# “SEEING IS BELIEVING”:

# EU BORDER SURVEILLANCE AND THE CASE OF NESTOR

By

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## Abstract

In light of the EU's increasing reliance on aerial surveillance technologies and the mediatic visibility of migration and border struggles, this thesis is concerned with the ways in which visuality constitutes a fundamental mode of power through which the European border regime is produced and instantiated. In my research I investigate the lines of sight or gazes produced by the "view from above" (Haraway 1988, 590) engendered by border surveillance technologies, and the bureaucratic or legal architecture which sanctions their use. To this end, I critically examine the EU border regime's politics of visuality through a focus the 2021 EU-funded project NESTOR (aN Enhanced pre-frontier intelligence picture to Safeguard The EurOpean boRders). The case of NESTOR, a project which seeks to develop a next-generation border surveillance system, raises significant questions about the politics of visibility, visuality, and the techno-militarization of borders. Through a critical content analysis of NESTOR communication materials, I interrogate and unpack the ideological investments and visual politics which underpin the project, and the ways in which they inhere what Joseph Pugliese terms a "statist regime of visuality that produce[s] both symbolic and physical forms of violence for their target subjects" (Pugliese 2013, 571). I argue that NESTOR intensifies the datafication of migration and further propagates the deterritorialization of borders, an enduring paradigm of the EU border regime. I supplement my analysis with a gesture towards seeing otherwise by examining Forensic Oceanography's 2014 audiovisual work *Liquid Traces: The Left-to-Die Boat Case* as a potential form of "countervisuality" (Mirzoeff, 2011, 480). While NESTOR bills itself as an innovative, "next generation" project, it does not constitute a rupture but rather a continuity in the EU's securitized surveillance practices – and while countervisual practices such as Forensic Oceanography's *Liquid Traces* might offer an alternative way of seeing, they too are bound up within a knowledge economy sustained by the EU border regime.

## Declaration

I hereby declare that this thesis is the result of original research; it contains no materials accepted for any other degree in any other institution and no materials previously written and/or published by another person, except where appropriate acknowledgment is made in the form of bibliographical reference.

I further declare that the following word count for this thesis are accurate:

Body of thesis (all chapters excluding notes, references, appendices, etc.): 18, 266 words

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Signed __Maria Zaslavsky_____ (name typed)

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To a world free of borders. All you fascists bound to lose.

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# Introduction

On April 12th, 2023, the International Organization for Migration (IOM) announced that the Missing Migrants Project had documented 441 migrant deaths in the Central Mediterranean between January and March 2023, marking the deadliest start to the year for migration along the Central Mediterranean route since 2017.[1] The IOM stressed that the 441 documented deaths were considered "an undercount of the true number of lives lost"[2] due to European Union (EU) member states' policies of non-assistance, neglect and delays in responding to distress calls from migrants; their outsourcing of search and rescue responsibilities to the EU trained, equipped, and funded Libyan coast guard[3]; and obstruction to rescue operations undertaken by merchant ships and NGOs, the latter of which are being actively targeted by Italian authorities through recent legislation which stipulates that vessels must disembark immediately after rescue, thus obstructing ships' abilities to attend to multiple boats in distress.[4] The IOM's announcement came only a day after Italy's (arguably fascist) far-right government announced a six-month "state of emergency"[5] in order to free up more funds to "manage" increased migration across its borders, while also calling on the EU to get involved. The measures are largely vague, but "reports say officials will be able to speed up reception procedures and repatriation of those not allowed to remain in Italy."[6]



[1] "Deadliest Quarter for Migrants in the Central Mediterranean since 2017," *International Organization for Migration*, April 12, 2023, https://www.iom.int/news/deadliest-quarter-migrants-central-mediterranean-2017.
[2] Ibid.
[3] Benjamin Bathke, "Libyan Coast Guard Intercepts and Takes Migrants Back to Libya," *InfoMigrants*, June 9, 2023, https://www.infomigrants.net/en/post/49550/libyan-coast-guard-intercepts-and-takes-migrants-back-to-libya.
[4] Angelo Amante, "Italy Approves Clampdown on Migrant Rescue Ships," *Reuters*, February 23, 2023, https://www.reuters.com/world/europe/italy-gives-final-approval-decree-clamping-down-migrant-charity-ships-2023-02-23/.
[5] Frances D'emilio, "Italy Declares State of Emergency as Migrant Numbers Surge," *Associated Press*, April 11, 2023, https://apnews.com/article/italy-migration-meloni-lampedusa-state-of-emergency-d37b160570c7905d82810cb65934331a.
[6] Paul Kirby and Alys Davies, "Europe Migrant Crisis: Italian State of Emergency to Tackle Migrant Boats." *BBC News*, April 12, 2023, https://www.bbc.com/news/world-europe-65235579.

Shipwrecks, interdictions, violent push and pull-backs, the criminalization of NGO-led assistance and rescue, and the unabated suffering and death at the maritime (and land) borders of the EU - this is, of course, nothing new.

What appears to be relatively new, however, is NESTOR (aN Enhanced pre-frontier intelligence picture to Safeguard The EurOpean boRders),[7] an EU-funded project which "aims to establish a fully functional next generation holistic border surveillance system"[8] for "the protection and safeguarding of the European marine and land borders."[9] I came across NESTOR by chance – I had not seen any articles, tweets, posts of any kind about the multi-million euro project, save for one alarming write-up on the website biometricupdate.com. The article reported that a Frontex delegation had visited the NESTOR consortium of partners and organizations in Greece to attend "the final demonstration of a border surveillance system using mixed-reality glasses, unmanned submarines, 3D radar, 360-degree cameras and more."[10] Presented (at least in its own promotional materials) as the "next generation" in border surveillance systems, NESTOR needs to be critically examined in light of contemporary securitized, restrictive, and violent EU border management practices and politics.

This thesis is concerned with the ways in which visuality, what Hal Foster terms "sight as a social fact,"[11] constitutes a fundamental mode of power through which the European border regime is produced and instantiated, and the "pivotal role" of the visual "in both mediating and militarizing current border struggles."[12] I am interested in investigating the lines of sight or gazes

[7] This is the official stylization of the project's name, as used across official EU channels.
[8] "Homepage," NESTOR Project, accessed June 12, 2023, https://nestor-project.eu/.
[9] NESTOR Project, "Homepage."
[10] Chris Burt, "Civil Society Alarmed by Migrant Biometrics and Surveillance in EU, Americas: Biometric Update," *Biometric Update*, April 10, 2023. https://www.biometricupdate.com/202304/civil-society-alarmed-by-migrant-biometrics-and-surveillance-in-eu-americas.
[11] Hal Foster, *Vision and Visuality*, (New York: Dia Art Foundation, 1988), ix.
[12] Anouk Madörin, "The View from Above at Europe's Maritime Borders: Racial Securitization from Visuality to Postvisuality," *European Journal of Cultural Studies* 23, no. 5 (2020): 699.

produced by the "view from above"[13] instantiated by border surveillance technologies and the bureaucratic or legal architecture which sanctions their use. It is all the more salient when considering the EU's present-day intensification of 'its electronic frontier through unmanned aerial vehicles or drones."[14] To this end, I seek to critically examine the EU border regime's politics of visuality through a focus on recent developments in border surveillance technologies, specifically regarding the 2021 EU-funded project NESTOR (. I interrogate and unpack the ideological investments and visual rationale which underpin the project, and the ways in which they inhere what Pugliese terms a "statist regime of visuality."[15] I argue that NESTOR intensifies the "datafication of mobility,"[16] or the enfolding of the human into the digital, and further propagates the deterritorialization of borders, an enduring paradigm of the EU border regime. I will conclude my analysis with a gesture towards seeing otherwise by briefly introducing and examining Forensic Oceanography's 2014 audiovisual work *"Liquid Traces: The Left-to-Die Boat Case"* as a potential form of "countervisuality."[17] As Louise Amoore contends, creative or artistic interventions contain the potential (though not the promise) for rupture and reflection on the norms which govern the everyday.[18] I will explore how Forensic Oceanography's practice of a "disobedient gaze"[19] disrupts the "many bordered gazes"[20] instantiated by a project such as

[13] Donna Haraway, "Situated knowledges: The science question in feminism and the privilege of partial perspective," *Feminist studies* 14, no. 3 (1988): 590.
[14] Madörin, "'The view from above' at Europe's maritime borders," 698.
[15] Joseph Pugliese, "Technologies of extraterritorialisation, statist visuality and irregular migrants and refugees," *Griffith Law Review* 22, no. 3 (2013): 571.
[16] Martina Tazzioli, "Spy, track and archive: The temporality of visibility in Eurosur and Jora," *Security Dialogue* 49, no. 4 (2018): 273.
[17] Nicholas Mirzoeff, "The right to look," *Critical Inquiry 37*, no. 3 (2011): 480.
[18] Louise Amoore, "Lines of sight: On the visualization of unknown futures," *Citizenship Studies* 13, no. 1 (2009): 17.
[19] Lorenzo Pezzani and Charles Heller, "A disobedient gaze: strategic interventions in the knowledge (s) of maritime borders," *Postcolonial Studies* 16, no. 3 (2013): 294.
[20] Anna Carastathis, "So many bordered gazes: Black Mediterranean geographies of/against anti-Black representations in/by Fortress Europe," *Geographica Helvetica* 77, no. 2 (2022): 231-237.

NESTOR and allows us to see that which has been concealed, hidden from view – the violence of the border regime.

## Methodology and Sources

This thesis offers a theoretical engagement with the politics of visuality, visualization, and visibility within the contested field of migration governance. I engage in a critical content analysis of the NESTOR project, looking at the project website, newsletters, and other online communication materials. These online materials form the bulk of NESTOR-related information that is accessible to the public, as the NESTOR project only recently wrapped up its trial phase on April 30th, 2023. I situate and develop my analysis by drawing on an interdisciplinary range of academic literature, spanning across the fields of migration studies, critical border studies, critical security studies, surveillance studies, the study of visual culture, and political geography. I conclude my analysis by engaging with the work of multidisciplinary research group Forensic Oceanography, more specifically their 2014 audiovisual work "*Liquid Traces: The Left-to-Die Boat Case*."

For anyone writing about border surveillance and the vast apparatus of technologies at its disposal, there is a risk of reproducing the very techno-fetishism/techno-utopianism which drives and legitimizes these efforts. As William Walter simply and succinctly puts it: "We should not reify its power."[21] One must be "careful about attributing too much capability and durability to the technologies."[22] Martina Tazzioli cautions about engaging in the "techno-hype in debates on the



[21] William Walters, "Live governance, borders, and the time–space of the situation: EUROSUR and the genealogy of bordering in Europe." *Comparative European Politics* 15 (2017): 810.
[22] Walters, "Live governance," 811.

digitalisation of refugee governmentality,"[23] which is caught in a kind of presentism that overemphasizes the supposed novelty of "high-tech" border regime developments. Tazzioli contends that "[t]echnological solutionism in refugee governmentality is in fact not without history: to the contrary, 'to avoid technological exceptionalism, more attention is needed to historical lineages and precedents' (Seuferling and Leurs 2021, 684)."[24] She gestures towards a possible remedy by suggesting a shift to studying how such technologies impact migrant's lives. An approach which "focuses on migrants' struggles and subjectivities and on the entanglements of digital and non-digital, conceptualises mobility out of a state-based perspective."[25] Going back to 2006, the c.a.s.e Collective[26] similarly urged "that the study of border surveillance ought to pay more attention to the mutual interaction between the subjects and objects that are studied and the possible resistance of the latter."[27] Galis, Tzokas, and Tympas further argue that "thus far, migration studies – even the most critical studies – have emphasized technologies used by those who have sought to block access to Europe."[28] Instead, "technologies need to be studied 'not only in connection with the rhetoric of those who introduce [them] but also in light of how [they are] materialized in human bodies through clandestine border-crossing practices and material configurations (artifacts)' (Galis et al., 2016: 8)."[29]

[23] Martina Tazzioli, "Counter-mapping the techno-hype in migration research," *Mobilities* (2023): 2.
[24] Philipp Seuferling and Koen Leurs, "Histories of humanitarian technophilia: how imaginaries of media technologies have shaped migration infrastructures," *Mobilities* 16, no. 5 (2021): 684, quoted in Martina Tazzioli, "Counter-mapping the techno-hype in migration research," *Mobilities* (2023): 2.
[25] Tazzioli, "Counter-mapping the techno-hype," 2.
[26] c.a.s.e Collective, "Critical approaches to security in Europe: A networked manifesto," *Security dialogue* 37, no. 4 (2006): 443-487.
[27] Huub Dijstelbloem, Rogier Van Reekum, and Willem Schinkel, "Surveillance at sea: The transactional politics of border control in the Aegean," *Security Dialogue* 48, no. 3 (2017): 225.
[28] Vasilis Galis, Spyros Tzokas, and Aristotle Tympas, "Bodies folded in migrant crypts: Dis/ability and the material culture of border-crossing," Societies 6, no. 2 (2016): 8.
[29] Galis, Tzokas, and Tympas, "Bodies folded in migrant crypts," 8, quoted in Dijstelbloem, Van Reekum, and Schinkel, "Surveillance at sea," 225.

As mentioned above, NESTOR's trial phase ended barely two months ago – we have yet to see how its implementation will actually, materially play out in migrants' lives. This, however, points to fruitful areas for future research. For now, I admit that my analysis is imbalanced, as it is mostly concerned with interrogating NESTOR's visualizing rationale – I sought to somewhat correct this asymmetry by juxtaposing NESTOR with Forensic Oceanography's *Liquid Traces: The Left-to-Die Boat Case.* In fact, Walters, in his genealogical excavation of European governance and EUROSUR, points to the same Forensic Oceanography work as constituting a "counter-practice"[30] that "describes practices that employ similar geolocational technologies and modes of live governance […], but for political purposes not of control but rather in the contexts of projects of resistance, justice and migrant autonomy."[31] This is not to engender a facile binary of good/bad, but is rather an attempt to bring more depth to the study at hand.

## On Limitations and Contributions

According to Western academic conventions (and the CEU gender studies thesis writing workshop criteria), my research should make some scholarly contribution, however slight, to a field or area of study – it must have some scholarly or political significance. Writing as a gender studies student, I find myself struggling with certain contradictions that arise when contemplating a question such as "so how and why is your research (politically or academically but hopefully both) relevant?" On the one hand, feminist research and knowledge production should be politicized – I wanted to write it is inherently so, but any discipline in neoliberal academia can be coopted and emptied of its politics. I find the call for feminist reflexivity regarding the ways in

[30] Walters, "Live governance," 811.
[31] Ibid., 811.

which our knowledge production is inextricably bound up in structures and fields of power is oftentimes transmuted into an imperative to *do* something with our work – to bring praxis to theory. To write about anything in a feminist, critical, and politicized framework requires – ideally – deep engagement, sustained reflection, and an intentional ethics of care, all of which are difficult to cultivate given the time and resource constraints of a short-term graduate program (and my own writing practice…). This is all the more relevant when writing about migration, due to the ways in which "scholarship—itself a business—is also part of the refugee regime,"[32] and how this research is carried out – in the form of what Heath Cabot terms "crisis chasing"[33] – can run the risk of replicating the "logics of apartheid and marginalization"[34] that underpin the violence of borders and bordering. Reflecting on my positionality, I could list all of the ways in which I benefit from various power structures – but this might have the effect of creating a binary opposition in which I discursively reconstruct an ahistorical, paradigmatically abject "migrant" as my dialectical foil, thus "reinvok[ing] 'the refugee' as an exceptional figure in the national order of things, one who must be identified, saved, or studied."[35] By opening this thesis with a slew of statistics about border-related deaths, I have arguably already engaged in what SA Smythe calls "the farce of the recurrent practice of enumeration, of counting people without being accountable to them,"[36] revealing a "quantified abstraction"[37] of migrant lives.

This thesis contributes to the literature in that it offers a preliminary analysis of a very new project – NESTOR. There hasn't yet been much scholarly attention paid to the project, and perhaps my thesis could offer a jumping off point for future researchers investigating it. But NESTOR's

[32] Heath Cabot, "The business of anthropology and the European refugee regime," *American ethnologist* 46, no. 3 (2019): 261-275.
[33] Cabot, "The business of anthropology," 265.
[34] Ibid., 262.
[35] Ibid., 268.
[36] SA Smythe. "The black Mediterranean and the politics of imagination." *Middle East Report* 286 (2018): 5.
[37] Ibid., 5.

novelty also implies some inherent limitations: I could not draw on existing literature or data related to the project, which thus limits my work to cautious theorization. As previously discussed in the Methodology section, I would say the primary limitation is the ways in which my analysis is overly concerned with NESTOR and its purported objectives and impacts as delineated by the project coordinators, and lacks insight into the ways in which NESTOR's deployment will materially impact the people it targets.

## A Note on Terminology

It is crucial to attend to the politics of language and terminology when writing about migration, mobility, and border regimes. Firstly, I echo Birey et al.'s contention that "[t]he deployment of the discourse of 'crisis', which takes the political imaginaries of 'Western' states as its starting – and often ending – point, has produced representations of migrants' mobility as exceptional and contributed to the depoliticisation and dehistoricisation of people's mobility."[38] As such, any mention of "crisis" will include quotation marks and qualifying adjectives – many scholars opt for the turn of phrase "so-called European migration crisis" – in order to signal the ways in which the term flattens and obscures "the political and historical reasons that led to [migrants'] displacement in the first place."[39] "Crisis" as a term also bears a powerful affective resonance, and while its use may be rationalized as a means for signaling the urgent and disastrous registers of border violence and shipwrecks at sea, its discursive deployment has often been marshalled in order into mobilize virulently racist, anti-immigrant rhetoric. And, crucially,



[38] Tegiye Birey, Ceilne Cantat, Ewe Maczynska, and Eda Sevinin, *Challenging the Political Across Borders: Migrants' and Solidarity Struggles,* (Budapest: Central European University, 2019), 2.
[39] Ibid., 2.

"[b]order deaths are not a new phenomenon."[40] If we are to employ a "methodology of the *longue durée*"[41] – as articulated by Christine Lombardi-Diop of the Black Mediterranean Collective – the exceptionalized narrative of "crisis" promulgated by European states and border agencies is shattered when considering the imbrication of histories of slavery and the use of the Mediterranean route to facilitate the slave trade within global structures of modernity and today's racialized mobility regime.

Secondly, I will employ almost exclusively the term "migrant" when writing about people who cross the Mediterranean. I do so for the reasons outlined by Mainwaring and Debono, who write:

> "we use the term 'migrant' as a broad umbrella for the people moving across the Mediterranean space and seeking a better life in Europe. Many of these people will apply for asylum. Some will receive some form of refugee status. Here, we try and avoid replicating the bureaucratic, violent language of states that reduces people to 'asylum seekers' or 'irregular migrants'. This language filters people into hierarchical categories of deservingness, while simultaneously obscuring the power-laden, historically contingent mechanisms that categorise people and their behavior.[42]

I will of course faithfully reproduce the words of other scholars when I cite them – in these cases, I will use the terminology employed by these scholars. However, I bear in mind that these constructed categories of "refugee", "asylum seeker", and "migrant" are historically contingent and legally specific. Finally, I write about migrants as "illegalized", as opposed to "illegal". No one is illegal. As Nicholas De Genova writes, "[m]igrants only become 'illegal' when legislative or enforcement-based measures render particular migrations or types of migration 'illegal'-or in



[40] Martina Tazzioli and William Walters, "The Sight of Migration: Governmentality, Visibility and Europe's Contested Borders," *Global Society* 30, no. 3 (2016): 445.
[41] Cristina Lombardi-Diop, "Preface," in *The Black Mediterranean: Bodies, Borders and Citizenship*, eds. Gabriele Proglio et al. (Springer Nature, 2021), 3.
[42] Ċetta Mainwaring and Daniela DeBono, "Criminalizing Solildarity: Search and Rescue in a Neo-Colonial Sea," *Sage Publications* 29, no. 5 (2021): 1033.

other words, *illegalize* them."[43] The language of "illegal" or "irregular" migrants is a terrifyingly cruel discursive strategy deployed by media, state, and non-state actors that locates violence in the body and being of migrants, obscuring the colonial, imperialist, capitalist political structures which produce heteropatriarchal, racialized, gendered hierarchies of personhood, and thus mark some as left to die.

## Chapter Breakdown

In **Chapter 1: Visuality and the EU Border Regime**, I demonstrate the significance of the visual within migration management. I define the key theoretical concept of *visuality* that guides my research. I trace its contemporary genealogy from its articulation within the field of critical visual culture and explore the ways in which scholars of EU migration have contended with it. In **Chapter 2: The Scopic Violence of Fortress Europe**, I delve deeper into the historical and political construction of the EU border regime in order to contextualize advancements in border surveillance and the visualizing technologies deployed therein, so as to situate NESTOR within a longer trajectory of EU border surveillance projects. In **Chapter 3: The "Next Generation": The Case of NESTOR**, I undertake a content analysis of the NESTOR project, exposing the techno-military underpinnings of its visualizing rationale and demonstrating the ways in which the project further intensifies the EU's practices and policies of border and migration securitization. I end my analysis with a gesture towards seeing otherwise by briefly introducing and examining Forensic Oceanography's 2014 audiovisual work *Liquid Traces: The Left-to-Die*



[43] Nicholas De Genova, "Migrant 'Illegality' and Deportability in Everyday Life," *Annual Review of Anthropology* 31 (2002): 421.

*Boat* as a potential form of countervisuality. I conclude with a deliberation on whether NESTOR represents rupture or continuity with extant EU bordering practices.

# Chapter 1: Visuality and the EU Border Regime

## 1.1 Introduction

On September 2nd, 2015, two-year-old Alan Kurdî drowned as he and his family attempted to cross the Mediterranean from the Turkish coast in the direction of the Greek island of Kos. The Kurdî family was Syrian, of Kurdish origin, and had come to Turkey from Kobane, a town in Syria that was being targeted by the Islamic State. His brother Galip and mother Rehana also died – only Alan's father, Abdullah, survived after the inflatable boat carrying them and a number of other passengers capsized.[44] When the boy's body was discovered face down on the shores of a beach near the Turkish town of Bodrum, Turkish photojournalist Nilüfer Demir took the haunting photos of the toddler that would become an "iconic representation"[45] of the suffering and violence of the so-called "European refugee crisis."

The photographs of Kurdî were frenetically circulated across print and social media, acquiring a virality previously not afforded to the troubling data and statistics that could already be found on the thousands of similarly forcibly displaced people – namely stateless Kurds, Iraqis, and Palestinians who were previously living in Syria.[46] The affective resonance of the images was deeply felt across the world: they elicited global outrage, outpourings of grief and shock, disbelief and desperation. It was precisely the photograph's "ability to shift the epistemic terrain of the migration discourse from numbers and statistics to an identifiable human with a face, a body, and



[44] Rebecca Adler-Nissen, Katrine Emilie Anderson, and Lene Hansen, "Images, Emotions, and International Politics: The Death of Alan Kurdi," *Review of International Studies* 46, no. 1 (2020): 75.
[45] Werner Binder and Bernadette Nadya Jaworsky, "Refugees as Icons: Culture and Iconic Representation," *Sociology Compass* volume 12, no. 3 (2018): 1-2.
[46] Tom Snow, "Visual Politics and the 'Refugee' Crisis: The Images of Alan Kurdi," in *Refuge in a moving world: Tracing refugee and migrant journeys across disciplines*, ed. Elena Fiddian-Qasmiyeh, (London: University College London, 2020): 166.

a life story"[47] that made it so powerful, and effectively thrust the so-called "European refugee crisis" – or rather, a crisis of racial capitalism and borders – into the public consciousness. The Kurdî photographs discursively consolidated (albeit temporarily) the framing of the so-called "refugee crisis" as a specifically humanitarian emergency, in contrast to other competing media and public discourses which hinged on securitized narratives of migrants as constituting a racialized threat to the economic, cultural, and political stability of European "host" countries. The images also had a significant political impact regarding national European border and migration policies: "then British Prime Minister David Cameron promised to 'fulfil our moral responsibilities' but gave no explicit details" announcing by September 7th that he would "accept a miserly 20,000 Syrian refugees over a five-year period (Ashdown, 2015)."[48] Two days earlier, the then German Chancellor Angela Merkel announced an open-door policy for Germany, putting no limit to the number of Syrians that could enter the country. However, the contemporaneous rise in far-right, fascistic Islamophobic groups in Germany and across Europe eventually forced the introduction of restrictions, and many other European states such as France, the Netherlands, Belgium, and Bulgaria followed suit.[49] Hungary erected fence along its border with Serbia, criminalized irregular crossings into the country, rejected asylum claims, and authorized the deployment of military forces – which were legally entitled to "use rubber bullets, tear gas grenades and pyrotechnical devices"[50] in pushback operations – to further secure and "defend" its borders.[51]



[47] Adler-Nissen, Anderson, and Hansen. "Images, Emotions, and International Politics," 76.
[48] Snow, "Visual Politics and the 'Refugee' Crisis," 169.
[49] Ibid., 169.
[50] Amnesty International. *Fenced Out. Hungary's violations of the rights of refugees and migrants*, (London: Amnesty International Publications, 2015): 5
[51] Ibid., 5.

I open this chapter with this vignette to illustrate what many others have incisively articulated in a variety of contexts: that "the visual has a pivotal role in both mediating and militarizing current border struggles."[52] The visual is significant on multiple, intersecting levels of migration governance: it inflects public, academic, and "expert" discourses and the general dissemination and circulation of knowledge about what goes on along migration routes. Images and other visual materials are "key social actants that interpellate us, shape our ways of thinking about and seeing the world, and can provoke various responses, as well as being symbolic force fields that condense and refract social and political relations."[53] They also construct, concretize, and sediment the very categories of "migrant" or "refugee." This was succinctly articulated in 1996 by Liisa Malkki, when she wrote, in her reflections on political violence and humanitarianism in the aftermath of the Rwandan genocide:

> The visual representation of refugees appears to have become a singularly translatable and mobile mode of knowledge about them. Indeed, it is not far-fetched to say that a vigorous, transnational, largely philanthropic traffic in images and visual signs of refugeeness has gradually emerged in the last half-century. Pictures of refugees are now a key vehicle in the elaboration of a transnational social imagination of refugeeness.[54]

The visual engenders the act of witnessing through the construction of a space or scene of spectatorship, in that there is an inevitable distance between what is experienced and what is presented to the viewer (mirroring in a sense the binary construction of the mythical Us vs. Them which underpins securitized/humanitarian border politics). There is no such thing as an unmediated visual – all visuals are produced and filtered through a variety of lenses which are constructed



[52] Anouk Madörin, "The View from Above at Europe's Maritime Borders: Racial Securitization from Visuality to Postvisuality," *European Journal of Cultural Studies* 23, no. 5 (2020): 699.
[53] Kurasawa, Fuyuki, "How does humanitarian visuality work? A conceptual toolkit for a sociology of iconic suffering," *Sociologica* 9, no. 1 (2015): 3.
[54] Liisa Malkki, "Speechless Emissaries: Refugees, Humanitarianism, and Dehistoricization," *Cultural Anthropology* volume 11, no. 3 (1996): 386.

according to what the author or photographer sees and what they mean to show. What makes it back to the public is a composite construction of a collective imaginary of migration, which in turn "secures hierarchies of gender, sexuality, and "race," essential to the functioning of bordered nation-states."[55] Public discourses and policy regarding migration have been profoundly impacted by the dissemination of visual materials – not only photographs, but we can add maps, data visualizations, documentaries, and other such forms that taken together comprise a veritable pillar of the European refugee regime, "that bundle of political-economic, governmental, and epistemic formations."[56]

The chapter is structured as follows. I will first delineate the ways in which scholars have engaged with the visual and, most notably, the issue of visual representation with regards to migration. Then I will define a key term that emerges out of the literature: visuality. Writing about the media interest around 2015 into the refugee camp by the port of Calais referred to as "the Jungle", Yasmeen Ibrahim and Anita Haworth utilize the terminology of *visuality* to refer to the "the cultural meanings consolidated in and as images"[57] – visuality is constituted by and simultaneously exceeds the actual image and the act of viewing, and refers to the material and discursive realities, infrastructures, ideologies, and conventions that mediate the image and the gaze(s) that inform its production. Crucially, the concept of visuality allows us to more closely investigate the materiality undergirding the representational – looking more so at the "visual infrastructure"[58] which informs and produces certain gazes, and what political implications of



[55] Anna Carastathis and Myrto Tsilimpounidi. *Reproducing refugees: Photographía of a crisis* (London: Rowman & Littlefield Publishers, 2020) vii.
[56] Heath Cabot, "The business of anthropology and the European refugee regime," *American ethnologist* 46, no. 3 (2019): 262.
[57] Yasmin Ibrahim and Anita Howarth, "Imaging the jungles of Calais: Media visuality and the refugee camp," *Networking Knowledge* 9, no. 4 (2016): 3.
[58] Rogier Van Reekum, and Willem Schinkel, "Drawing lines, enacting migration: Visual prostheses of bordering Europe," *Public culture* 29, no. 1 (2017): 44.

those ways of seeing. The concept of visuality enables me to attend to the ways in which the visual *inheres* the political: it produces political realities and must thus be conceptualized as a technology of power, a mode of governance. Engaging with visuality allows me to home in on the focus of my research which concerns another visual field within migration governance – the line of sight produced by the "view from above"[59] instantiated by border surveillance technologies and the bureaucratic or legal architecture which sanctions their use. In the final section of this chapter, I will offer an overview of the ways in which scholars studying border surveillance have conceptualized and built on visuality in their studies.

## 1.2 The Visual Politics of Migration

The gut-wrenching images of Kurdî on the beach and their dizzying virality produced a flurry of academic inquiry into the multifaceted ways in which they were received, circulated, and discursively instrumentalized. Important critiques were raised about the ways in which the photos' reception secured gendered and racialized hierarchies of deservingness and/or threat. Textually and visually, those who were attempting to settle in Europe were constructed as ambiguous figures "'suspended between victimhood and malevolence,"[60] discursively located within an ambivalent, seemingly contradictory dyadic structure in which they were represented "*at/as risk*."[61] In this way, as argued by Chouliaraki and Zaborowski, migrants appear "as abject bodies unable to participate in public discourse,"[62] for "neither the sufferer nor the evil-doer ultimately partake in the sphere of humanity."[63] Crucially, Gray and Franck claimed that such a representational logic

[59] Haraway, "Situated Knowledges," 590.
[60] Lilie Chouliaraki and Rafal Zaborowski, "Voice and community in the 2015 refugee crisis: A content analysis of news coverage in eight European countries," *International Communication Gazette* 79, no. 6-7 (2017): 613-635.
[61] Harriet Gray and Anja K. Franck, "Refugees as/at risk: The gendered and racialized underpinnings of securitization in British media narratives," *Security Dialogue* 50, no. 3 (2019): 279.
[62] Chouliaraki and Zaborowski, "Voice and community," 622.
[63] Ibid., 617.

was not, in fact, as contradictory as one might initially think, but was underpinned by a coherent set of mutually dependent and intertwined colonial logics of "racialized masculine threat and racialized feminine vulnerability."[64] Such deeply embedded logics rendered the haunting images of Alan Kurdî intelligible within a matrix that positions apolitical "women and children" as paradigmatically and essentially vulnerable, innocent, and therefore deserving of help,[65] thus sanctioning a humanitarian response that is contingent on its constitutive Other: the racializing securitized discourse of (masculine) migrants as threat. Furthermore, while the affective power of the images may have catalyzed an initial response from "the international community", through a perverse process which mirrors the colonial logics that inform the current border regime, Kurdî's being was objectified, commodified, and turned into a symbolic vessel through the rapid circulation of the photographs. While Kurdî's "death imagery possessed a life and momentum of its own propelled by its iconic status as the symbol of the Mediterranean refugee crisis,"[66] he could never be brought back to life, and the structures which led to his death were concealed by the spectacular media frenzy. His subjectivity, his personhood, was evacuated through a never-ending digital "resurrection."[67]

Scholars and researchers of migration and borders across a variety of disciplines who have engaged with the visual (e.g Hansen et al.,[68] Chouliaraki and Stolic,[69] Zhang and Hellmueller[70])

[64] Harriet Gray and Anja K. Franck, "Refugees as/at risk: The gendered and racialized underpinnings of securitization in British media narratives," *Security Dialogue* 50, no. 3 (2019): 279.
[65] Gray and Franck, "Refugees as/at risk," 280.
[66] Yasmin Ibrahim, "The unsacred and the spectacularized: Alan Kurdi and the migrant body," *Social Media + Society* 4, no. 4 (2018): 3.
[67] Ibid., 3.
[68] Lene Hansen, Rebecca Adler-Nissen, and Katrine Emilie Andersen, "The visual international politics of the European refugee crisis: Tragedy, humanitarianism, borders," *Cooperation and Conflict* 56, no. 4 (2021): 367-393.
[69] Lilie Chouliaraki and Tijana Stolic, "Rethinking media responsibility in the refugee 'crisis': A visual typology of European news," *Media, Culture & Society* 39, no. 8 (2017): 1162-1177.
[70] Xu Zhang and Lea Hellmueller, "Visual framing of the European refugee crisis in Der Spiegel and CNN International: Global journalism in news photographs," *International Communication Gazette* 79, no. 5 (2017): 483-510.

have largely focused on quantitative[71] and qualitative[72] content analyses of visual representations of migrants in local and international news coverage as well as social media[73], and their weaponization and attendant discursive ramifications, as well as the forms of responsibility they mobilize. Scholars have explored the ways in which particular visual framings and discursive strategies work to dehumanize[74] and Other[75] migrants. In their comprehensive 2017 study of European news, Chouliaraki and Stolic identify five major symbolic tactics of dehumanization - "massification, vilification, infantilisation, marginalisation or aestheticisation"[76] - through which "the refugee appears in Western spaces of publicity as a deeply ambivalent figure: a body-in-need, a powerless child, a racial 'other', a linguistic token or a sentimental drawing,"[77] never a political, agential subject. Other studies[78] have shown how such dehumanizing visuals "invite a politics of securitization, deportations, or border closures."[79] Researchers have examined how visual representations in media reporting have contributed to the public perception of increased migration as constituting an exceptional state of "crisis" and the bolstering of nationalist, anti-immigrant

[71] Ljiljana Saric, "Visual presentation of refugees during the "Refugee Crisis" of 2015–2016 on the online portal of the Croatian public broadcaster," *International Journal of Communication* 13 (2019): 991-1015; Javier J. Amores, Carlos Arcila Calderón, and Mikolaj Stanek, "Visual frames of migrants and refugees in the main Western European media," *Economics & Sociology* 12, no. 3 (2019): 147-161.
[72] Cigdem Bozdag and Kevin Smets, "Understanding the images of Alan Kurdi with 'small data': A qualitative, comparative analysis of tweets about refugees in Turkey and Flanders (Belgium)." *International Journal of Communication* 11 (2017): 4046–4069.
[73] Pavel Doboš, "Visualizing the European migrant crisis on social media: the relation of crisis visualities to migrant visibility," *Geografiska Annaler: Series B, Human Geography* 105, no. 1 (2023): 99-115.
[74] Rafal Zaborowski and Myria Georgiou, "Gamers versus zombies? Visual mediation of the citizen/non-citizen encounter in Europe's 'refugee crisis'," *Popular Communication* 17, no. 2 (2019): 92-108.
[75] Jari Martikainen and Inari Sakki, "Visual (de) humanization: construction of Otherness in newspaper photographs of the refugee crisis," *Ethnic and Racial Studies* 44, no. 16 (2021): 236-266.
[76] Chouliaraki and Stolic, "Rethinking media responsibility," 1173.
[77] Ibid., 1173.
[78] Caroline Lenette and Natasa Miskovic, "'Some viewers may find the following images disturbing': Visual representations of refugee deaths at border crossings," *Crime, Media, Culture* 14, no. 1 (2018): 111-120; Roland Bleiker, David Campbell, Emma Hutchison, and Xzarina Nicholson, "The visual dehumanisation of refugees." *Australian journal of political science* 48, no. 4 (2013): 398-416.
[79] Martikainen and Sakki, "Visual (de) humanization," 238.

politics.[80] Particularly after the global response to the Kurdî photographs, scholars have focused on the iconicity[81] of certain images and their affective potential, and the ways in which they engender a distant spectatorship of suffering. Broadly, scholars[82] argue that visual representations vacillated ambivalently, and in complex, heterogeneous ways along gendered and racialized lines, between "the humanitarian logics of protection and the securitizing rhetoric of deterrence [which] mutually reinforce each other."[83] As Holzberg et al. argue, this tension "directly mirrors and extends the humanitarian securitization of European borders (Vaughan-Williams, 2015) into public discourse."[84]

Scholars have also focused on other visual media genres aimed at representing migration, such as data visualizations[85] and maps.[86] Focusing on the dominant cartographic practices utilized to represent the movement of "undocumented migrants"[87] van Houtum and Bueno Lacy take to task "the migration map," insisting that maps "are not merely a reflection of power but *power itself*: visual statements and narratives about the political topics they picture or, in other words,

[80] Berry, Mike, Inaki Garcia-Blanco, and Kerry Moore. *Press coverage of the refugee and migrant crisis in the EU: A content analysis of five European countries*. Geneva: United Nations High Commissioner for Refugees, 2016.
[81] Werner Binder and Bernadette Nadya Jaworsky, "Refugees as icons: Culture and iconic representation," *Sociology Compass* 12, no. 3 (2018): 1-14; Mette Mortensen and Hans-Jörg Trenz, "Media morality and visual icons in the age of social media: Alan Kurdi and the emergence of an impromptu public of moral spectatorship," *Javnost-The Public* 23, no. 4 (2016).
[82] Billy Holzberg, Kristina Kolbe, and Rafal Zaborowski, "Figures of crisis: The delineation of (un) deserving refugees in the German media," *Sociology* 52, no. 3 (2018): 534-550; Heidrun Friese, "Representations of gendered mobility and the tragic border regime in the Mediterranean," *Journal of Balkan and near eastern studies* 19, no. 5 (2017): 541-556; Pierluigi Musarò, "Mare Nostrum: the visual politics of a military-humanitarian operation in the Mediterranean Sea," *Media, Culture & Society* 39, no. 1 (2017): 11-28.
[83] Holzberg, Kolbe, and Zaborowski, "Figures of crisis," 536.
[84] Nick Vaughan-Williams, *Europe's border crisis: Biopolitical security and beyond* (Oxford: Oxford University Press, 2015), quoted in Holzberg, Kolbe, and Zaborowski, "Figures of crisis," 536.
[85] Roopika Risam, "Beyond the migrant "problem": Visualizing global migration," *Television & New Media* 20, no. 6 (2019): 566-580; Giacomo Toffano and Kevin Smets, "Migration Trail: Exploring the Interplay Between Data visualisation, Cartography and Fiction," *Research Methodologies and Ethical Challenges in Digital Migration Studies: Caring For (Big) Data?* (2022): 87-112.
[86] Paul C. Adams, "Migration maps with the news: Guidelines for ethical visualization of mobile populations," *Journalism Studies* 19, no. 4 (2018): 527-547.
[87] Henk Van Houtum and Roos Pijpers, "The European Union as a gated community: the two-faced border and immigration regime of the EU," *Antipode* 39, no. 2 (2007): 292.

visual discourses."[88] They address maps produced by Frontex, the European Border and Coast Guard Agency, arguing that "the viewer is ultimately exposed to a visual composition in which a threatening invasion of migrants is taking over a defenceless EU"[89] when confronted with a graphic in which exaggerated, "colossal arrows [travel] unimpeded across the Afro-Asian landmasses" to breach European borders. In a similar vein, Stachowitsch and Sachseder[90] interpret Frontex maps as constituting a crucial pillar in Frontex's framing of migration as an "exceptional, often militarized threat scenario"[91] and security risk. In their analysis of Frontex's 2016 Annual Risk Analysis Report (RAR), which occupies a central function in Frontex's operations, the scholars counted "no less than 18 maps visualizing the EU external borders, sometimes as being overridden by large arrows, or EU member states disappearing behind ever widening circles representing immigration numbers."[92] Finally, Laura Lo Presti[93] investigates the maps and cartographic images which permeate visual regimes of migration and borders. She explores three particular mapping forms - low-operational, evocative, and forensic mapping - to show the ways in which "maps produce, expose or evoke the necropolitics of the Mediterranean Sea,"[94] a space in which "the border enclosure of the land and strategy of deferring rescue operations at sea conjoin to create a concerted right to kill."[95] In her work, Lo Presti argues that "engaging critically with mapping demands a deep understanding of the intentions, methods, and visuality (namely the

[88] Henk Van Houtum and Rodrigo Bueno Lacy, "The migration map trap. On the invasion arrows in the cartography of migration," *Mobilities* 15, no. 2 (2020): 196.
[89] Ibid., 213.
[90] Saskia Stachowitsch and Julia Sachseder, "The gendered and racialized politics of risk analysis. The case of Frontex," *Critical studies on security* 7, no. 2 (2019): 107-123.
[91] Ibid., 113.
[92] Ibid., 113.
[93] Laura Lo Presti, "Terraqueous Necropolitics: Unfolding the low-operational, Forensic, and Evocative Mapping of Mediterranean Sea Crossings in the Age of Lethal Borders," *ACME: An International E-Journal for Critical Geographies* 18, no. 6 (2019): 1347-1367.
[94] Ibid., 1347.
[95] Ibid., 1349.

political, cultural, and phenomenological contexts) in which this death exposure occurs"[96] which brings us back to a key term – visuality.

## 1.3 Defining Visuality

It is largely posited that the primacy of the sensory system of sight – the "persistence of vision,"[97] as Donna Haraway put it – is what distinguishes Western modernity as a historical (and historiographical) project and era from its "premodern predecessors."[98] This claim is certainly not without its critics – it can be argued that investing so much time and space to theorizing modernity's ocularcentrism overdetermines its actual might. Nevertheless, vision (and visuality) has been historically instrumental for the formation of colonial empires, whose enduring legacies shape our current realities and contemporary processes of migration. From colonial cartography[99] to the voyeuristic televising of the United States' bombing of Iraq during Operation Desert Storm[100], "the eyes have been used to signify a perverse capacity – honed to perfection in the history of science tied to militarism, capitalism, colonialism, and male supremacy – to distance the knowing subject from everybody and everything in the interests of unfettered power."[101]

It is this very project, of attempting to investigate the "the situation of vision […] within Western modernity"[102] that motivated the disciplinary formation of the study of visual culture in

[96] Ibid., 1360.
[97] Donna Haraway, "Situated knowledges," 581.
[98] Martin Jay, "Scopic Regimes of Modernity," in *Vision and Visuality*, ed. Hal Foster, (New York: Dia Art Foundation, 1988), 3.
[99] Tamara Bellone, Salvatore Engel-Di Mauro, Francesco Fiermonte, Emiliana Armano, and Linda Quiquivix, "Mapping as tacit representations of the colonial gaze," in *Mapping crisis: Participation, datafication and humanitarianism in the age of digital mapping,* ed. Doug Specht, (London: University of London Press, 2020): 17-38.
[100] Allen Feldman, "On cultural anesthesia: From desert storm to Rodney King," *American ethnologist* 21, no. 2 (1994): 407.
[101] Haraway, "Situated knowledges," 581.
[102] Nicholas Mirzoeff, "On visuality," *Journal of visual culture* 5, no. 1 (2006): 54.

the late 20th century, and which "gained one of its signature impulses"[103] from Hal Foster's edited volume *Vision and Visuality*. *Vision and Visuality* gave new critical weight to the terminology of visuality and is often the text most cited by scholars engaging with the concept today. Vision, for Foster, entails the "physical operation"[104] of sight; visuality pertains to "sight as a social fact", or "how we see, how we are able, allowed, or made to see, and how we see this seeing or the unseen therein."[105] This also brings to mind John Berger's famous expression "ways of seeing", or the ways in which images are ideologically loaded and encoded, and how our viewing practices are "affected by what we know and what we believe."[106] Which "we" is interpellated in these definitions – which structures of power produce (and are in turn produced by) a seeing subject, who can claim the "right to look"[107] – is but one question that visuality, a "socialized and historicized vision,"[108] seeks to problematize and ascertain. Visuality thus exceeds, or is not reducible to, that which is immediately perceptual, *visible*; it constitutes an unstable cultural imaginary "created from information, images, and ideas."[109] Nor is visuality wholly distinguishable from vision – although I quoted Foster earlier as writing that vision is a physiological process, he argues for a dialectical relationship between vision and visuality, such that the process of seeing, of perceiving the material reality before one's eyes, is never fully divorced from the social and cultural forces which inform what it is that we should pay attention to and what, in turn, we should ignore.

[103] Ibid., 54.
[104] Hal Foster, *Vision and Visuality*, (New York: Dia Art Foundation, 1988), ix.
[105] Foster, *Vision and Visuality*, ix.
[106] John Berger, *Ways of seeing*. (London: Penguin Modern Classics, 2008), 8.
[107] Nicholas Mirzoeff, *The Right to Look: A Counterhistory of Visuality*, (Durham: Duke University Press, 2011), 1.
[108] Tamara Shepherd, "Mapped, measured, and mined: The social graph and colonial visuality," *Social Media + Society* 1, no. 1 (2015): 1-2.
[109] Mirzoeff, *The Right to Look*, 2.

Visual culture theorist Nicholas Mirzoeff expands upon and historicizes technologies and techniques of visuality, and the development of the term itself, in his 2006 keyword entry for the "Journal of Visual Culture" and his 2011 book *The Right to Look: A Counterhistory of Visuality*. Mirzoeff reminds that the language of visuality, and related vocabulary such as *visualize*, are not purely postmodern theoretical constructs or "trendy word[s] meaning the totality of all visual images and devices."[110] Indeed, they have a much longer history, going back to the Scottish historian Thomas Carlyle, who initially coined the term in the late 1830s. In more precisely historically locating visuality's lexical development, Mirzoeff reveals the ways in which these terms "are themselves rife with tensions and entangled in the history of oppressive Western regimes' will to power."[111] Carlyle was writing at a time when various emancipatory struggles were sweeping across Europe – visuality, in his theorizations, referred to:

> what he [Carlyle] called the tradition of heroic leadership, which visualizes history to sustain autocratic authority. In this form, visualizing is the production of visuality, meaning the making of the processes of history perceptible to authority. This visualizing was the attribute of the Hero and him alone.[112]

Visuality was thus articulated as a fundamentally masculine domain, embodied in the seeing Great Man, a modern imperialist hero who could visualize history. But prior to visuality being named as such, Mirzoeff argues that, as a technology of power in/of Western racial capitalism and modernity,[113] visuality was honed on the slave plantations, deployed by the figure of the surveilling overseer, "operating as the surrogate of the sovereign."[114] In this schema we can already see Haraway's "god trick"[115] (which will come back later in this thesis when discussing surveillance



[110] Ibid., 2.
[111] Danyel M. Ferrari, "Visibilizing Vulnerabilities: The Temporality of "Awareness Raising" Memorials and the Making of the Always-Already Lost," (MA thesis, Central European University, 2016) 7.
[112] Nicholas Mirzoeff, "The right to look," *Critical Inquiry 37*, no. 3 (2011): 473-496.
[113] Mirzoeff, *The Right to Look,* 2.
[114] Ibid., 2.
[115] Haraway, "Situated Knowledges," 581.

and the use of drones) at play – the power of "seeing everything from nowhere"[116] is embodied by the sovereign who deputizes the overseer in his place. Visuality is operationalized first:

> by naming, categorizing, and defining, a process defined by Foucault as "the nomination of the visible." It was founded in the plantation practice, from the mapping of plantation space to the identification of cash-crop cultivation techniques and the precise division of labor required to sustain them. Second, visuality separates the groups so classified as a means of social organization. Such visuality separates and segregates those it visualizes to prevent them from cohering as political subjects, such as the workers, the people, or the (decolonized) nation. Third, it makes this separated classification seem right and hence aesthetic.[117]

We could extend this series of operations – naming, categorizing, defining, separating, aestheticizing – to the workings of the EU border regime. Populations are segmented into discursively constructed categories of "migrant," "asylum seeker," "refugee," "undocumented" or "illegal" according to differentiated legal frameworks and administrative structures, which "produce different subjects whose movements are to be monitored, facilitated, restricted, or inhibited"[118] depending on the ways in which they have been separated. These processes are validated and rendered legitimate, "right," through "the mere fact of border and immigration enforcement [which] systematically activates the spectacle of 'violations' that lend 'illegality' its fetishistic objectivity,"[119] a scenario which Nicholas De Genova terms the "Border Spectacle."

Classifying, separating, and aestheticizing constitute articulations of power, governance, and subjection which, per Mirzoeff, taken together form a "complex of visuality."[120] Mirzoeff devises a schematic in which he identifies three major complexes of visuality which have formed and dominated throughout modernity: that of the plantation complex which sustained Atlantic



[116] Ibid., 581.
[117] Mirzoeff, *The Right to Look*, 2.
[118] Amade M'charek, Katharina Schramm, and David Skinner, "Topologies of race: Doing territory, population and identity in Europe," *Science, Technology, & Human Values* 39, no. 4 (2014): 470.
[119] Nicholas De Genova, "Spectacles of migrant 'illegality': the scene of exclusion, the obscene of inclusion," *Ethnic and Racial Studies* 36, no. 7 (2013): 1183.
[120] Mirzoeff, *The Right to Look*, 4.

slavery, moving to the "imperialist complex" and finally to the "military-industrial complex."[121] Visuality is a "discursive practice for rendering and regulating the real"[122] – it entails the production and legitimation of political power. Importantly, a complex generates *countervisualit[ies]*: a resistance to hegemonic gazes which enacts a "performative claim of a right to look where none technically exists."[123] The right to look entails a struggle over reality: the right to name violence as such, the right to claim one's subjectivity and autonomy, efforts which have and continue to animate liberation struggles – postcolonial, feminist, queer (to name but a few). In the following section I will delineate how certain scholars of EU migration and borders engage with visuality, and which "complexes," or regimes, they identify and theorize.

## 1.4 The Visuality of Border Surveillance

Of course, it is not only photographs or (static) images that propagate and inform the visual politics of migration. Visualizing surveillance technologies and the legal and administrative architecture that enables their use constitute and engender another gaze which contributes to the construction of a "visual economy"[124] of migration and migrants and their management at sea and on land. Dijstelbloem, van Reekum, and Schinkel argue that "[s]urveillance at sea has long had a major role in the events that make up the *visuality* of clandestine transit, territory, border patrolling, human smuggling, migration monitoring and the spectacle of illegality [emphasis added]."[125] I have so far delineated the centrality of the visual in the construction of migration – as an imaginary, as a crisis, as a situation to be managed. As images of migrants circulate and proliferate,



[121] Ibid., 8.
[122] Mirzoeff, "The Right to Look," 476.
[123] Ibid., 478.
[124] Anna Carastathis and Myrto Tsilimpounidi. *Reproducing refugees: Photographía of a crisis* (London: Rowman & Littlefield Publishers, 2020) vii.
[125] Huub Dijstelbloem, Rogier Van Reekum, and Willem Schinkel, "Surveillance at sea: The transactional politics of border control in the Aegean," *Security Dialogue* 48, no. 3 (2017): 226.

"oscillating from representations of migrants as a horde ready to 'invade' the shores of Europe to epidemic accounts of the mortality caused by their crossings,"[126] concurrently the European Union "is intensifying its electronic frontier through unmanned aerial vehicles or drones."[127] Visuality offers a particularly potent framework to think through the effects of the surveillance technologies – and discursive/administrative/bureaucratic architecture which sanctions their use – employed in the contested race to render migration visible and visualizable, knowable, and thus "governable."[128]

Researchers of migration governmentality have engaged with the concepts of visuality, visibility, and questions of sight within the specific surveillance context largely through their studies of EUROSUR, the European Border Surveillance system initiative. Formally launched in October 2013 (but having been in the works for half a decade prior[129]), EUROSUR was envisioned to be "the system of the systems,"[130] a comprehensive framework for information exchange and cooperation between EU member states to:

> improve their situational awareness and reaction capability at the external borders of the Member States of the Union ('external borders') for the purpose of detecting, preventing and combating illegal immigration and cross-border crime and contributing to ensuring the protection and saving the lives of migrants.[131]

[126] Laura Lo Presti, "Terraqueous Necropolitics: Unfolding the low-operational, Forensic, and Evocative Mapping of Mediterranean Sea Crossings in the Age of Lethal Borders," *ACME: An International E-Journal for Critical Geographies* 18, no. 6 (2019): 1348.
[127] Madörin, "'The view from above'," 698.
[128] Michel Foucault, *Security, Territory, Population: Lectures at the Collège de France, 1977–1978* (New York: Palgrave Macmillan, 2007).
[129] Charles Heller and Chris Jones, "Eurosur: saving lives or reinforcing deadly borders?," *Statewatch,* February 1, 2014, https://www.statewatch.org/statewatch-database/eurosur-saving-lives-or-reinforcing-deadly-borders-by-charles-heller-and-chris-jones/.
[130] Martina Tazzioli and William Walters, "The sight of migration: Governmentality, visibility and Europe's contested borders," *Global society* 30, no. 3 (2016): 455.
[131] Regulation (EU) No 1052/2013 of the European Parliament and of the Council of 22 October 2013 establishing the European Border Surveillance System (Eurosur). Eur-Lex. Accessed June 11, 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1052#:~:text=This%20Regulation%20establishes%20a%20common,borders')%20for%20the%20purpose%20of.

Such wording plainly illustrates a militarized, security-driven border politics, with human life (and the right to mobility) a secondary (if that) priority. Coordinated primarily by Frontex, EUROSUR has furnished the already well funded European Border and Coast Guard Agency with even more surveillance capabilities, funding, and infrastructure – such as biometric technologies, human detection sensors, drones, and satellite tracking systems – necessary to "protect" and "secure" the EU's external borders. In addition, Search and Rescue (SAR) responsibilities were explicitly excluded from EUROSUR's scope in the initial proposal – this was somewhat amended through several ensuing amendments, with the most recent 2021 regulation stating that "in addition to existing obligations under international law, Member States will have to *report incidents and operations related to* Search and Rescue."[132] Again, the language is vague, and does not include an active directive for EU member states and their various agencies and coast guards to carry out SAR activities.

Cultural studies scholar Joseph Pugliese examines the ways in which the surveillance and identification technologies I mention above – and the legislation which prescribes the deployment of these technologies such as EUROSUR – constitute "regimes of statist visuality that produce both symbolic and physical forms of violence for their target subjects"[133] across the EU and Australian border regimes. Pugliese defines visuality, in this particular context statist visuality, as the "discursively mediated ways of seeing enabled by the state and its laws."[134] Such "embodied discursive practices"[135] have significant implications not only for what is seen, but which actions

[132] "Border management: New Eurosur regulation improves cooperation between Member States and Frontex," European Commission - Home Affairs, April 9, 2021, accessed June 11, 2023, https://home-affairs.ec.europa.eu/news/border-management-new-eurosur-regulation-improves-cooperation-between-member-states-and-frontex-2021-04-09_en.
[133] Joseph Pugliese, "Technologies of extraterritorialisation, statist visuality and irregular migrants and refugees," *Griffith Law Review* 22, no. 3 (2013): 571.
[134] Pugliese, "Technologies of extraterritorialisation," 571.
[135] Ibid., 572.

are then taken. Within a statist regime of visuality, people on the move are dehumanized – "statist regimes of visuality anatomise the bodies of target subjects by digitally seizing the corporeal attributes that serve to individuate and identify them"[136] – illegalized and objectified as threats and symbols of crisis. The subsequent pushbacks, detention, deportations, and further immobilization (which also occur along migration routes and not only at a border) are meted out, according to Pugliese, in order to "biopolitically preclude and control the entry of irregular migrants, refugees and asylum seekers from the global South."[137]

At the heart of EUROSUR's operational framework is the notion of "situational awareness" and the "situational picture," through which we can grasp the centrality of the visual within the border regime. Within Regulation (EU) No 1052/2013 of the European Parliament and of the Council, published on 22 October 2013 effectively establishing EUROSUR as a primary framework for border control, situational awareness is defined as the ability to:

> monitor, detect, identify, track and understand illegal cross-border activities in order to find reasoned grounds for reaction measures on the basis of combining new information with existing knowledge, and to be better able to reduce loss of lives of migrants at, along or in the proximity of, the external borders.[138]

Situational awareness is attained through the composition of the "situational picture," a "graphical interface to present near-real-time data and information received from different authorities, sensors, platforms and other sources"[139] which is distributed across a plethora of information and communication channels amongst the various agencies that constitute the EU border apparatus. Migration is semantically and visually abstracted to signify "situations" or "events" – this is what



[136] Ibid., 572.
[137] Ibid., 571.
[138] Regulation (EU) No 1052/2013 of the European Parliament and of the Council of 22 October 2013 establishing the European Border Surveillance System (Eurosur). Eur-Lex. Accessed June 11, 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1052#:~:text=This%20Regulation%20establishes%20a%20common,borders')%20for%20the%20purpose%20of
[139] Ibid.

the system can and seeks to register. Pugliese reads situational awareness as signaling "the state's aspiration to visual and cognitive omniscience over the territory encompassed by its borders."[140] This is, however, an impossibility – and it is starkly illuminated by the gaps and glitches in which migrant boats, especially smaller vessels which do not show up on coast guards' radars, do not register in EUROSUR databases.

While Pugliese's statist regimes of visuality take on a panoptic, all-seeing character, Dijstelbloem et al., argue that "[p]resupposing coherence in surveillance compositions would threaten to adopt the rhetoric of technological advancement with which Eurosur and comparable systems are praised,"[141] thereby obscuring the ways in which the visuality of illegalized migration is a profoundly contested field, in which the "objects" of surveillance – human subjects – wrestle with and resist the practices of visualization which capture and illegalize them. As such, visuality in migration is not purely defined by a politics of dominance, immobilization, and control – Dijstelbloem et al. contend that "border surveillance opens up a particular kind of politics we have termed 'transactional'."[142] They are transactional, or contested, in that the actions of migrants, who must be conceptualized as political subjects rather than pure objects[143] of vision, determine what can be visualized. For instance,

> emergencies could be provoked by slashing a rubber boat with knives, jumping in the water, capsizing a vessel. In any event, no longer does the patrol boat survey 'illegal migrants' and 'control a border'; it now witnesses an emergency and, as such, is legally obligated, according to the same agreements that recognize sovereign territoriality at sea, to initiate a SAR operation[.][144]



[140] Pugliese, "Technologies of extraterritorialisation," 576.
[141] Dijstelbloem, Van Reekum, and Schinkel, "Surveillance at sea," 228.
[142] Ibid., 236.
[143] Stephan Scheel, "Studying embodied encounters: Autonomy of migration beyond its romanticization," *Postcolonial Studies* 16, no. 3 (2013): 279-288.
[144] Dijstelbloem, Van Reekum, and Schinkel, "Surveillance at sea," 232.

In this way, migrants can strategically subvert and appropriate the surveillance technologies which seek to deter them to instead initiate a chain of events which could potentially lead to their assistance. This could be conceptualized as an instigation of countervisuality: the strategic renegotiation of the visual field to proclaim: "we are here, we are distress, and you must now see and witness our distress at hands of your borders regime." However, as we will see in my analysis of Forensic Oceanography's work on the *Left-to-Die Boat*, which will come later in this thesis, assistance requires a political will on the parts of states which is frequently (arguably intentionally) absent: if it requires more capital and manpower to initiate SAR, states may in fact be unwilling to register the boat or group of people in question, thus absolving themselves of responsibility.

The language of graphical interfaces and the digital seizure of migrants through surveillance technologies brings us to Anouk Madörin's work on *postvisuality*. Madörin argues that the "view from above" generated by the intensified use of unmanned aerial vehicles (UAVs), remote piloted aircrafts and satellite remote sensing enables the working together of the "scopic/visual/ocular" and the "digital/algorithmic,"[145] which "installs the conditions under which refugees' data doubles become more valuable than their lives."[146] The use of aerial surveillance with the goal of enhancing migrants' visibilities is primarily intended for the extraction of data and knowledge about migrants and migration rather than increasing search and rescue capacities: in the racialized (or rather, racializing) European border-security complex, migrants' movements are reduced to commodities, statistical probabilities, and deviations, their subjectivities harnessed as "content providers for a (scientific) surplus-driven white male and sexualized gaze."[147] Madörin sees postvisuality as emerging from the fusion of screen and image, the "entanglement of image

[145]Anouk Madörin, "'The view from above',"699.
[146] Ibid., 700.
[147] Ibid., 699.

and code,"[148] such as in EUROSUR's graphical interface. While the graphical interface's ostensible goal is to paint a comprehensive picture of what is taking place on the ground, its real value lies in the way it transmutes human corporeality into data, which creates the imperative for further investment into sophisticated surveillance technologies.

## 1.5 Conclusion

As van Reekum and Schinkel write: "issues of visualization and visuality are hardly secondary to or reflective of a bordered world. Border management must intervene in how we look at and perceive the world in order to even begin to manage anything."[149] In the sections above, I first outlined the history and various definitions of the concept of visuality proposed in the literature, and then demonstrated its relevance to the EU's approach to its bordering practices, particularly within the domain of border surveillance. In the next chapter I delve more deeply into the historical developments of the EU border regime and the processes and practices which have contributed to border surveillance's current state.



[148] Ibid., 700.
[149] Van Reekum and Schinkel, "Drawing lines, enacting migration," 33.

# Chapter 2: The Scopic Violence of Fortress Europe

## 2.1 Introduction

In the previous chapter I explored visuality as a theoretical concept and the ways in which scholars have engaged with it to explore the politics of migration and the EU border regime. While the "spectacular"[150] and sensationalized imagery and visuals of crowded boats and bright orange life vest strewn across beaches consolidated the framing of the "long summer of migrations"[151] of 2015 as representing a "refugee crisis," they effectively obscured what was actually transpiring – "a crisis of the border regime."[152] In this chapter I will offer a partial overview of the shifts and changes over the last two decades in EU "bordering practices"[153] and parallel developments in border surveillance, in order to better situate my analysis and to offer an understanding of the historical trajectory that has led us to where we are today.

## 2.2 Reconceptualizing "the Border"

The fall of the Berlin Wall, the subsequent dissolution of the Soviet Union, associated utopian discourses of accelerated globalization and interconnectedness: the late 20th century saw the ontological and epistemological "denaturalization of the border,"[154] and the European Union (EU), which emerged as a supranational governing entity, was regarded by some scholars as a "paradigmatic laboratory"[155] for examining contemporary migration and border struggles in the

[150] De Genova, "Spectacles of migrant 'illegality'," 1187.
[151] Bernd Kasparek and Marc Speer, "Of Hope: Hungary and the Long Summer of Migration," *bordermonitoring.eu*, September 9, 2015, https://bordermonitoring.eu/ungarn/2015/09/of-hope-en/
[152] Sabine Hess and Bernd Kasparek, "Under control? Or border (as) conflict: Reflections on the European border regime," *Social Inclusion* 5, no. 3 (2017): 59.
[153] Noel Parker and Nick Vaughan-Williams, "Critical border studies: Broadening and Deepening the 'Lines in the Sand' Agenda," *Geopolitics* 17, no. 4 (2012): 727.
[154] William Walters, "Mapping Schengenland: denaturalizing the border." *Environment and planning D: society and space* 20, no. 5 (2002): 561.
[155] Hess and Kasparek, "Under control? Or border (as) conflict," 60.

"post-Westphalian global order."[156] With the Schengen agreement of 1985 internal border controls were abolished to facilitate trade and promote freedom of mobility for the signatory countries' nationals, reconfiguring notions of citizenship, nation, and belonging. The supranational EUropean[157] project thus instigated a conceptual and political dilemma: its borders could no longer be conceived of as the classic geopolitical "lines in the sand" which demarcate the territorial and political sovereignty of the nation-state. In light of these changes, Étienne Balibar famously proclaimed that borders "are dispersed a little everywhere"[158] and that Europe in fact constitutes a "borderland"[159] of contradictions:

> 'Borderland' is the name of the place where the opposites flow into one another, where 'strangers' can be at the same time stigmatized and indiscernible from 'ourselves', where the notion of citizenship, involving at the same time community and universality, once again confronts its intrinsic antinomies.[160]

This newly configured political space, the borderland of the "inside," necessarily demarcated an uneasy and unstable "outside," a constitutive Other which could not indulge in the same privileges of mobility, citizenship, and belonging. Thus, a concomitant "(re)bordering"[161] was required – the creation of a "notion of an 'external border' as the pivotal mechanism and space for migration control."[162] For Bernd Kasparek, "Schengen thus mark[ed] the birth of the European



[156] Ibid., 60.
[157] Nick Vaughan-Williams writes: The term 'EUrope' is used […] in order to acknowledge that the spatial and legal limits of the 'European Union' are related to but not coterminous with that of 'Europe.'" Nick Vaughan-Williams, *Europe's border crisis: Biopolitical security and beyond*, (Oxford: Oxford University Press, 2015), 14.
[158] Balibar, "World Borders, Political Borders," *PMLA* 117, no. 1 (2002): 71-78.
[159] Balibar, "Europe as borderland*," Environment and planning D: Society and space* 27, no. 2 (2009): 210.
[160] Ibid., 210.
[161] Rutvica Andrijasevic and William Walters, "The International Organization for Migration and the international government of borders," *Environment and Planning D: Society and Space* 28, no. 6 (2010): 977.
[162] Hess and Kasparek, "Under control? Or border (as) conflict," 60.

External Border as an institution and European policy field."[163] When "Schengenland"[164] was incorporated into EU law through the 1999 Treaty of Amsterdam,

> [t]he process resulted in the creation of an "area of freedom, security and justice" […] and the parallel construction of the European border regime as a fluid, multi-scalar assemblage involving European Union agencies such as Frontex (the European border and coast guard agency), bodies of European law (like the Common European Asylum System. CEAS), processes of standardizations and harmonizations especially in the field of border management (called "Integrated Border Management"), a growing military-industrial-academic complex largely funded by the EU (Lemberg-Pedersen, 2013), alongside more traditional national apparatuses of migration control that had evolved since the 1970s and a flexible involvement of IGOs (international and intergovernmental organizations, such as the UNHCR or the IOM).[165]

In the description above, Hess and Kasparek employ the concept of the "border regime," which they conceive of as "a space of conflict and contestation between the various actors trying to govern the border and the movements of migration—without minimizing the border regime's brutality."[166] They engage with a Foucauldian understanding of the *regime*, "as a dynamic and somehow contingent apparatus based on laws and regulations, institutions, techniqual [sic] devices, moral beliefs and representations, discourses, actors, and practices."[167] For these two scholars, migration is a constitutive, "central structural condition"[168] for the existence and propagation of borders – as it is in a similar way for Mezzadra and Neilson, for whom borders are understood as "social institutions, which are marked by tensions between practices of border reinforcement and border crossing."[169] Making migration a focal node in analyses of borders



[163] Bernd Kasparek, "Complementing Schengen: The Dublin system and the European border and migration regime," *Migration policy and practice: Interventions and solutions* (2016): 61.
[164] Walters, "Mapping Schengenland," 561.
[165] Hess and Kasparek, "Under control? Or border (as) conflict," 60.
[166] Ibid., 60.
[167] Ibid., 60.
[168] Ibid., 60.
[169] Sandro Mezzadra and Brett Neilson, *Border as Method, or, the Multiplication of Labor,* (Durham: Duke University Press, 2013): 3, quoted in Sabine Hess and Bernd Kasparek, "Under control? Or border (as) conflict," 59.

"points to the intrinsic structural fragility of the border regime"[170]: borders will always be challenged and contested by those crossing it, as articulated by the "autonomy of migration" approach, which treats migration as a "co-constitutive factor of the border."[171]

## 2.3 Neighbors of Neighbors: The Fortification of the External Border

The EU's creation of an internal market for the free circulation of goods, people, and capital conflicted with "with a continued biopolitical will to control the movements of people,"[172] particularly from non-Schengen states. What followed was the fortification and securitization of the EU's external border, principally through the paradigm of "border externalization."[173] Border externalization is more concretely defined as "the process of territorial and administrative expansion of a given state's migration and border policy to third countries"[174] – in other words, non-EU countries – a process based on "the direct involvement of the externalizing state's border authorities in other countries' sovereign territories, and the outsourcing of border control responsibilities to another country's national surveillance forces."[175] Two policy frameworks were essential to the consolidation of the phenomenon of border externalization: the European Neighbourhood Policy (ENP), which was initiated in 2004, and the Global Approach to Migration (GAM), which first appeared in official documents in 2005.[176] The ENP pertained to countries located in Europe and in its immediate vicinity, "just outside the current official limits of the EU: all North African and Eastern Mediterranean countries, parts of Eastern Europe and the Caucasian

[170] Hess and Kasparek, "Under control? Or border (as) conflict," 60.
[171] Ibid., 60.
[172] Ibid., 60.
[173] Maribel Casas, Sebastian Cobarrubias, and John Pickles, "Stretching borders beyond sovereign territories? Mapping EU and Spain's border externalization policies," *Geopolitica (s)* 2, no. 1 (2010): 77.
[174] Casas-Cortes et al., "New keywords: Migration and borders," *Cultural studies* 29, no. 1 (2015): 73.
[175] Ibid., 73.
[176] Casas et al., "Stretching borders beyond sovereign territories?," 78-79.

states."[177] Besides "generating a geographical imaginary where border and migration management is being rethought,"[178] one of the ENP's primary objectives was to involve these neighboring countries in joint border control operations "and to allow joint border management agencies to operate within their territories."[179] The Global Approach to Migration (GAM) was "the first pan-EU, multi-year process to concretely talk about the need to cooperate on migration and border management across destination, transit and origin countries."[180] It specifically centered on the issue of migration and border management, and even further extra-territorialized and externalized the EU border, in that it enfolded not only neighboring countries, but the "'neighbours of neighbours',"[181] by following the concept of "migratory routes"[182] which enfolds the entire itinerary of origin and transit countries through which migrants move into the framework's scope. Thus emerges a heterogenous, transnational assemblage of agencies, private and public actors, policies, ICT systems, and policing and security measures, all geared towards strengthening the EU's external border in an increasingly securitized framework and preventing third-country nationals from even reaching, never mind crossing, it. Many scholars[183] have incisively studied the violent, often fatal repercussions of border externalization policies and practices. In her research on the "'out-sourcing' and 'off-shoring' of EUrope's border-work"[184] to Libya, Luiza Bialasiewicz writes that "EUrope's neighbours are, in other words, becoming EUrope's

[177] Ibid.,78-79.
[178] Ibid.,79.
[179] Ibid., 79.
[180] Ibid., 80.
[181] Ibid., 80.
[182] Ibid., 80.
[183] Xavier Ferrer-Gallardo, and Lorenzo Gabrielli, "The Ceuta Border Peripeteia: Tasting the Externalities of EU Border Externalization," *Journal of Borderlands Studies* 37, no. 3 (2022): 645-655; Bill Frelick, Ian M. Kysel, and Jennifer Podkul, "The impact of externalization of migration controls on the rights of asylum seekers and other migrants," *Journal on Migration and Human Security* 4, no. 4 (2016): 190-220; Vasja Badalič, "Tunisia's role in the EU external migration policy: crimmigration law, illegal practices, and their impact on human rights," *Journal of International Migration and Integration* 20, no. 1 (2019): 85-100.
[184] Luiza Bialasiewicz, "Off-shoring and out-sourcing the borders of Europe: Libya and EU border work in the Mediterranean," *Geopolitics* 17, no. 4 (2012): 843-866.

policemen:"[185] following the 2008 signing of the Italian-Libyan Friendship treaty, both countries implemented and enforced a policy of pushbacks, wherein migrants intercepted in international Mediterranean waters by Italian authorities were forcibly transferred back to Libya, in violation of the principle of *non-refoulement*. There, migrants faced a "militarized Libyan system of detention, labour exploitation and abuse,"[186] and this continues to this day – backed by continued EU funding and training, Libyan coast guards and authorities continue to incarcerate and abuse migrants.[187]

A "radical new spatialization of border control was envisioned"[188] and operationalized through frameworks such as the ENP and GAM, in which the border was stretched, uncoupled from its geographical form. This process of deterritorialization was further intensified through the EU's taking up of information and communication technologies (ICTs) and large scale, interoperable digital databases to monitor, register, sort, surveil, and differentiate between desirable travelers and illegalized/irregular migrants. These include the Schengen Information System (SIS), a "a joint electronic police tracking and information system for immigration and border control"[189] whose "origins can be traced back to the implementation of the 1990 Schengen Agreement, where it was constructed in order to fight (cross-border) criminality and, explicitly, as a 'compensatory measure [...] to [maintain] security'."[190] The SIS was updated into SIS II following the 2004 and 2007 EU enlargements, its storage capacities enhanced to include biometric information such as photographs and fingerprints. Another major database is Eurodac,

[185] Ibid., 847.
[186] Martin Lemberg-Pedersen, "Manufacturing displacement. Externalization and postcoloniality in European migration control," *Global affairs* 5, no. 3 (2019): 250.
[187] "Eight Years on from Deadly Tragedy, Lives Continue to be Lost: EU Complicit in Libyan Abuse, Fact-Finding Mission Finds Possible Crimes Against Humanity in Libya," *European Council on Refugees and Exiles (ECRE),* accessed June 11, 2023, https://ecre.org/med-eight-years-on-from-deadly-tragedy-lives-continue-to-be-lost-eu-complicit-in-libyan-abuse-fact-finding-mission-finds-possible-crimes-against-humanity-in-libya/.
[188] Casas et al., "Stretching borders beyond sovereign territories?," 80.
[189] Paul Trauttmansdorff, "The politics of digital borders," *Border politics: Defining spaces of governance and forms of transgressions* (2017): 112.
[190] Ibid., 112.

the EU's asylum fingerprint database established in 2003 aimed at "control[ing] the mobility of people who do not have a visa and to improve the application of the Dublin Convention by determining which member states are responsible for a refugee's asylum procedure."[191] The Visa Information System (VIS), which became operational in 2011, stores biometric data such as fingerprints and digital photographs from visa applicants.[192] The VIS "is a system of *re-identification* (Broeders 2007) that collects and stores data of visa procedures in order to foreclose migrants' strategies to stay in the EU after a legal visa has expired, detecting so-called 'overstayers'."[193] These largescale, centralized digital databases form the foundation of the EU border surveillance apparatus. The border was multiplied, virtualized, and rendered mobile through the "networked computers"[194] that access these databases, enabling the emergence of "the digital border," which "operates through extending surveillance over mobility to multiple sites."[195] The SIS I and II, Eurodac, and VIS also work in concert with "radar systems, towers with remotely controlled thermal vision cameras, and ground sensors to trigger the cameras and portable motion detectors,"[196] digital and visual technologies which expand the EU's capacity to see and surveil what occurs at its land and maritime borders, "designed effectively to project power beyond the physical boundaries of sovereign territory"[197] and to further respatialize and extend – in a "neocolonial, empire style"[198] – the EU border regime's reach.

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[191] Ibid., 113.
[192] Özgün Topak, "The New Borders of the European Union: Digital Surveillance and Social Sorting," in *Migration-global processes caught in national answers*, ed. Mehmet Okyayuz, Peter Herrmann, and Claire Dorrity (Vienna: Wiener Verlag, 2014), 28.
[193] Trauttmansdorff, "The politics of digital borders," 113.
[194] Karolina S. Follis, "Vision and transterritory: The borders of Europe," *Science, Technology, & Human Values* 42, no. 6 (2017): 1007.
[195] Özgün Topak, "The New Borders of the European Union: Digital Surveillance and Social Sorting," in *Migration-global processes caught in national answers*, ed. Mehmet Okyayuz, Peter Herrmann, and Claire Dorrity (Vienna: Wiener Verlag, 2014), 28.
[196] Follis, "Vision and transterritory," 1007.
[197] Ibid., 1007.
[198] Henk Van Houtum, "Human blacklisting: the global apartheid of the EU's external border regime," *Environment and Planning D: Society and Space* 28, no. 6 (2010): 961.

A key institution buttressing both the process of border externalization and "the technological imperative that is embedded in the diverse European projects of border securitization"[199] is Frontex, the European Border and Coast Guard Agency. Established in 2004 and headquartered in Warsaw, Frontex is tasked "with the role of co-ordinating border management among member states, neighbouring states, and neighbours of neighbours"[200] with the goal of "securing and protecting the external borders of the Schengen Area as well as for guaranteeing free movement within the EU."[201] Frontex exemplified a "qualitative step forward"[202] in the EU border regime's increasingly integrated approach to border and migration management, forming its centerpiece and aimed at harmonizing border controls across the member states. Although it is part of a vast network of governmental and non-governmental agencies charged with managing migration, Frontex is an incredibly powerful institution within the border regime, and its budget, resources, and mandate have been notably and continuously expanded in recent years. In 2016, the Agency was granted through an institutional reform a permanently deployable pool of border guards and the capacity to collect personal data.[203] In 2020:

> Frontex was granted a €5.6 billion budget, the largest of any EU agency. This is matched by an army of 10,000 border guards, an extension of its powers and mandate, and the fulfilment of a long-term wish: the ability to acquire and lease its own equipment (vessels, vehicles, air-planes, drones, radars etc), putting an end to the agency's dependency on contributions from EU member states.[204]

Frontex is one of the major drivers behind the use of the kinds of visualizing technologies and surveillance systems that are under investigation in this thesis, pushing the increasing

[199] Trauttmansdorff, "The politics of digital borders," 121.
[200] Casas et al., "Stretching borders beyond sovereign territories?," 81.
[201] Stachowitsch and Sachseder, "The gendered and racialized politics of risk analysis," 109.
[202] Ibid., 109.
[203] Ibid., 109.
[204] Myriam Douo, Luisa Izuzquiza, and Margarida Silva, "Lobbying Fortress Europe: The making of a border-industrial complex," *Corporate Europe Observatory*, February 5, 2021, https://corporateeurope.org/en/lobbying-fortress-europe.

"manipulation of space and boundaries"[205] within and beyond the EU. But as has been shown time and time again, the Agency does not deploy these technologies or utilize its extensive surveillance capabilities to aid and assist migrants in distress, far from it. In 2011, Human Rights Watch conducted an inquiry into Frontex operations in Greece and discovered that the Agency was complicit in the abuse of migrants by transferring apprehended migrants to Greek authorities, resulting in their confinement and detainment under inhumane circumstances.[206] Between March 2020 and September of the following year, "[t]he EU's border agency has been involved in the pushbacks of at least 957 asylum seekers in the Aegean Sea."[207] In 2021, investigative reporting by German news publication Der Spiegel and its partners shed a light on the ways in which Frontex enables the Libyan Coast Guard's interception of migrants in the Central Mediterranean, leading to their violent incarceration and detainment, abuse and torture in Libyan camps and jails.[208] Just last year, the findings of a 120-page classified report on Frontex which detailed "serious allegations of cover ups of human rights violations in EU member states by the agency and its staff"[209] led, in part, to the resignation of Frontex's then-executive director, Fabrice Leggeri.[210] These are the lethal effects of the EU border regime.

[205] Follis, "Vision and transterritory," 1010.
[206] Human Rights Watch, "The EU's Dirty Hands Frontex Involvement in Ill-Treatment of Migrant Detainees in Greece," *Human Rights Watch*. September 2011. Accessed June 11, 2023. https://www.hrw.org/sites/default/files/reports/greece0911webwcover_0.pdf.
[207] Katy Fallon, "Revealed: EU border agency involved in hundreds of refugee pushbacks," *The Guardian,* April 28, 2022, https://www.theguardian.com/global-development/2022/apr/28/revealed-eu-border-agency-involved-in-hundreds-of-refugee-pushbacks
[208] Sara Creta, Bashar Deeb, Klaas van Dijken, Emmanuel Freudenthal, Steffen Lüdke und Maximilian Popp, "How Frontex Helps Haul Migrants Back To Libyan Torture Camps," *DER SPIEGEL,* April 29, 2021. https://www.spiegel.de/international/europe/libya-how-frontex-helps-haul-migrants-back-to-libyan-torture-camps-a-d62c3960-ece2-499b-8a3f-1ede2eaefb83
[209] Katy Fallon, "EU border agency accused of serious rights violations in leaked report," *The Guardian*, October 14, 2022, https://www.theguardian.com/global-development/2022/oct/14/eu-border-agency-frontex-human-rights-violations-report
[210] Ibid.

## 2.4 Breakdown, Crisis, and the Emergence of EUROSUR

The transformations described thus far – the outsourcing of border controls in an effort to strengthen the EU's external border – combined with the enduring effects of the 2011 Arab Spring set the conditions for a "quantitatively and qualitatively new level of migration to Europe in the summer of 2015."[211] These events and their aftermath mark important turning points in the consolidation of the EU border regime's practices and policies of *humanitarian securitization,* a fusion of seemingly unlikely logics which "(re)produc[e] the 'irregular' migrant as potentially both a life to be protected and a security threat to protect against,"[212] bolstering and fueling the expansion of border surveillance operations. In 2011, "with the toppling of the authoritarian regimes in North Africa that had served as the EU's outsourced border guards, migrants were able to 're-open' maritime routes to the European continent."[213] As migrants began to cross the Eastern and Central Mediterranean in high numbers, "the EU's internal system for mobility control of asylum seekers and refugees came under increased pressure."[214] Due to the measures set forth by the Dublin system, which stipulates that the country of first entry be the one to process asylum applications, EU Member states situated at the EU's external borders such as Greece, Italy, Malta, and Cyprus bore the brunt (so to speak) of hosting recently arrived migrants, for whom the Dublin system also posed a serious problem – "[m]any migrants start their journey knowing where they want to go, due to transnational networks of information and social relations that make certain

[211] Hess and Kasparek, "Under control? Or border (as) conflict," 61.
[212] Nick Vaughan-Williams, *Europe's border crisis: Biopolitical security and beyond* (Oxford: Oxford University Press, 2015), 3.
[213] Charles Heller and Lorenzo Pezzani, "Forensic oceanography," in *Moving images: Mediating migration as Crisis*, ed. by Krista Lynes, Tyler Morgenstern, and Ian Alan Paul, (Bielefeld, Germany: Transcript-Verlag, 2020): 96.
[214] Hess and Kasparek, "Under control? Or border (as) conflict," 62.

places in Europe more desirable as end destinations,"[215] which may differ from countries of first entry.

The lethal, exclusionary, and restrictive practices of the EU border regime were further thrown into stark relief on October 3rd, 2013, when a boat carrying over 500 people sank off of the coast of the Italian island of Lampedusa, resulting in the deaths of more than 360 people. Barely over a week later, on October 11th, a second shipwreck occurred. In response, the Italian Navy launched the *Mare Nostrum* operation, whose "declared aim was both to save human lives and to intensify border control. As time went by, however, the stress was put more and more on the humanitarian side of the mission."[216] Between October 18, 2013, and December 31, 2014, a high "number of vessels, helicopters, aeroplanes, drones and personnel of the Italian Navy, Army, Air Force, Carabinieri, Guardia di Finanza, Coast Guard and Police continuously patrolled the international waters of the Strait of Sicily"[217] and brought an estimated 140,000 people to safety.[218] While *Mare Nostrum* was praised for its humanitarian mission, Cuttitta argues that one must not forget that the operation was still very much concerned with securing EU borders:

> Italian Navy ships were used to identify people, to interrogate them and to detect smugglers. In order to do this, not only military personnel but also police officers were on board, while Navy ships were turned into floating detention centres—the forerunners of the EU "floating hotspots" proposed by Italy in May 2016—with migrants being held on board for several days before they were brought to land.[219]

Cuttita ultimately contends that the humanitarian discourse surrounding *Mare Nostrum* was "thus an instrumental move for making restrictive and delocalized border control policies and practices acceptable to a public opinion that was increasingly shocked by the high death toll at sea."[220]And

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[215] Ibid., 62.
[216] Paolo Cuttitta, "Delocalization, humanitarianism, and human rights: The Mediterranean border between exclusion and inclusion," *Antipode* 50, no. 3 (2018): 789.
[217] Ibid., 789.
[218] Follis, "Vision and transterritory," 1013.
[219] Cuttitta, "Delocalization, humanitarianism, and human rights," 789.
[220] Ibid., 791.

indeed, *Mare Nostrum* was soon replaced by Frontex-coordinated Joint Operation Triton, "which again reprioritized secure borders over the lives of humans."[221] Stier argues that this "humanitarian turn" was ultimately short-lived.[222] Struggling to respond to increased migration and the rising death tolls in the Mediterranean, in May 2015 the European Commission came out with the European Agenda on Migration (EAM), effectively "coopting of the language of humanitarianism"[223] within a securitized policy framework that wed humanitarianism to the imperative to secure borders, and which legislated the tripling of Frontex's budget.[224]

These horrific shipwrecks were framed as providing the impetus for fast-tracking the implementation of the already mentioned EUROSUR, the European Border Surveillance System, which had been in the works since 2008. I keep coming back to EUROSUR as it marks a crucial juncture in the increasing technologization of borders and the shaping of EU bordering (and visualizing) practices through an expanded border surveillance apparatus operating at a supranational level. With Frontex as its central coordinator, EUROSUR has garnered significant attention from critics and various actors within border and migration management for its high costs, wide scope, and emphasis on technological innovation.[225] As mentioned in Chapter 1, EUROSUR's primary objective is to foster "situational awareness" amongst Member States and Frontex to prevent illegalized migration across the EU's external border through the use of



[221] Hess and Kasparek, "Under control? Or border (as) conflict," 63.
[222] Maurice Stierl, "Rebel spirits at sea: Disrupting EUrope's weaponizing of time in maritime migration governance," *Security Dialogue* (2023): 2.
[223] Laura Charney, "Mapping Violence Along the Balkan Route: The Tensions Between Humanitarian Assemblages, Securitization Policies, and the Experiences of Refugees and Migrants," (MA thesis, Columbia University, 2020), 13.
[224] Ibid., 13.
[225] Ruben Andersson, "Hardwiring the frontier? The politics of security technology in Europe's 'fight against illegal migration'," *Security dialogue* 47, no. 1 (2016): 22-39; Ben Hayes and Mathias Vermeulen, *Borderline. The EU's New Border Surveillance Initiatives. Assessing the Costs and Fundamental Rights Implications of EUROSUR and the 'Smart Borders' Proposals* (Berlin: Heinrich Böll Foundation, 2012); Jorrit Rijpma and Mathias Vermeulen, "EUROSUR: saving lives or building borders?," *European security* 24, no. 3 (2015): 454-472.

"drones, reconnaissance aircraft, ship reporting systems, offshore sensors and satellite remote sensing."[226] EUROSUR was envisioned as an expanded "computerized 'system of systems'"[227] through "the interlinking [of] 24 different national surveillance systems and coordination centers, bilaterally and through FRONTEX."[228] in order to enable Schengen states to effectuate "'24/7' surveillance of land and sea borders designated as high-risk – in terms of unauthorised migration – and mandate FRONTEX to carry out surveillance of the open seas beyond EU territory and the coasts and ports of northern Africa."[229] The system's aspiration towards "full electronic security"[230] and its "breadth of vision"[231] which stretches beyond the territorial borders of Europe "fundamentally alter[s] the nature of national borders."[232]

While EUROSUR was "optimistically presented by EU officials as part of a technologically enhanced solution to the problems of illegal border crossing and loss of life,"[233] critics have strongly argued that:

> EUROSUR is more likely to be used alongside the long-standing European policy of preventing these people reaching EU territory (including so-called push back operations, where migrant boats are taken back to the state of departure) rather than as a genuine life-saving tool.[234]

While EUROSUR's development was contextualized within a growing need to address shipwrecks and deaths at the EU's maritime borders, Heller and Jones highlight the fact that the surveillance technologies deployed through the EUROSUR framework would still not be able to detect the

[226] Madörin, "'The view from above'," 704.
[227] William Walters, "Live governance," 799.
[228] Ibid., 800.
[229] Hayes and Vermeulen, *Borderlin*e, 8.
[230] Ruben Andersson, "Hardwiring the frontier? The politics of security technology in Europe's 'fight against illegal migration'," *Security dialogue* 47, no. 1 (2016): 33.
[231] Follis, "Vision and transterritory," 1013.
[232] Ibid., 1004.
[233] William Walters, "Live governance, borders, and the time–space of the situation: EUROSUR and the genealogy of bordering in Europe." *Comparative European Politics* 15 (2017): 799.
[234] Ben Hayes and Mathias Vermeulen, *Borderline,* 8.

small boats and vessels migrants use to cross the Mediterranean, as they can only be visualized by "high-resolution images which cover a small area, while the maritime area to be monitored - the Mediterranean - is huge."[235] Furthermore, given the overarching exclusionary and securitized border and migration governance politics out of which EUROSUR emerges and in turn co-constitutes, EUROSUR's purported humanitarian façade fails to conceal the reality that militarization and surveillance are the very factors responsible for the loss of migrant lives, rather than being effective "solutions" to prevent them.

## 2.5 The "View From Above": Dronification and Aerial Surveillance

In this final section I focus on the EU's increasing reliance on drones and drone technology in border surveillance operations, as a practice of "visibility-making" - a deployment of visuality as power - which is "enabled by and enable[s] violent practices of domination."[236] EUROSUR specifically stipulates the deployment of drones for surveillance purposes, and the NESTOR project, which I will explore in more depth in the following chapter, also relies on aerial surveillance technologies. If we go back to Mirzoeff's complexes of visuality, just as Anouk Madörin does, we can trace "the 'view from above' back into the slavery 'Plantation Complex' with its metonymic figure of the plantation overseer – marking the always already racist and racialized genealogy of this visual tool."[237] According to Allinson, "drones already operate within an algorithm of racial distinction"[238] if racism is understood "as the technology of power that unites the exercise of sovereign power with technologies of the surveillance, auditing, and management

[235] Charles Heller and Chris Jones, "Eurosur: saving lives or reinforcing deadly borders?," *Statewatch,* February 1, 2014, https://www.statewatch.org/statewatch-database/eurosur-saving-lives-or-reinforcing-deadly-borders-by-charles-heller-and-chris-jones/

[236] Madörin, "'The view from above'," 702.
[237] Ibid., 702.
[238] Jamie Allinson, "The necropolitics of drones," *International Political Sociology* 9, no. 2 (2015): 113.

of populations."[239] What follows then is that "the drone is precisely a technology of the management of populations: of the drawing of a 'caesura' between worthy and unworthy life."[240] The drone - or in the European Commission's sanitized parlance, remotely piloted aerial systems (RPAS) or unmanned aerial vehicles (UAVs) - is the ultimate embodiment of Haraway's god trick, omniscient and omnipresent, aspiring to a global "situational awareness" that seeks to construct and migratory presents and futures.

The racializing necropolitics of the drone have largely been critically theorized with regards to their militarized use in (typically US-led) warfare,[241] particularly their lethal deployment in countries such as Afghanistan as part of the imperialist "war on terror."[242] Critical scholarship can also be found about the use of drones in border control and surveillance, especially by the EU.[243] According to Madörin and Hayes et al., the EU initiated the funding of border drones under the Preparatory Action for Security Research, between 2004-2006.[244] Since then, research and development (R&D) funding for border control drones has surpassed that of any other type of drones.[245] Aerial surveillance is especially pursued at sea - in 2020, Frontex "had entrusted aerospace giant Airbus and two Israeli companies with an 'aerial maritime surveillance' service

[239] Ibid., 118.
[240] Ibid.,118.
[241] Grégoire Chamayou, *A Theory of the Drone*, (New York: The New Press, 2015); Kyle Grayson, *Cultural politics of targeted killing: On drones, counter-insurgency, and violence*, (New York: Routledge, 2016); Derek Gregory, "From a view to a kill: Drones and late modern war," *Theory, culture & society* 28, no. 7-8 (2011): 188-215.
[242] Lauren Wilcox, "Embodying algorithmic war: Gender, race, and the posthuman in drone warfare," *Security dialogue* 48, no. 1 (2017): 11-28.
[243] Ben Hayes, Chris Jones and Eric Toepfer, *Eurodrones, Inc.,* (Amsterdam: Transnational Institute (TNI) and Statewatch, 2014); Maria Gabrielsen Jumbert, "Creating the EU drone: Control, sorting, and search and rescue at sea," in *The Good Drone*, ed. Kristin Sandvik and Maria Jumbert, (London: Routledge, 2016), 89-108; Luisa Marin, "The humanitarian drone and the borders: unveiling the rationales underlying the deployment of drones in border surveillance," in *The Future of Drone Use: Opportunities and Threats from Ethical and Legal Perspectives*, ed. Bart Custers (The Hague: T.M.C. Asser Press, 2016), 115-132.
[244] Madörin, "'The view from above'," 701; Ben Hayes, Chris Jones and Eric Toepfer, *Eurodrones, Inc.*, (Amsterdam: Transnational Institute (TNI) and Statewatch, 2014).
[245] Ibid., 701.

using drones to intercept migrant vessels crossing the Mediterranean."[246] Terrifyingly enough, and in a move that renders evident the transnational register of white supremacy and colonialism, Airbus' decision to deploy the Heron maritime surveillance drone choice "was determined by the aircraft's technical specifications and by its performance attained during deployment in war theatres [...] by the Israeli Defence Forces and police forces. Drones from the Heron series have mainly been used against the Palestinian population."[247] In the Mediterranean, EU aerial surveillance has been found to play a crucial role in the systematic pushbacks, interceptions, and returns of tens of thousands of migrants back to Libya, where they face arbitrary detention, violence, and torture.[248]

As such, drones pose a particularly vexing problem for the EU, which has come to increasingly rely on them for surveillance and border controls. The weaponized "view from above" cannot be divorced from its military origins and lethal deployment. Marin notes that the European Commission has been "particularly careful to demonstrate attention to the humanitarian dimension"[249] of drone use and surveillance practices. Indeed, the *Mare Nostrum* operation purchased Predator drones – the name says it all – from the United States to be used for humanitarian purposes. However, Marin argues that ultimately, during the ostensibly life-saving mission, the drones' "deployment [was] connected to the strengthening of the intelligence dimension of border controls, which is part of a policy of externalization of border controls."[250]

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[246] Antonio Mazzeo, "Border surveillance, drones and militarisation of the Mediterranean," *Statewatch*, May 6, 2021, https://www.statewatch.org/analyses/2021/border-surveillance-drones-and-militarisation-of-the-mediterranean/.
[247] Ibid.
[248] Borderline Europe, *Remote control: the EU-Libya collaboration in mass interceptions of migrants in the Central Mediterranean*, 2020, https://www.borderline-europe.de/sites/default/files/readingtips/RemoteControl_Report_0620.pdf
[249] Luisa Marin, "The humanitarian drone and the borders: unveiling the rationales underlying the deployment of drones in border surveillance," in *The Future of Drone Use: Opportunities and Threats from Ethical and Legal Perspectives*, ed. Bart Custers (The Hague: T.M.C. Asser Press, 2016), 119.
[250] Ibid., 129.

Crucially, drones enable the emergence of what Karolina S. Follis terms "sovereign vision,"[251] which designates:

> the gaze of agents empowered by the state to watch the border for signs of trespass, [which] now encompasses the high seas, territorial waters, and coastal areas of third countries. By reaching into those spaces, it effectively decouples existing jurisdictional boundaries from their geographical demarcations.[252]

Through this process, in which "the gaze of the border agent is directed increasingly beyond the external border,"[253] enabled by visualizing technologies such as drones, what surfaces is a conjuncture Follis names "transterritory"[254]: "the territory that has been rendered elastic through the application of modern technologies of vision."[255] And within the amorphous transterritory, migrants (if they are spotted) are always already illegalized, as the drone's eye has been trained to surveil, detect, and capture.

## 2.6 Conclusion

In this chapter I have surveyed the emergence of the EU border regime, as catalyzed by the transformations and changes initiated by the Schengen Agreement. I paid special attention to the EU's bordering practices regarding its creation of an external border, which was strengthened and fortified through processes of externalization and the use of information and communication technologies (ICTs) and large-scale databases. This in turn allows us to contextualize what was periodized as the so-called "refugee crisis" and parallel developments in border surveillance legislation and technologies. Moving on, we are thus better able to situate NESTOR within the



[251] Karolina S. Follis, "Vision and transterritory," 1005.
[252] Ibid., 1005.
[253] Ibid., 1009.
[254] Ibid., 1009.
[255] Ibid., 1009.

broader context and history of the technologization of EU borders and developments in surveillance technology.

# Chapter 3: The "Next Generation": The Case of NESTOR

## 3.1 Introduction

"Seeing is believing!" read a February 1st, 2023, tweet from the NESTOR H2020 EU Project twitter account.[256] The pithy phrase was followed by an excited announcement about the project's recently held trial in Cyprus, complete with an emoji featuring the geographic rendering of Cyprus and an adjoining photograph of a camera focused on a computer-filled control room (perhaps we are looking inside the headquarters of the Cypriot Joint Rescue Coordination Center Larnaca, who are tagged in the tweet as the trial hosts). The seemingly innocuous tweet very succinctly encapsulates a central problematic within the contested field of migration governance and management: the politics of visibility and visuality, what can be seen and therefore known, what remains unseen and obscured, and what chain of events this knowledge might unleash. But what is NESTOR: aN Enhanced pre-frontier intelligence picture to Safeguard The EurOpean boRders?[257] NESTOR is an EU-funded project – more specifically within the Horizon 2020 research program framework, with the EU having contributed € 4 999 578,13 of its total € 6 108 593,75 cost[258] – launched in November 2021. Its purpose is to "demonstrate a fully functional next-generation holistic border surveillance system providing pre-frontier situational awareness beyond maritime and land borders following the concept of the European Integrated Border



[256] NESTOR H2020 EU Project (@Nestor_H2020). 2023. "Seeing is believing! Today was the 1st day of the @Nestor_H2020 project Cypriot #maritime #trial which is taking place in Larnaca, Cyprus hosted by @CyprusJRCC. Stay tuned for tomorrow's demonstration!! #nestoreu #pilottrial #cyprus #eufunded #maritime #H2020." Twitter, February 1, 2023, 5:32 p.m. https://twitter.com/Nestor_H2020/status/1620822395786514433
[257] This is the official stylization of the project's name, as used across official EU channels.
[258] "CORDIS | European Commission," Europa.eu, accessed May 29, 2023, https://cordis.europa.eu/project/id/101021851.

Management."[259] While the project is not exclusively concerned with human migration – it is also focused on the illegal trafficking of goods – it directly concerns borders and mobility.

In this chapter I follow Tazzioli and Walters' call to "to interrogate how the proliferation of systems for seeing migrants at distance and the abstract visualisation of migration (see EUROSUR) have changed in the way of perceiving migration."[260] I scrutinize NESTOR's objectives and mission. Unveiled more than half a decade after what came to be known globally as the so-called "European refugee crisis" – in effect, a crisis of borders and capital – NESTOR comes at a time of increasing border securitization. Hailed as the "next generation" in border surveillance systems, it needs to be critically examined in light of contemporary border management practices and politics. I will first more thoroughly introduce the project and its members, highlighting the deeply problematic involvement of private companies which offer services and products to the military and defense industry. I will then interrogate and unpack the ideological investments and visual rationale which underpin the project, and the ways in which they inhere what Pugliese terms a "statist regime of visuality."[261] I then delve deeper into the ways in which the project brings about the "datafication of mobility"[262] or the enfolding of the human into the digital and the ways in which such a project intensifies the deterritorialization of borders, an enduring paradigm of the EU border regime. I will conclude my analysis with a gesture towards seeing otherwise by briefly introducing and examining Forensic Oceanography's 2014 audiovisual work *Liquid Traces: The Left-to-Die Boat* as a potential form of "countervisuality."[263] As Louise Amoore contends, creative or artistic interventions contain the potential (though not the promise)

[259] "About Nestor," NESTOR Project, accessed June 12, 2023, https://nestor-project.eu/.
[260] Martina Tazzioli and William Walters, "The sight of migration: Governmentality, visibility and Europe's contested borders." *Global society* 30, no. 3 (2016): 461.
[261] Pugliese, "Technologies of extraterritorialisation," 571.
[262] Martina Tazzioli, "Spy, track and archive: The temporality of visibility in Eurosur and Jora," *Security Dialogue* 49, no. 4 (2018): 273.
[263] Mirzoeff, "The Right to Look," 480.

for rupture and reflection on the norms which govern the everyday.[264] I will explore how Forensic Oceanography's practice of a "disobedient gaze"[265] disrupts the "many bordered gazes"[266] instantiated by a project such as NESTOR and allows us to see that which has been concealed, hidden from view – the violence of the border regime.

## 3.2 NESTOR and The Militarized "Techno-Fix"

When considering the interconnectedness of vision and histories of military domination in the service of imperialism, Donna Haraway writes: "[v]ision is always a question of the power to see—and perhaps of the violence implicit in our visualizing practices. With whose blood were my eyes crafted?"[267] It is thus crucial to ask who is involved in a project such as NESTOR, and what rationale they supply for the project's visualizing mission. NESTOR as a project discursively constructs the process of migration within a securitized, militarized frame: the about section on its website reads "NESTOR technologies form an interoperable network to *detect, assess and respond to illegal activities in border surveillance missions in both land and maritime operations* (emphasis added)"[268] utilizing militaristic language. This is further underscored when watching the "NESTOR H2020 Project final video" on Youtube: the 20-minute video is accompanied by affectively loaded, heroic orchestral music, as if to herald an oncoming battle. But beyond discursive acts, its members are ideologically and materially invested in the defense and security arena. The project is coordinated by the Hellenic Police (Greek national police) and led by a



[264] Louise Amoore, "Lines of sight: On the visualization of unknown futures," *Citizenship Studies* 13, no. 1 (2009): 17-30.
[265] Lorenzo Pezzani and Charles Heller, "A disobedient gaze: strategic interventions in the knowledge (s) of maritime borders," *Postcolonial Studies* 16, no. 3 (2013): 294.
[266] Anna Carastathis, "So many bordered gazes: Black Mediterranean geographies of/against anti-Black representations in/by Fortress Europe," *Geographica Helvetica* 77, no. 2 (2022): 231-237.
[267] Haraway, "Situated Knowledges," 585.
[268] NESTOR Project, "About Nestor."

consortium of twenty-one partners from thirteen different European countries. In the consortium we have a dizzying amalgamation of national police and law enforcement services and ministries – who are (not so) sneakily identified as "end-user bodies" in one presentation text which can be found online:[269] the Chief Directorate Border Police of the Bulgarian Border Police, the Republic of North Macedonia's Ministry of Interior, Cyprus' Ministry of Transport, Communications and Works / Joint Rescue Coordination Center, the State Border Guard Service at the Ministry of Interior of the Republic of Lithuania, and Spain's national Guardia Civil (Public Security Corps).[270]

Beyond these police and law enforcement bodies, the consortium boasts a number of large corporations, private small & medium enterprises, and research institutes, many of which operate in or provide services and technology to the defense industry, reflecting a very troublesome and increasingly militarized border politics. This is not a novel development but builds on long-standing EU policies and has been speeding up since the so-called "refugee crisis."[271] In 2017 Karolina S. Follis noted how, by "promoting the use of drones and other robotic technology in EU border surveillance, the European Commission is ramping up the business incentives for security and military technology companies to enmesh themselves ever more closely in what Andersson (2014) has called Europe's "illegality industry.'"[272]



[269] Frontex. *NESTOR: The Next-Generation European Situational Awareness System for Cross-Border Maritime and Land Surveillance*. June 22, 2020. Accessed Jun 11, 2023. https://frontex.europa.eu/assets/EUresearchprojects/News/NESTOR.pdf
[270] "Consortium," NESTOR Project, accessed June 12, 2023, https://nestor-project.eu/.
[271] Mark Akkerman, "Militarization of European Border Security," in *The Emergence of EU Defense Research Policy*, eds. Nikolaos Karampekios, Iraklis Oikonomou, Elias G. Carayannis (Springer, 2018), 337-355.
[272] Karolina S. Follis, "Vision and transterritory: The borders of Europe," *Science, Technology, & Human Values* 42, no. 6 (2017): 1017.

It is significant when considering how, in post- (is there ever a stable aftermath) pandemic times, we are "witnessing the consolidation of racialized border regimes across the globe."[273] While 2015 marked what some scholars term "the humanitarian turn"[274] in the EU's border and migration management practices (wherein humanitarianism was still intimately intertwined with border policing and control),[275] some scholars have noted that in recent years migration has become increasingly securitized.[276] This is perhaps an understatement – Catherine Besteman sees the global situation as constituting a "militarized global apartheid:"

> a loosely integrated effort by countries in the global north to protect themselves against the mobility of people from the global south. The new apartheid apparatus takes the form of militarized border technologies and personnel, interdictions at sea, biometric tracking of the mobile, detention centers, holding facilities, and the criminalization of mobility.[277]

For Anna Carastathis, there is a veritable, "undeclared race war against people on the move"[278] unfolding at Europe's unstable and mobile borders – and when we take a closer look at NESTOR's consortium members, we cannot ignore it. The German HENSOLDT multinational corporation proudly asserts on its webpage that "HENSOLDT is a German champion in the defense industry with a leading position in Europe and a global reach."[279] Its motto is to "detect and protect:"[280] they provide sensor technologies, amongst other "innovative and customer-specific solutions,"[281] for protection and surveillance efforts in the defense, security, and aerospace sectors. The Swiss



[273] Anouk Madörin, *Postcolonial Surveillance: Europe's Border Technologies Between Colony and Crisis*, (Rowman & Littlefield, 2022), ix.
[274] Cuttitta, "Delocalization, humanitarianism, and human rights," 788.
[275] Polly Pallister-Wilkins, "The humanitarian politics of European border policing: Frontex and border police in Evros," *International political sociology* 9, no. 1 (2015): 53-69.
[276] Bruno Oliveira Martins and Maria Gabrielsen Jumbert, "EU Border technologies and the co-production of security 'problems' and 'solutions'," *Journal of ethnic and migration studies* 48, no. 6 (2022): 1435.
[277] Catherine Besteman, *Militarized Global Apartheid*, (Durham: Duke University Press, 2020), 1.
[278] Carastathis, "So Many Bordered Gazes," 232.
[279] "Homepage," HENSOLDT, accessed June 12, 2023, https://www.hensoldt.net/.
[280] "Homepage," HENSOLDT, accessed June 12, 2023, https://www.hensoldt.net/.
[281] "Homepage," HENSOLDT, accessed June 12, 2023, https://www.hensoldt.net/.

Decodio, a technology company that specializes in digital signal processing, signals intelligence, and radio monitoring, offers solutions for electronic warfare and "defense professionals worldwide."[282] MILTECH HELLAS S.A is a Greek defense company which specializes in thermal imaging products, and whose "vast experience and rigorous military standards […] provide superior defence and commercial applications."[283] Elistair provides tethered drones for defense and security purposes.[284] The Ingeniería de Sistemas para la Defensa de España is a commercial corporation that is property of the Spanish Ministry of Defense, offering media and technological services.[285]

Military and defense industry "experts" increasingly take the lead on governing the movements and bodies of migrants, fueling an ever more restrictive, violent, and self-perpetuating border and migration management agenda. Military actors position themselves as authorities in border governance and leverage this standing to frame and portray migration as a continuous source of security risks, necessitating increasingly sophisticated militarized solutions. Martin Lemberg-Pedersen, in his study on the neoliberalization of border management and the increasing involvement of Private Security Companies (PSCs) in the formulation and shaping of European bordering practices,[286] noted that increased EU subsidies to PSCs for research and development – and we must remember that NESTOR is largely financed by the EU's research and innovation funding program Horizon 2020 – have systematically blurred the boundaries between public and private, allowing private companies "to participate in the multileveled governance of Europe's borders."[287] This has fundamentally disastrous effects for migrants: this accelerates the violent

[282] "Electronic Warfare," Decodio, accessed June 12, 2023, https://www.decodio.com/solutions/electronic-warfare/.
[283] "Homepage," Miltech Hellas S.A., accessed June 12, 2023, https://www.miltech.gr/.
[284] "Homepage," Elistair, accessed June 12, 2023, https://elistair.com/.
[285] "Homepage," ISDEFE, accessed June 12, 2023, https://www.isdefe.es/.
[286] Martin Lemberg-Pedersen, "Private security companies and the European borderscapes," in *The migration industry and the commercialization of international migration* (2013): 2.
[287] Ibid., 21.

militarization of borders, enables public bodies such as the EU to sidestep and evade accountability and transparency, and creates an immensely profitable arena for military and defense contractors. This in turn produces a "lock-in effect,"[288] a vicious, self-reinforcing cycle:

> Migrants and facilitators facing high-tech control technologies, like motion sensors, radars, satellites and drones, respond by low-tech solutions and by mobilizing informal and sometimes family-based networks (Ibid.; Düvell, 2008). The technological market thereby inadvertently acts as catalysts for new social relations and sometimes life-threatening solutions. Therefore, combined with the European closure of legal routes for migrants and refugees, the smuggling and border control industries are locked in a self-reinforcing, but highly profitable cycle: the more controls imposed, the bigger the need for irregular routes, which, in turn, is used to justify even more advanced control technologies and so on.[289]

As one of its primary objectives, NESTOR aims to "motivate border agencies to capitalize on state-of-the-art technologies for supporting the Member States in reaching full situational awareness at their external borders and enhancing the decision making and reaction capability of their security authorities."[290] The heavy investment in "state-of-the-art technologies," the technophilic fetishization of the power of virtual or digitally generated augmented realities reflects the ongoing "technologization of borders"[291] and the "technological security fix"[292] philosophy which has governed "European border-making"[293] in recent years. Technological "innovation" has been key in the EU's push to securitize and militarize its borders, with the EU having effectively created "a technological playground for military and tech companies repurposing products for new markets,"[294] namely the policing of human mobility. Bruno Oliveira Martins & Maria Gabrielsen

[288] Martin Lemberg-Pedersen, "Security, industry and migration in European border control," *in The Routledge handbook of the politics of migration in Europe* (2018): 248.
[289] Lemberg-Pedersen, "Security, industry and migration," 248.
[290] NESTOR Project, "About Nestor."
[291] Martina Tazzioli, "Counter-mapping the techno-hype in migration research." *Mobilities* (2023): 2.
[292] Lemberg-Pedersen," Security, industry and migration," 243.
[293] Ibid., 243.
[294] Kaamil Ahmed and Lorenzo Tondo, "Fortress Europe: the millions spent on military-grade tech to deter refugees," *The Guardian*, December 6, 2021, https://www.theguardian.com/global-development/2021/dec/06/fortress-europe-the-millions-spent-on-military-grade-tech-to-deter-refugees

Jumbert trace "the construction of a security-technology nexus in the field of border management"[295] to the 2004 Hague Programme and the 2011 Smart Borders Initiative, which discursively framed migration as an issue of security which could be managed, or "solved," by "smarter" and evermore advanced and sophisticated technological solutions.[296]

The migration and border policy arena has thus become dominated by a whole host of private tech industry actors and "experts," such as Woitsch Consulting, Satways LTD, Narda Safety Test Solutions, SME OceanScan Marine Systems and Technology, and Robotnik, small & medium enterprises which provide the consulting and technological infrastructure for NESTOR, and which specialize in the creation of products ranging from tethered drones to underwater inspection technologies. The "expert" technocratic discourses which emerge from this dense "socio-technical assemblage"[297] – "the different systems, digital and material, its technologies, hardware and software, high- and low-tech, various border professionals, and their everyday practices"[298] – are so specialized and specific so as to become ever more opaque and inaccessible for policymakers, civil society actors, and the very migrants whose lives are impacted in manifold ways by these technologies. The EU and its Member States can ostensibly thus evade taking responsibility for the violent effects of militarized borders – which push migrants to take more dangerous and clandestine routes – as they further delegate border management to an array of private industry actors.

However, while NESTOR emphasizes the innovative (the "next-generation" holistic border surveillance system") and pioneering (I cannot help but note the coloniality of such



[295] Martins and Jumbert, "EU Border technologies," 1434.
[296] Martins and Jumbert, "EU Border technologies," 1434; see also Huub Dijstelbloem, Albert Meijer, and Michiel Besters, *The migration machine*, (Palgrave Macmillan UK, 2011).
[297] Bruno Oliveira Martins, Kristoffer Lidén, and Maria Gabrielsen Jumbert, "Border security and the digitalisation of sovereignty: insights from EU borderwork." *European security* 31, no. 3 (2022): 477.
[298] Martins, Lidén, and Jumbert, "Border security and the digitalization," 477.

language) character of their work, Anouk Madörin reminds us that EU border and surveillance technologies cannot be disarticulated from their colonial antecedents:

> EU border technologies, including its media infrastructure and bureaucratic systems, do not present qualitative distinctions from pre-digital apparatuses but new declinations of already established colonial technologies such as panoptic surveillance, biopolitical registers, body tags and labels, and deterrent infrastructure. Europe's pre-digital colonial history continues to shape the political present and has morphed into EU border technologies, media infrastructure, classification apparatuses, and weaponry.[299]

These forms of governance are not, in fact, new. The development of sophisticated surveillance infrastructure and technologies for mobility and border management are "a continuation of longstanding practices of 'remote control'."[300] We can go back to John Torpey's study of the invention of passports in the 20th century for the "monopolization of the legitimate means of movement"[301] to understand how "states have long sought to project their borders overseas and require non-state actors to perform immigration control functions."[302] Identifying the historical continuities in border technologies (and their analog predecessors) undoes the exceptionalized narrative of technological advancement which discursively fuels the techno-military-border-industrial complex.

## 3.3 Scopic Governance and the Datafication of Mobility

NESTOR as a project is profoundly loaded with visual metaphors and visual terminology. This is, of course, expected, as a project dedicated to developing advanced surveillance technologies necessarily concerns the ability to visualize and capture what is happening on the



[299] Madörin, *Postcolonial Surveillance: Europe's Border Technologies Between Colony and Crisis*, xiii.
[300] Dennis Broeders and James Hampshire, "Dreaming of seamless borders: ICTs and the pre-emptive governance of mobility in Europe," *Journal of Ethnic and Migration Studies* 39, no. 8 (2013): 1204.
[301] John Torpey, "Coming and going: On the state monopolization of the legitimate "means of movement"," *Sociological theory* 16, no. 3 (1998): 240.
[302] Broeders and Hampshire, "Dreaming of seamless borders,"1204.

ground. The project's website's homepage reads, in large and bold letters: "An Enhanced Pre-Frontier Intelligence Picture to Safeguard the European Borders."[303] Abstracting and fixing the incredibly complex and heterogeneous process of migration into a "picture" flattens and obscures the historical processes that produce the conditions in which people are forced to migrate and conceals the statist forms of violence that fix certain peoples in situations of immobility. The metaphor of "picture" articulates a visual ideology promoted by the state: that such an incredibly complex experience such as migration can be visualized and rendered knowable, "governable,"[304] through the translation of data points and radar blips. It renders real, human people into "digitally trackable objects,"[305] transmuting the "world into a 'graphical interface'."[306] This is an instance of what Anouk Madörin terms the workings of "postvisuality"[307] enabled by the "view from above" enacted by various surveillance technologies, particularly drones – a conjuncture in which "refugees' movements appear as commodities, statistical probabilities and deviations, or vectors of risk as they become content providers for an enlarged European surveillance apparatus."[308] This follows the enumerative, homogenizing, and clinical logics of the "colonial imagination."[309]

The "picture" aspires to render all that is invisible, visible. But it is, of course, not a realist(ic) snapshot of what goes on, and certainly not a comprehensive or panoramic one: it is an informational composite of heterogeneous data flows. In the case of NESTOR, the data is generated through the use of a staggering number of "existing mixed reality and sensing technologies based on intelligent radar systems, RF localisation and wide-area visual surveillance



[303] NESTOR Project, "About Nestor."
[304] Tazzioli and Walters, "The sight of migration," 447.
[305] Pugliese, "Technologies of extraterritorialisation," 577.
[306] Ibid., 577.
[307] Madörin, "'The view from above'," 700.
[308] Ibid., 707.
[309] Arjun Appadurai, "Number in the Colonial Imagination," in *Orientalism and the Postcolonial Predicament*, ed. Carol A. Breckenridge and Peter Van der Veer (Philadelphia: University of Pennsylvania Press, 1993), 315.

services along with unmanned assets."[310] These include Unmanned Aerial Vehicles, Unmanned Ground Vehicles, Unmanned Underwater Vehicles, tethered drones, and radio frequency sensors. This "real-time border surveillance data"[311] is fused with algorithmically acquired web and social media information and processed using artificial intelligence (AI) techniques. The "real-time" data is further augmented by the use of Mixed Reality (MR) technologies – what emerges is an ontologically unstable configuration which in 2009 sociologist Karin Knorr Cetina named "the synthetic situation."[312] Knorr Cetina describes the "synthetic situation" as "situations that include electronically transmitted on-screen projections that add informational depth and new response requirements to the 'ecological huddle' (Goffman 1964:135) of the natural situation."[313] The "synthetic situation" arises from the thick technological mediation of physical realities – though this is not to introduce a binary opposition between real/synthetic. What is at stake, according to Monika Halkort, is the ways in which "[t]his inextricable entanglement of data, space and world introduces a whole new range of actors and agencies into the struggle over how to see,"[314] leading to the "diffraction of visual agency"[315] and the "decentering [of] the loci of power and accountability."[316] With the enmeshment of AI and MR technologies and their visual logics within the gaze(s) on migration, Halkort, citing Tamara Sheppard, argues that we are confronted:

> with a kind of 'autonomous visuality' (Sheppard, 2015, p. 2), an active, non-localisable perceptual system that opens up new possibilities for the production of difference and the patterning of behaviours, while at the same time enrolling new

[310] "Approach," NESTOR Project, accessed June 12, 2023, https://nestor-project.eu/about-nestor/.
[311] NESTOR Project, "Approach."
[312] Karin Knorr Cetina, "The synthetic situation: Interactionism for a global world," *Symbolic Interaction* 32, no. 1 (2009): 61.
[313] Ibid," 61.
[314] Monika Halkort, "Dying in the technosphere: an intersectional analysis of European migration maps," in *Mapping crisis: Participation, datafication and humanitarianism in the age of digital mapping*, ed. Doug Specht (University of London Press, 2020): 151.
[315] Ibid., 151.
[316] Ibid., 151.

> political spaces of exclusion, delegitimation and erasure in geocoded space-times.[317]

The "situational picture" is the "organizational prism"[318] through which the operational logic of "situational awareness" is materialized. As briefly discussed in Chapter 1, "situational awareness" is a concept and visualizing metaphor on which many surveillance projects, including NESTOR, and border security practices hinge. This is clearly stated in NESTOR's "About" section on their website: "NESTOR aims to demonstrate a fully functional next-generation holistic border surveillance system providing pre-frontier situational awareness beyond maritime and land borders."[319] As Pugliese notes in his assessment of the EUROSUR framework and as I mentioned earlier, such abstracted language "signals the state's aspiration to visual and cognitive omniscience over the territory encompassed by its borders."[320] However, William Walters cautions against treating "situational awareness" as producing an omniscient, panoptic gaze, as such a reading might reify the technology's might and runs the risk of glossing over the tactical ways in which migrants challenge it. He provides a helpful genealogy of the term in order to denaturalize it: while the concept is presently associated with "risk analysis, emergency management, and disaster response"[321] with the purported aim of "securing and saving life,"[322] "its genesis is to be found not in a benign will to save but in the world of aerial combat, and the life and death struggles and kill counts of the early fighter pilots in WWI."[323] Citing Gilson, Walters traces the term's origins to its use by "the German tactician and ace pilot Oswald Boelke who emphasized 'the importance of gaining an awareness of the enemy before the enemy gained a similar awareness, and devised

[317] Ibid., 151.
[318] William Walters, "Live governance, borders, and the time–space of the situation: EUROSUR and the genealogy of bordering in Europe." *Comparative European Politics* 15 (2017): 806.
[319] NESTOR Project, "About Nestor."
[320] Pugliese, "Technologies of extraterritorialisation," 576.
[321] Walters, "Live governance," 803.
[322] Ibid., 803.
[323] Ibid., 803.

methods for accomplishing this' (cited in Stanton et al, 2001: 189)."[324] "Situational awareness" emerges from a military modality of visuality – it necessitates the deployment of a gaze (or multiple gazes) from afar, which *should not be apprehended or returned*, in order for "situational awareness" to be reached successfully. For Walters, "situational awareness" exceeds the boundaries of "concept" or "doctrine:"[325] it is better understood as "a mobile political technology that today traverses, interacts with, and reshapes a whole swathe of institutional and functional domains."[326] As a mode of *seeing* and *knowing*, it powerfully reconfigures the governance of migration – as Walters powerfully notes,

> [a]t issue is the way that the governance of events is being transformed – from a world in which political agency can often only respond to specific events after they have happened to a world where synthetic situations, scopic systems and situational awareness aspire to open up the event to practices of ongoing, live monitoring and reflexive, or pre-emptive action.[327]

This is what is at stake in the "view from above" and *seeing* migration remotely, from a distance, through the eyes of the drone: the abstraction of material reality, and the transmutation of subjectivities into "migratory events" – "a reality that does not correspond to migrants as individuals or to migrants as multiplicities/groups but to potential flows,"[328] flows identified for the potential future risk (of having to, for instance, mobilize more resources for detainment, resettlement, or deportation) they carry. The necropolitical register is difficult to disregard: here unfolds a process of what Mbembe saw as "*becoming-object* of the human being; or the subordination of everything to impersonal logic and to the reign of calculability and instrumental rationality."[329]



[324] Ibid., 803.
[325] Ibid., 803.
[326] Walters, "Live governance," 804.
[327] Ibid., 805-806.
[328] Tazzioli and Walters, "The Sight of Migration Governmentality," 462.
[329] Achille Mbembe, "Necropolitics," *Public culture* 15, no. 1 (2003): 18.

## 3.4 Border Deterritorialization and the "Pre-Frontier"

Within NESTOR communication materials, newsletters, and on their website, "situational awareness" is often preceded by the language of the "pre-frontier:" the full project name is, in fact, "an enhanced *pre-frontier* intelligence picture to safeguard The European borders (emphasis added)."[330] This is, of course, not the first instance of such language cropping up. The "pre-frontier" features prominently, yet definitionally vaguely, in the EUROSUR framework and regulation – one of its primary objectives is to generate a common pre-frontier intelligence picture, or CPIP, to be managed and maintained by FRONTEX. Within the EUROSUR Regulation of 2013 which established EUROSUR's scope and functions, "pre-frontier" features prominently – it is mentioned twenty-four times – but is defined very briefly as "the geographical area beyond the external borders."[331] Karolina S. Follis underlines the imprecise and nebulous character of the term when she notes that the concept of the "pre-frontier" is "neither an established legal term nor a recognizable concept in political geography, international relations, or any other field that engages with cross-border relationships between states,"[332] but seems to have been coined expressly for the purposes of border policing and control. On NESTOR's website and across its various textual outputs, there is a similar (and perhaps strategic) lack of precision regarding what the "pre-frontier" encompasses. The "pre-frontier" designates "an expansive area that begins at the external borders



[330] NESTOR Project, "About Nestor."
[331] Regulation (EU) No 1052/2013 of the European Parliament and of the Council of 22 October 2013 establishing the European Border Surveillance System (Eurosur). Eur-Lex. Accessed June 11, 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1052#:~:text=This%20Regulation%20establishes%20a%20common,borders')%20for%20the%20purpose%20of
[332] Follis, "Vision and transterritory," 1018.

of the EU but which has no external limits."[333] Such a "statist regime of visuality,"[334] articulated through the "ideology of direct, devouring, generative, and unrestricted vision"[335] and the technologies which operationalize it – Unmanned Aerial Vehicles, tethered drones, and the like – fundamentally reshapes and transforms borders, stretches and de-territorializes them, leading to their multiplication and proliferation and inscribing them onto the very movements and beings of migrants, further instantiating "geographies of dispossession and statist practices of immobilisation and fixity."[336] Pugliese claims that:

> [t]hrough this topological move, singular European nation states and the larger supranational, quasi-state conglomerate – the EU – can be seen to secure a regime of biopolitical governmentality that encompasses, in an imperial fashion, both the same (the global North) and its absolute other (the global South).[337]

The border is thus ontologically and epistemologically de-territorialized and re-spatialized: pre-frontier intelligence gathering like that of NESTOR's enfolds the space traversed *prior* to reaching any kind of border into its scope, targeting any possible migration route. The threat of migration is subsequently always already ambiguously within this amorphous and flexible prefrontier: this is concretized through "anticipatory security practices underpinned by preemptive logics"[338] aimed at preventing and deterring migration. In their study on EUROSUR and the "Smart Borders" proposal, Hayes and Vermeulen incisively argue that the purpose of these projects and surveillance efforts is to dislocate the EU's external border from its actual territory "into the high seas and



[333] Maribel Casas-Cortés, Sebastian Cobarrubias, Charles Heller, and Lorenzo Pezzani, "Clashing cartographies, migrating maps: The politics of mobility at the external borders of EUrope," *ACME: An International Journal for Critical Geographies* 16, no. 1 (2017): 21.
[334] Pugliese, "Technologies of extraterritorialisation," 571.
[335] Haraway, "Situated knowledges," 592.
[336] Pugliese, "Technologies of extraterritorialisation," 587.
[337] Ibid., 579.
[338] Martina Tazzioli, "Spy, track and archive: The temporality of visibility in Eurosur and Jora," *Security Dialogue* 49, no. 4 (2018): 274.

territories of third countries,"[339] a "trend [which] can only be interpreted as a concerted attempt by the member states to avoid responsibility for asylum claims."[340] Follis argues the same: "[i]n the prefrontier, the EU and national authorities can project their power transterritorially, by advanced social and technical means, but they can shun any legal duties toward (prospective) migrants much more effectively than they can on their own territory."[341] Over time, as NESTOR moves beyond its trial phase, it will be possible to witness whether the "next generation" system will be utilized for SAR or if its application will continue and intensify the EU's practices of pushbacks and returns, enabled by their ongoing relationships with third countries. This is not to imply that such a system *should* exist if it were to be used for assisting migrants: such an argument elides the structural conditions which make migration dangerous in the first place, that is, border regimes and hierarchies of mobility.

The concept of the "pre-frontier" "encompasses the notion of a dark field, of the unknown and of futurity."[342] Besides the obviously colonial echoes of such a notion, a dark unknown always poses a certain risk, and therefore "needs to be explored, illuminated, explained and put on the screen."[343] Risk management – and the subsequently necessary preemption and prevention activities undertaken therein – is a guiding principle and ethic underpinning the securitization of migration through enhanced border surveillance: this effectively means that anyone comes to be labeled a potentially "irregular migrant" prior to even entering the EU, or as Sergio Carrera writes, a "'would-be-irregular immigrant' or 'would-be asylum seeker.'"[344] In the eyes of the drone,

[339] Ben Hayes, Chris Jones and Eric Toepfer, *Eurodrones, Inc.,* (Amsterdam: Transnational Institute (TNI) and Statewatch, 2014): 45.
[340] Ibid., 45.
[341] Karolina S. Follis, "Vision and transterritory," 1018.
[342] Sabrina Ellebrecht, *Mediated Bordering: Eurosur, the Refugee Boat, and the Construction of an External EU Border* (Bielefeld: transcript Verlag, 2020), 121.
[343] Ibid., 121.
[344] Sergio Carrera, "The EU Border Management Strategy: Frontex and the Challenges of Irregular Migration in the Canary Islands," CEPS Working Document No. 261/March 2007, 25.

mobile manifestations of the extra-territorial border, migrants are "desubjectified,"[345] rendered to be "mere suspect object that must be surveilled, monitored and immobilised – in detention centres, transit camps and other carceral loci."[346] This is further intensified by mixed reality technologies – the border and its regulatory, Othering logics are projected into a virtual field, opening up new spaces of algorithmic governance and marginalization.

## 3.5 Forensic Oceanography's "Disobedient Gaze" as Countervisuality

In this final section, I wish to introduce the work of research group Forensic Oceanography (FO), particularly their 2014 audiovisual work *Liquid Traces: The Left-To-Die Boat Case,*[347] as advancing a potential form of "countervisuality"[348] to the statist regime of visuality deployed and produced by projects such as NESTOR. While the video was produced almost a decade before NESTOR's inception and much has changed since then, I argue that the work offers a potent alternative to the humanitarian/securitized matrix of representation which dominates the visuality of migration and demonstrates the ways in which surveillance devices can be reappropriated to produce a very different "picture" of migration than the one the EU seeks to capture.

The video is based on the 2012 "Report on the '*Left-to-Die Boat*'," which sought to investigate how, in March 2011, sixty-three migrants died in the Central Mediterranean as they attempted to reach the Italian island of Lampedusa from the coast of Libya. The boat, which left Tripoli in the early hours of March 27th carrying seventy-two passengers, was left to drift in open waters for fourteen days, under the (seemingly) watchful eyes of NATO, who had declared a maritime surveillance area over the Central Mediterranean after they had assumed command over



[345] Pugliese, "Technologies of extraterritorialisation," 589.
[346] Pugliese, "Technologies of extraterritorialisation," 588.
[347] The video is alternately referred to as *Liquid Traces, Liquid Traces: The Left-To-Die Boat Case*, and *The Left-to-Die Boat* across press that refers to Forensic Oceanography's work.
[348] Mirzoeff, "The right to look," 480.

the Libyan arms embargo following the outbreak of the Libyan civil war.[349] The migrants sent out distress calls, came into contact with military and commercial vessels all while being ostensibly intensely monitored and surveilled, yet their appeals for help were summarily dismissed, ignored, or actively rejected by fishermen who feared criminalization, having been "repeatedly accused of facilitating illegal migrations when they rescued migrants at sea."[350] FO sought to chronicle and bear witness to these practices of non-assistance, and they did so by repurposing and reappropriating the optical and radar satellite images and data produced by border surveillance technologies to reveal the violence of the EU border regime and demand accountability. In doing so, project leads Charles Heller and Lorenzo Pezzani articulated a theory/methodology of the "disobedient gaze,"[351] which seeks "not to disclose what the regime of migration management attempts to unveil— clandestine migration; but unveil that which it attempts to hide—the political violence it is founded on and the human rights violations that are its structural outcome."[352] This could be interpreted as advancing what Nicholas Mirzoeff terms "countervisuality," which entails a disruption of reality – and its attendant hierarchies – as identified and reified by hegemonic and oppressive complexes of visuality: a "performative claim of a right to look where none technically exists."[353] This is perhaps a tenuous claim: in his work on migrant produced smartphone videos of border crossings, Yener Bayramoğlu interprets Mirzeoff's formulation of countervisuality as "the visualization of insurgency produced by indigenous, oppressed, colonized, and subaltern communities that demanded the right to look for themselves and to produce a form of visuality

[349] Charles Heller, Lorenzo Pezzani, and Situ Studio, *Report on the "Left-To-Die Boat"* (London: Forensic Architecture Project, Goldsmiths University of London, 2012), https://content.forensic-architecture.org/wp-content/uploads/2019/06/FO-report.pdf, accessed June 12, 2023.
[350] Forensic Architecture, "The Left-to-Die Boat," video, accessed June 12, 2023, 00:08:50 to 00:09:00, https://forensic-architecture.org/investigation/the-left-to-die-boat.
[351] Lorenzo Pezzani and Charles Heller, "A disobedient gaze: strategic interventions in the knowledge (s) of maritime borders," *Postcolonial Studies* 16, no. 3 (2013): 294.
[352] Ibid., 294.
[353] Mirzoeff, "The Right to Look," 478.

that was often seen as unacceptable for the West-centered gaze."[354] It would be quite a stretch to describe the producers of *Liquid Traces* "oppressed, colonized, and subaltern communities." Forensic Oceanography (FO) is an offshoot of Forensic Architecture (FA), an award-winning multidisciplinary research group based out of Goldsmiths, University of London. Established by architect Eyal Weizman in 2010, Forensic Architecture mobilizes "cutting-edge techniques in spatial and architectural analysis"[355] – "open-source investigation, the construction of digital and physical models, 3D animations, virtual reality environments and cartographic platforms"[356] – to investigate cases of state violence globally. Weizman founded the collective with the help of a European Research Council (ERC) grant, a grant established by the European Commission, the same body which administers the funding for Horizon 2020, through which NESTOR is funded. This is not to draw an equivalency between these projects, but rather to point out the ways in which vastly different initiatives are bound together within the same economy, which conditions the political possibilities of knowledge production about migration.

Nevertheless, FO's work and their theory of the "disobedient gaze" offers a critical rebuttal to the statist regimes of visuality inculcated by border surveillance technologies and their discursive underpinnings. The film begins with an aerial shot of an animated Mediterranean Sea floor, its viscous waves moving slowly. It is the land, not the water, that forms the negative space – an inversion of normative cartographic aesthetics in which ocean and sea often constitute unmapped, "eternal, boundless and unchanging […] realm[s],"[357] while continents and countries are bisected and divided by the logics and structures of territoriality. Slowly, the liquid terrain

[354] Yener Bayramoğlu, "Border countervisuality: smartphone videos of border crossing and migration." *Media, Culture & Society* 45, no. 3 (2023): 598.
[355] "About," Forensic Architecture, accessed June 12, 2023, https://forensic-architecture.org/about/agency.
[356] Ibid.
[357] Suvendrini Perera, "Oceanic corpo-graphies, refugee bodies and the making and unmaking of waters," *Feminist Review* 103, no. 1 (2013): 62.

comes to be superimposed with a plethora of lines and dots, which illustrated intersecting maritime migration routes and the origin/destination cities that "had been disrupted by the EU's policy of closure since the 80s,"[358] the coordinates of Frontex, the European Border and Coast Guard Agency's joint operations, the contours of Italy and Malta's search and rescue (SAR) zones, and the NATO maritime surveillance area as declared on the 23rd of March, 2011. As time passes, an astonishingly "complex assemblage"[359] begins to take shape, revealing a ghastly reality: the sea as not just a vast and untouchable void, or alternatively a vacation playground for the wealthy, but an intensely surveilled and policed site of "mobile and deterritorialized borders."[360] As the migrants depart from Tripoli in the direction of Lampedusa, the trajectory of the boat is mapped onto the seascape by a straight white line. As the boat makes its way across the Mediterranean, additional graphics pop up: the narrator relays that these are the "returns," or data, generated by Synthetic Aperture Radar technologies "which emits radar signals from satellites snapping the surface of the earth according to their orbit. The returns of large vessels appear as bright pixels on the sea's dark surface."[361] At times the screen becomes populated by glimmering neon green points indicating the location of a multitude of commercial and military vessels, identified through another remote sensing technology, this time "AIS [Automatic Identification System] tracking systems which emit a signal to coastal radar stations with information as to the identity, speed, and position of large commercial vessels."[362] A dizzying, intangible yet terrifyingly material "electromagnetic"[363] sea, one which cannot be physically grasped, cannot actually be *seen* by the human eye, envelops the Mediterranean. The viewer's gaze assumes the "view from above," the distanced position of the

[358] Forensic Architecture, "The Left-to-Die Boat," 00:01:04 to 00:01:11.
[359] Forensic Architecture, "The Left-to-Die Boat," 00:02:39.
[360] Forensic Architecture, "The Left-to-Die Boat," 00:01:39.
[361] Forensic Architecture, "The Left-to-Die Boat," 00:03:00 to 00:03:22.
[362] Forensic Architecture, "The Left-to-Die Boat," 00:02:47 to 00:02:48.
[363] Forensic Architecture, "The Left-to-Die Boat," 00:03:30.

satellites – witnesses to murder, given that "the Italian and Maltese MRCC [Maritime Rescue Coordination Centers] as well as participating states/NATO forces present in the area were informed of the distress of the boat and of its location, and had the technical and logistical ability to assist it,"[364] and still – no one intervened. It is a perspective that is usually the domain of border regime "experts" and state authorities: it forces the viewer to wrestle with their complicity in the border regime's violence.

Here, FO disrupts "a well-ingrained imaginary of the maritime space as an empty expanse without history, where all traces of past events seem to be constantly erased by winds and currents."[365] They make visible the border logics and "political geography of the sea"[366] which render the sea a perilous site of immobility for some and a hypermobile space for capital and privileged travelers, at a time when "the Mediterranean appeared as a "black box" for civilian actors in which the capacity to see and document the events occurring at sea was nearly entirely in the hands of state actors."[367] This is the "disobedient gaze": the subversion of surveillance technologies' intended use, and their repurposing to reveal the lethal effects of the border regime. FO synthesized the disparate data generated by the "technologies [which] are often used for the purpose of policing and detecting illegalized migration"[368] to powerfully demonstrate that the boat could not have gone unnoticed – that this is a crime of neglect and non-assistance, made possible by the very existence of borders. With the help of oceanographer Richard Limeburner in conjunction with testimonies from the survivors, they were able to digitally reconstruct and model the boat's deadly drift, which allowed them to hypothesize that the boat did, in fact, reach the

[364] Heller, Pezzani, and Situ Studio, *Report on the "Left-To-Die Boat*," 11.
[365] Charles Heller and Lorenzo Pezzani, "Forensic oceanography," in *Moving images: Mediating migration as Crisis*, ed. by Krista Lynes, Tyler Morgenstern, and Ian Alan Paul, (Bielefeld, Germany: Transcript-Verlag, 2020): 101.
[366] Ibid., 104.
[367] Ibid., 101.
[368] Ibid., 102.

Maltese SAR zone, but was pushed out of it by southeast winds and powerful currents.[369] As the video progresses, the boat is carried *backwards*, its jerky, hiccupping drift a far cry from the linear, continuous, uninterrupted journey that dominant cartographic depictions of illegalized migration, in their reliance on big, smooth arrows,[370] would have us believe are the norm, the arrows coming to "symbolize an imagined, gigantic, imminent and violent conquest of Europe by global masses of undocumented migrants,"[371] as noted by van Houtum and Bueno Lacy in their analysis of Frontex produced maps. Meanwhile, FO was able to access satellite imagery that proved "the presence of a large number of vessels in the vicinity of the drifting migrant boat that did not heed their calls for help."[372] As William Walters noted about this work,

> [t]his restaging of the boat's course, plotted against NATO 'assets', this reverse-engineered situation cannot save the lives that have been lost. But it does show how the same style of knowledge production can be put to the purpose of establishing an empirical and sequential account of events.[373]

Crucially, FO does not play into the spectacularized representational norms which dominate the visual landscape of maritime migration. The visuality of migration, and especially maritime migration, is marked by an excess of racialized, anonymous people crammed into boats. A cursory Google search reveals a surfeit of such images. *The Left-to-Die Boat* maps out a monstrous cartography of political violence and reconstructs the deadly drift of the boat, yet strikingly, the bodies of the seventy-two migrants are almost entirely absent from the screen. There are some brief instances throughout *The Left-to-Die Boat* video wherein physical bodies emerge, always in a smaller window positioned in the bottom-right corner of the screen, superimposed onto

[369] Heller, Pezzani, and Situ Studio, *Report on the "Left-To-Die Boat*," 72.
[370] Henk Van Houtum and Rodrigo Bueno Lacy, "The migration map trap. On the invasion arrows in the cartography of migration," *Mobilities* 15, no. 2 (2020): 202.
[371] Ibid., 202.
[372] Heller and Pezzani, "Forensic oceanography," 102.
[373] Walters, "Live governance," 811.

the Mediterranean seafloor. One of these moments is an excerpt from an in-depth interview between the project leads, Heller and Pezzani, and one of the survivors, Dan Haile Gebre. There are some more obvious reasons as to why "the body" is not as present: there was no footage from up close, no close-up images, and FO worked with what they could access.[374] But the project leads also sought to challenge the visual and discursive conventions which animate securitized *and* humanitarian visual economies of migration, which are defined by their *corporeality* – as Malki wrote, "[m]ass displacements are often captured as a 'sea' or 'blur of humanity' […] An utter human uniformity is hammered into the viewer's retina. This is a spectacle of 'raw,' 'bare' humanity"[375] and "anonymous corporeality."[376] Rajaram echoes Malkki's assertion, writing that within humanitarian representations migrations are "rendered speechless and without agency, a physical entity, or rather a physical mass within which individuality is subsumed. Corporeal, refugees are speechless and consigned to 'visuality': to the pictorial representation of suffering and need."[377] In *Liquid Traces*, visuality – the ability to visualize, to name reality and the power structures which subtend it – is wielded not to identify migrants in the act of illegalized migration, but to reveal the structural conditions which produce border deaths.

## 3.6 Conclusion

There are limits, of course, to a "disobedient gaze." Monika Halkort mounts a critique of counter-maps or practices such as Heller and Pezzani's *Liquid Traces* that gives one pause. The scholar argues that:

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[374] Heller and Pezzani, "Forensic oceanography," 101.
[375] Liisa Malkki, "Speechless Emissaries: Refugees, Humanitarianism, and Dehistoricization," *Cultural Anthropology* volume 11, no. 3 (1996): 387.
[376] Allen Feldman, "On cultural anesthesia: From desert storm to Rodney King," *American ethnologist* 21, no. 2 (1994): 407.
[377] Prem Kumar Rajaram, "Humanitarianism and Representations of the Refugee," *Journal of refugee studies* 15, no. 3 (2002): 251.

> Their ambition to resituate 'the space of death' by turning the surveillant gaze of the state against itself merely stabilised the matrix of intelligibility that read the human cost of irregular border crossings from a disembodied view of nowhere, in pursuit of political projects that left the migrant's own partial perspective invisible and foreclosed.[378]

For Halkort, works such as *Liquid Traces* do little "to release the dead and missing from their liminal status as 'known unknowns', much less to reinstate their agency to speak on their own behalf."[379] Indeed, the high-tech, investigative aesthetics of a project such as *Liquid Traces* are lauded internationally and highly regarded within academic and artistic realms, garnering recognition for the researchers. And although on the one hand, refusing to shine a sensational light on the migrants' corporeal forms departs from normative representations of what Malkki termed "refugeeness,"[380] with each viewing the sixty-three migrants who perished in March 2011 still emerge as "decorporealised digital spectres,"[381] their "voice, recognition and visibility [...] contingent on the variously differentiated definitions of border death and the struggle of where to situate it in the political geography of Europe."[382]



[378] Halkort, "Dying in the technosphere," 148.
[379] Ibid., 149.
[380] Malkki, "Speechless Emissaries," 388.
[381] Pugliese, "Technologies of extraterritorialisation," 592.
[382] Halkort, "Dying in the technosphere," 149.

# Conclusion

The application of the NESTOR framework and technologies was piloted in three trial scenarios/demonstrations: the first was held in Lithuania, November 14th-18th, 2022, where the "storyline" concerned the detection of illegal goods trafficking. The following demonstration was held in Cyprus and focused on Search & Rescue (SAR) capabilities and "associated Humanitarian Operations."[383] This trial took place between January 30th and February 3rd, 2023. The final trial was the Greek-Bulgarian land and maritime trial, which lasted from March 12th to March 22nd, 2023, where the NESTOR concept was implemented to practice apprehending human trafficking and irregular migration.

Video documentation of how each trial went is included in the "NESTOR H2020 Project final video,"[384] which can be found on Youtube. For the second demonstration regarding Search and Rescue, we are shown a computer screen accessing the NESTOR Border Command Control and Coordination intelligence (BC3i) system. The system is alerted of a possible boat in distress. The boat is localized through radio frequency sensors and visually detected by the long-range MILTECH camera. Through the BC3i system, coast guards (which country's coast guards they are remains unclear) are assigned, as is a tethered drone. The coast guards are ordered to execute the SAR mission, and an Underwater Unmanned Vehicle is assigned to search underwater for migrants' belongings. The BC3i operator then closes the case. The emphasis on personal item



[383] Frontex, *NESTOR: The Next-Generation European Situational Awareness System for Cross-Border Maritime and Land Surveillance*, June 22, 2020. Accessed Jun 11, 2023. https://frontex.europa.eu/assets/EUresearchprojects/News/NESTOR.pdf

[384] "NESTOR H2020 Project final video," Nestor Project H2020, uploaded April 28, 2023, video, https://www.youtube.com/watch?v=W-PRARCIOxI&ab_channel=NestorProjectH2020.

retrieval is curious, given that reports of authorities stealing migrants' belongings are plentiful.[385] In the Greek-Bulgarian land and maritime trial, the video shows how the system's "web crawler" mines the Internet to find social media posts evidencing smuggling. The system is alerted through a variety of sensors of illegalized migrants on the move: this time an Unmanned Ground Vehicle is assigned, and the "field head" coordinates the mission using Uoulu mixed reality glasses. Once the (actors playing the) smuggler and illegalized migrants have been detected and apprehended, the BC3i operator closes the case. We are shown a clip of a control room, where system operators look pleased and satisfied.

The Youtube video shows a success story – the swelling violins and cymbals that accompany the video create the sense that genuine work has been done. But what happens to migrants once they are apprehended? Are they detained? Deported? Disembarked at a safe country's port? If they are claiming asylum, will their claims be processed? What bilateral agreements are in place with their countries of origin which might determine the next steps? This is left unclear and ambiguous.

In this thesis, I have explored the centrality of visuality and visualization in the EU's bordering practices. The case of NESTOR, an EU-funded project aimed at developing a next-generation border surveillance system, raises significant questions about the politics of visibility, visuality, and the militarization of borders. The convergence between the military and technology companies within the realm of border governance reinforces a self-perpetuating cycle of violence and profit. The more advanced and seemingly sophisticated the border control technologies become, the more migrants resort to dangerous routes, leading to further justifications for enhanced



[385] "Greek border authorities have stolen more than €2 million from migrants in five years," InfoMigrants, accessed June 11, 2023, https://www.infomigrants.net/en/post/47307/greek-border-authorities-have-stolen-more-than-%E2%82%AC2-million-from-migrants-in-five-years.

control. NESTOR's emphasis on state-of-the-art and mixed reality technologies reflects the ongoing technologization of borders, where technological solutions are regarded as the panacea for border and migration governance. While NESTOR bills itself as an innovative, "next generation" project, it does not constitute a rupture but rather a continuity in the EU's securitized surveillance practices – and while countervisual practices such as Forensic Oceanography's *Liquid Traces* might offer an alternative way of seeing, they too are bound up within a knowledge economy sustained by the EU border regime. To echo Martina Tazzioli and Glenda Garelli, how can we (and who is this we, really) engage critically with notions of visuality and migration "not (only) in terms of seeing differently or seeing more,"[386] but in ways that push us to deepen our practices of solidarity with migrants?

It remains to be seen how NESTOR will actually be implemented. What is at stake is the ways in which the project and its visualizing mission exacerbates and perpetuates the multiplication and proliferation of borders, and the violence their existence inures. I was particularly struck, while watching the above mentioned "NESTOR H2020 Project final video," by the image of a "field operator" wearing mixed reality glasses and visualizing, somewhere in between our precarious reality and cyberspace, how best to "catch" someone on the move. It shook me to my core: the overt militarization and fetishistic glee with which these technologies are put to use to deny and preclude the right to mobility. The use of mixed reality technologies for border and migration governance in particular points to avenues for future research – for all their exalted promises of building new worlds, a world without borders remains out of sight.



[386] Martina Tazzioli and Glenda Garelli, "Counter-mapping refugees and asylum borders," *in Handbook of Critical Geographies of Migration*, ed. Katharyne Mitchell, Reece Jones, and Jennifer L. Fluri (Cheltenham: Edward Elgar, 2019), 399.

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