through circumstantial information, but there is not much time. The body must be moved. Relations of space and time will change as the body keeps on moving.

Cemetery X, 9 a.m.

The zipper is opened. She starts looking. It's incredibly hot. Her colleague is outside the tent smoking a cigarette. They have been working all night. He is humming a song he heard on the radio, a summer hit. She smiles, then starts attentively inspecting the corpse in front of her. The body is lying in a supine position with a rigid support under the nape. She looks for distinctive elements or particular marks on the black epidermis. She finds nothing. No special mole, piercing or tattoo. No external injuries, scars, or traces of old surgeries. The only thing she takes note of: he is circumcised. She then cuts off a lock of hair. After securing it in a plastic bag she takes the scalpel and performs a cut at the level of the pelvis. She raises some bundles of the iliopsoas muscle with surgical forceps. She notices the brownish looking muscle has lost its normal consistency, as it is easily divided by the scalpel. She withdraws a piece of it for DNA analysis.

This fragment depicts a forensic external examination. Once the cadaver is removed from the context in which it was found, practices to identify it can proceed more calmly. The surroundings don't count anymore. Elements that may contribute to finding the bodies' identity are now sought on the body. Its exterior is the fount of data pertaining to the skin, the fingers, the nails, the wounds - inside the mouth, on the teeth. Biological samples are retrieved. A lock of hair and a piece of the metaphysis of the femur. Not only biological samples are retrieved from the body. Photographs of details or particular signs are taken, fingerprints (if not done before), garments and personal effects are collected and stored

away. Throughout identification procedures we observe a multiplication of the body (Mol 2002), as examinations take the body and articulate it into the source for forensic identification. The following excerpt describes an autopsy.

Once the surface is checked, the body can be opened up. It tells more. They start from the head¹². The scalp is opened: pericranial soft tissues are detached and skin flaps reversed. From the left frontal region samples are taken and placed in a sterile container, a specific box that ensures proper conservation pending the histological examination. Her colleague performs a cut with a circular saw, he removes the skullcap and clutches it with two hands. After extracting the duramater, which is free of injuries, they observe the encephalon. It is in an advanced state of putrefaction. They retrieve anyway it and place it in a box for future dissection in the lab. She then takes the scalpel and deeply carves the skin with a long incision from the upper part of the neck to the suprapubic area...

Whereas before evidence was looked on the body's surface, information is now found *inside*. The body "shrinks". Through incisions, the body is exposed, cut and dissected. It reduces in space, but it is gaining time. The body is transient. Although the protocol suggests a neat temporal and spatial orientation, once the body is subjected to forensic examinations it undergoes a process of spatial compression and temporal expansion. As samples are progressively retrieved for laboratory examinations, tiny bits of the body become part of other networks and travel long distances. Whilst the corpse is handed to undertakers that arrange the burial, photographs and fingerprints crystallize it in archives of the scientific police, as it enters digital databases through Interpol and ICRC forms. Documents pile on the desk of a magistrate. The femoral diaphysis goes to a laboratory for DNA analysis. Skin tissues undergo histological examinations, and so on. Legal, physical, bureaucratic, and forensic investigations intertwine as the body is translated (Mol 2002, 35). Pictures, biological samples, the fingerprints, the files and the clothes are what the "body" is at the end of the identificatory route. From physical to material, from written to digital, the body on its route towards identity is transformed. It has become smaller yet acquired an abiding durability.

10. Conclusion

In the context of the putative "refugee crisis" thousands of people have died *en route* to reach Europe. Moving away from the lenses and

¹² Alternatively, autopsies start from the rib cage, usually with a "Y" cut.

politics of the border, this article offers an alternative approach to the crisis in the Mediterranean, exploring the scientific endeavor to know these corpses and confront their anonymity. Attending to the management of deceased migrants in Italy and identification initiatives surrounding dead-bodies-at-the-border, this paper dealt with the issue of forensic infrastructure. My argument in this piece was about adding further articulations to the issue of infrastructure. Whereas infrastructures have traditionally been viewed as passive substrates affording movement, I invited the reader to challenge this common way of thinking about infrastructures, offering insights in the becoming of infrastructures. Utilizing the protocol as an ordering device, the paper analyzed movement empirically and disclosed the reality of forensic work *in practice*, showing how infrastructures are processes of constant adjustment that emerge creatively through circulations.

Here I have focused on circulations and what circulations do. At the end of this journey, I hope to have convinced the reader that movement is so much more than a simple passage from here to there, and that the performative powers of circulation deserve our attention. Movement is change. It turned coffee cups into forensic utensils, professionals into volunteers, and it made me an anthropologist of science. But this is another story. This work also provided knowledge on the management of dead bodies of migrants. Mobilizing the visual metaphor of *rammendo*, I disclosed the factual and affective commitment with the becoming of these bodies, refusing the silencing of these deaths. In conclusion, inquiring the scientific efforts to attend to the dead migrant's body, this article aims to subvert the unacknowledged massacre and advocate for the existence and the possibility of change. For while these bodies move, they might also move us.

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