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Borders as Infrastructure

The Technopolitics of Border Control

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Marking Points

Curiously iconic in both their visibility and invisibility, Europe's borders continue to mark points of mobility and fixity and inclusion and exclusion. From the cliffs of Dover and the Mária Valéria Bridge that joins Hungary and Slovakia across the Danube River, to the almost unnoticeable change in road surface between Italy and France; and from the camps on the Greek Aegean Islands, the fortifications on the boundaries of Hungary and Austria, and the migrants stuck in Ventimiglia and Calais to the cooperation between the European Union (EU) and the Libyan coast guard and refugees drowned in the Mediterranean Sea: Europe's borders arise and move, surveil and intervene, perish and continue in other guises. Borders are not only avatars of politics or instruments that carry the burdens of history and the Westphalian past that can be used at will; they also translate and mediate politics by creating moments where the conditions of territory are reproduced. Tools, devices, and instruments introduced to address specific challenges become parts of networks that quickly morph into border infrastructures. Witness, for example, the fingerprinting machines in Aegean reception centers connected to the databases of the European Asylum Dactyloscopy Database (Eurodac) and asylum applications under the Dublin Regulation. The growth of borders as infrastructure out of networked actors, institutions, and technologies entails the emergence of a machinery of governing and decision-making—an archive of images and imaginaries of past, present, and future movements of people, as well as of possible interventions. While technopolitics works as a web spun over political actors and agencies, the unwieldy technologies of border control are hard to steer and difficult to govern, manage, and

coordinate. They come to impose their forms on the political functions that they ought to execute.

How has the changing nature of borders and border control affected Europe's development as a political entity? What forms of technopolitics are implicated in recent developments? In the previous chapters of this book, the gulf between "ontic" and "ontological" conceptions of technology was filled with technologies combining materiality and movement, while concepts such as "kinopolitics" and "viapolitics" pointed to their dizzying variety. To unravel the specific technopolitical nature of these movements, I suggested an approach that can attend to changes in the form of both technology and politics. Borders can be objects or instruments of state power, networks to organize international human mobility or worldviews to order reality. A technopolitical account of borders addresses the transformations between these repertoires and follows how technologies travel from one form to the next.

This chapter offers a final reflection on the technopolitics of Europe's border infrastructures. I first revisit the idea of borders as infrastructure, using the technopolitical movements revealed in the investigation of airports, surveillance systems, hotspots, and humanitarian borders to interrogate the particular peramorphic mediations of which they consist. I then argue that these mediations all point in a specific direction—to what can be called "extreme infrastructure." The book ends with a coda on the significance of COVID-19 for Europe's borders-as-infrastructures.

Peramorphic Mediations

Borders illustrate once more that politics and technology are inseparable. States require techniques to govern societies, which manifest themselves through concrete measures to collect taxes, keep census records, map populations to implement health policies, and much else. Border control fits into this list; like other technopolitical systems, its technologies require combinations of administration, organization, and coordination. While borders can be seen as infrastructural systems, their ability to control requires other supporting infrastructures such as surveillance networks, monitoring mechanisms, databases, and the Internet. With these technologies, states create new spaces of governance and new ways to monitor target groups, as well as new contact zones with other countries that are rarely free of tension.

The previous chapters characterized the technopolitical expansion of Europe's border infrastructures as instances of peramorphic mediation—the expansion of border infrastructures through the creation of borders and border practices, intensified relations between these practices, and the transformation of existing practices into new border infrastructures—all giving rise to multiple political relationships. The extension and multiplication of borders pose particular risks in the current era of growing violence, xenophobia, racism, and nativist populism, as borders become laboratories of movement where experiments are conducted on humans, affecting their rights and their very lives. I pursued the peramorphic politics of Europe's border infrastructures through the notion of mediation and by following the emergence of infrastructures—not as a flat ontology in which human and nonhuman are equals, but as a *ménage à trois* among actors, institutions, and technologies. The notion of technology itself consists of all kinds of mediations, encompassing mutually interacting things, networks, and worldviews. Mediations were also found in the infrastructural competition over the design of the European Union and of the mechanisms to mediate between Europe's internal and external borders. Mediation also concerns the infrastructural imaginations that situate Europe as a security actor and the infrastructural compromises that are required to do so.

In chapter 2, I discussed four characteristics of borders that make them comparable to other kinds of infrastructure. Although the border as infrastructure is comparable to other infrastructures, what intrigues me are the specific technopolitical dimensions of the border. In what follows, I revisit the infrastructural characteristics of borders. But what I previously termed as “characteristics,” I now frame as “movements”—the back-and-forth transformations of the border as tool and instrument, network and worldview.

The humanitarian border exemplifies such movement. Once established as a concept, it has become a portable instrument that can be set up where necessary, operating as a pneumatic infrastructure that can be inflated, set up, and taken to a tracking location.¹ But between the humanitarian border as a policy concept and a portable containment tool lies its conception as infrastructure—one inextricably linked to various state and nonstate organizations, information systems, and human bodies harboring distinct fingerprints. Humanitarian borders appear in many guises, changing from one form to the other and giving rise to a morphological kind of technopolitics.

This perspective allows us to conceive of border infrastructures as particular peramorphic mediations.

The first peramorphic mediation concerns the relation between materiality and spatial movement. The infrastructural bordering of Europe is not restricted to the boundaries of the European Union or its member-states; nor is it necessarily steered from the center. Governing, securing, aiding, monitoring, and registering are all closely connected, relational arrangements. While the reintroduction of border controls in the Schengen Area, the opening of hotspots and detention centers in Greece and Italy, and the rise of walls in Europe during the migrant crisis of 2014–2016 may all seem exceptional, they can also be seen as more mundane effects of coordination between Europe's internal and external borders. Although terrorist attacks in Europe that occurred following the 9/11 attacks in the United States and the war in Syria have led to the intermingling of border control, migration, and security policies, the externalization of border control and the intensification of security mechanisms were set in motion long before. In the meantime, Schengen has begun experimenting with programs, policies, and technologies that bring together the controlling of its internal and external borders. The mechanism is much more than an instrument in the hands of EU institutions, or a tool to be used by Frontex; instead, it creates a wheelwork through which Europe is built and rebuilt.

The power, control, surveillance, and intervention that accompany the proliferation and dispersion of borders affect the relations between centralized and decentralized authorities, internal and external borders, and isolation and circulation. The dichotomy between the European Union's internal and external borders, between Europe's inside and outside, is being infrastructurally replaced by more dynamic relations that result in internal isolation (detention centers in EU member-states) and external circulation (the EU-Turkey Statement), organized through numerous compromises.² Borders are not only facilities to organize movement or assemblages that connect technologies, but also are deeply implicated in circulation.³ Border control is organized to surveil human mobility to facilitate intervention. While blocking movement or preventing people from entering expresses such control, borders also enable the following of people through monitoring and registration, in effect checking them before they reach critical crossing points. Borders act and select, not only at the boundaries of states and territories, but also at numerous places where state authority, technology, and

movement meet. The border as infrastructure is rooted in the design of both large-scale policies (Schengen, Dublin) and technological systems [Eurodac, Visa Information System (VIS), Schengen Information System (SIS)], as well as in more mundane elements. A peramorphic perspective on the items used by migrants shows that shipwrecks, tents, garbage, and life jackets littering the shores of the Aegean Islands constitute novel material openings for following the emergence of infrastructures.

The second mediation concerns movements to select different sorts of migrants. Border infrastructures distinguish migrants from travelers in specific ways, organizing circulation to identify persons who are not allowed access under certain conditions. Classifying migrants through categories such as regular and irregular is but one example. Such classifications give rise to mobility regimes that distinguish between insiders who belong and variously othered outsiders who do not. By following the organization of passenger flows, the control of travelers and the management of migration, we saw how relations between design, detection, and detention at the airport are expressed through infrastructural improvisations, innovations, and compromises. Border regimes stem not only from restrictive state policies, but also from infrastructural compromises that connect and disconnect various forms of selection, isolation, and circulation. To understand the inner workings of a border as infrastructure, we need a different scheme than simple inclusion/exclusion. We can see how the sorting function of information technologies and how they create classifications of various kinds of migrants—students, workers, temporary migrants, refugees—is the outcome of a sociotechnical process.⁴ Rather than being two extremes in a fixed scheme, inclusion and exclusion apply to specific moments and locations where the categorization of persons comes to be associated with more, less, or unclear and ambiguous rights. Databases and registration systems mediate between existing oppositions such as between citizens and migrants and generate a proliferation of different kinds of people with different statuses and opportunities. As a result, the insider/outsider distinction is being replaced by a much more heterogeneous handling of technologically constructed categories of people.

The third mediation concerns the aesthetic interplay of the visible and the invisible. The intermingling of migration and security policies, Europe's repositioning as a geopolitical actor, and the border policies of EU member-states and other European countries have focused our attention on borders

since the beginning of the so-called migrant crisis. The hidden integration of Europe through its infrastructural projects is now fully exposed.⁵ But these infrastructures were never completely invisible; they were out of sight only to scholars who studied European integration and cooperation through treaties and documents while ignoring the material constructions of Europe. The idea that infrastructures are part of a stable background that structures society—which become visible only when technologies stop doing what they are supposed to do—has made way to a more variegated view. Infrastructures are visible and invisible at the same time; some parts are on the surface, while others are underground. Visibility is not something that can just be switched on and off; much depends on the event at hand and the specific constellation of actors, institutions, and technologies. Borders can be visible or invisible while harboring a particular aesthetic relation between vision and action. The European Border Surveillance Program (EUROSUR) aims to create situational awareness by visualizing specific events in order to intervene, whereas the hotspot approach operating within this program processes visual biometric information to assess applications while keeping the bodies of migrants and their living conditions in the camps out of sight. Monitoring borders implies constant zooming in and out, arriving at positions that allow only partial oversight while preparing for interventions in real time. Conversely, journalists, academics, nongovernmental organizations (NGOs), migrant support groups, and activists aim to make things visible by shining light on precarious situations, critical events, and the networks within which power and responsibility do (or do not) circulate.

The fourth mediation concerns mobility itself. While borders are concerned with movement, border infrastructures themselves are movable entities. This peramorphic mobility concerns EU and member-state policies, as well as the actions of migrants. The European Border Surveillance Program EUROSUR depends on the mobility of patrol boats and surveillance instruments, as well as the flow of data and transfers of knowledge, regulations, and policies; the humanitarian border entails the traveling and intertwining of care and control; the investigation of border infrastructures requires the mobilization of representations by architectures of knowledge and visualizations that reconstruct infrastructural events. These movements are not just instrumental; the externalization of border control and the rise of so-called mobility partnerships are a technopolitical worldview as much as a socio-technical project.

Seen peramorphically, infrastructural imaginations and infrastructural violence travel hand in hand. And as we saw in the previous chapters, borders travel with migrants. Corridors of migration, migrants gathering for collective travel, and the goods, devices, and technologies used for housing, food, and medical care, as well as for communicating and conducting financial transactions all give rise to portable infrastructures that combine care and control. This transformation of borders into movable border infrastructures leads to a multiplication of political relationships. Local volunteers aiding migrants, professionals from international NGOs, coast guards, Frontex officials, municipalities in border areas, local and regional police, and the border guards of various countries all find themselves negotiating the often-conflicting demands of humanitarian support, border control, state politics, and the governance of international mobility.

These four mediations intervene inside and outside of states and the European Union in multiple ways. As infrastructures, borders are the technologically designed, delegated, mediated, and morphological manifestations of the circulation and selection of people and the control, anticipation and evaluation of their movements. They function through the use of myriad instruments, from walls and barriers to registries and Big Data. Rather than resulting in an all-encompassing surveillance system, we see the becoming of a fragmented field of border practices in which configurations of actors, institutions, and technologies are involved in the bordering of Europe.

Traveling to the Limits

The mediations that typify Europe's borders are not just the characteristics of a particular kind of infrastructure; they also point in a specific direction—namely, at the way that Europe's borders develop *as* infrastructure. This direction is toward what I call “extreme infrastructure.” The terms that I have used to typify Europe's border infrastructures—“compromise,” “mosaic,” “patchwork,” and “bricolage,” to name but a few—underline the interoperability that is expected to connect the various extant border control systems. EUROSUR's goal of achieving situational awareness is a means to bridge the gap between vision and action to enable critical border interventions in real time. The humanitarian border aims to both protect borders and human lives. The airport's design can be seen as a specific architecture to facilitate intervention, whether to manage the flow of passengers

or to detect and detain unwanted persons. Conversely, the infrastructural investigations described in chapter 7 can be likened to countersurveillance, deploying the “detecting eye” to reveal the contours of the infrastructural state and cases of infrastructural violence in order to raise awareness and create possibilities for public intervention.

These infrastructural compromises are more than the dialectical outcome of the open-closed dichotomy; the interplay between opening and closing reveals a morphological logic, a tension between political thinking and acting in terms of ends and endings (an eschatological view) and a generative view that emphasizes the birth and subsequent transformation of events. In the latter, borders do not mark a clear end or ending, but rather a multiplication and hybridization of bordering practices that can affect relations among states, peoples, territories, and technologies. The multiplication of borders concerns both the expansion of borders and the people engaged with them: migrants as well as rescue workers and volunteers who are increasingly criminalized for offering food and shelter. As infrastructures, borders never end.

This reconceptualization of infrastructure points to how Europe, as an infrastructural imagination, has been constructed and deconstructed through its border politics. As a boundary project, Europe and its border politics emerge at the threshold of actions and interventions by a myriad of actors, institutions, and technologies.⁶ Although the political and institutional order of the European Union may be unique, its border infrastructures share many features with border infrastructures elsewhere, with comparable constructions, conflicts, and compromises. Rather than suggesting European exceptionalism, the notion of a boundary project allows us to situate Europe’s border politics in the continent’s particular regional environments, histories, and political orders in such a way that the politics remains open to comparison with other border infrastructures. Characterizing Europe as a boundary project, furthermore, acknowledges how Europe has developed via its border politics. Like the etymological origin of the word “project,” Europe’s border politics are thrown forth (which is what the Latin *pro-iacere* means).

If Europe is indeed a boundary project, what does it bring forth? It is tempting to see the development of border infrastructures as being guided by an infrastructural kind of state governance.⁷ Indeed, some aspects of the planning, funding, and regulation needed to install border controls are comparable to the nineteenth- and twentieth-century expressions of the

infrastructural state. But the current organization, coordination, and integration of state policies through technology is much more than an instrumental operation, as it does not leave the actors and institutions involved untouched.

I therefore suggest that we need to revisit our ideas about the infrastructural state. If technologies are not only means to an end but mediators of techniques of governance, is it not plausible that state authority not only is transferred or delegated to technologies, but also emerges from these very techniques? Europe as an infrastructural state arises out of the intermingling of policies, agencies, and technologies; its border infrastructures do not arise solely out of human design or political will. While controlling its external borders was one of the European Union's tasks from the outset, the legal order that developed around its policies of border surveillance did not provide a blueprint for installing border infrastructures. The European Union and the states participating in the control of its external borders developed from the inside out, from the very construction of border infrastructures.

The question of what Europe as a boundary project brings forth can be raised even more profoundly. Considering the fire that destroyed the Moria camp on the island of Lesbos September 8, 2020, pushback operations at sea, the deaths in the Mediterranean, and the conditions under which migrants who are part of mixed movements travel across the continent, Europe's borders often lead to uncertainty, insecurity, vulnerability, and violence. In these cases, Europe's borders have become the machinery of extreme situations.⁸

By "extreme," I not only mean how Europe's borders create states of exception or extreme increases in migration, often referred to as peaks and climaxes, waves and tsunamis. Rather, what I refer to as "extreme" materializes in how selections are made. Border infrastructures push inclusion and exclusion to the extreme by pursuing selection under circumstances that inevitably introduce states of exception, in which people's rights are endangered and migrants are reduced to objects in the politics of circulation. By technologically naturalizing processes of bordering, borders as infrastructure fashion the exceptional and turn it into the new normal. Increasing migration is often said to exert extreme pressures on Europe's borders. But human migration is not an extraordinary event; the tensions that accompany border infrastructures are "intra-ordinary" events, generated and disseminated by the dispersion and diffusion of borders, their movability, and the interplay between visibility and invisibility.

My conception of borders as extreme infrastructures is also informed by the rise of so-called gray zones and black holes where the control of borders crosses the boundaries of existing policies, regulations, and fundamental rights or leads to situations of organized irresponsibility and infrastructural violence. The technopolitical border policy of surveillance in the Mediterranean, the hotspot policy in the Greek Islands, and the outsourcing of border controls to strongmen in Turkey and warlords in Libya (to cite but two examples) are a recipe for compromising compromises.

The point of the notion of extreme infrastructure is that it not only encounters critical situations, but also to some extent creates exceptions through the way that the infrastructure itself is organized and operates by its peramorphical multiplications. In this sense, the infrastructure generates extremes. The movements are not simply from normal to extreme to the becoming of a new normal—extreme situations are not only exceptions but intensifications of normal situations. The etymology of “extreme” is apposite here, as the word is the Latin superlative of *exter*, meaning “on the outside,” “outer,” or “external.” The emergence of extreme situations is not a development in which something that is inherently political (borders) slowly or rapidly radicalizes into extreme infrastructures. Following the technopolitical repertoire, the emergence of extreme infrastructure takes place through all kinds of movements that transform it from instruments to networks and vice versa. These technopolitical travels do not necessarily create extraordinary situations, but account for intra-ordinary maneuvers that make up all kinds of compromised compromises, resulting in a diffusion of extremes. As a result, border policies that are operative at the outside of the European Union (e.g., at the external borders), such as the externalization of border controls, also affect the inside via an internalization of border policies and technopolitical imaginations of borders. The ongoing multiplication, transformation, and hybridization of borders turns Europe into an infrastructural state with movable borders that organize mobility. Europe’s current relationship with borders renders borders—and Europe itself—as an extreme infrastructure obsessed with boundaries and limits.

Borders are archetypical political entities, among the oldest objects of state concern. Whether they are perimeters to mark territory, mechanisms to manage migration, signs or symbols of national identity, or security instruments to control the mobility of populations, or take the form of theater and spectacle, borders are political. But borders are not just objects of

political thought and action; they also are the things, concepts, and issues through which politics and states develop. As migration policies, security policies, and foreign affairs overlap, borders increasingly become the realm of politics; the repertoire of databases, checkpoints, registers, and monitoring instruments, as well as the linkages among border infrastructures on land, at sea, and in the air, guide international political cooperation. Politics give and receive shape via borders.

The shaping and reshaping of borders bring back ghosts of the past, histories of discovery, trade, conquest, colonialism, and racism. But they also foreshadow a future in which the bordering and rebordering of Europe will only grow. Besides offering a way for states—and in the case of the European Union, a union of states—to reinvent themselves, borders create an atmosphere filled with tension. The technopolitical nature of these tensions becomes apparent only when borders are no longer solely seen as representations and manifestations of state power, but as infrastructures that create spaces for technopolitical maneuvering. Checkpoints, walls, cameras, biometric systems, cell phones, registers, and databanks not only organize the movements of people, adding an informational layer onto the sociotechnical organization of states; they also compose an architectural configuration that facilitates intervention. The entanglement of technologies with landscapes and seascapes, as well as the intertwining of programs to provide traveler services, care, and control, results in a peramorphic multiplication of political relationships.

The infrastructural lens this book applied was partly introduced as an alternative for the focus on institutions. In the case of borders, the infrastructural perspective shows borders are not just the material realization of institutional policies and politics, but have a particular material dynamic that fuels their expansion and transforms their shape. As borders change shape, they transform from objects into networks into world views and vice versa. These peramorphical mediations (i.e., the infrastructural expansion, continuation, multiplication, and transformation of borders) complicate their evaluation. When borders are stretched to the extreme and split apart into all capillaries of societies, questions regarding their infrastructural legitimacy and infrastructural illegitimacy become more and more pertinent. As politics and political compromises morph into material shapes, addressing these questions does not become any less complicated. Meanwhile, these complications offer a ticket to follow the emergence of borders as movable

infrastructures. As such, investigating borders as infrastructure is a next step to detect the unfolding of technopolitics in policies concerning international mobility and security.

As vignettes of the efforts to control human mobility, borders express the tensions among state authority, technology, and movement. The infrastructural bordering of Europe is likely to mingle with geographies and ecologies that affect the circulation of human and nonhuman entities. As such, borders continue to be the entities par excellence through which state configurations present and reinvent themselves regarding such issues as the consequences of climate change or the COVID-19 pandemic that currently grips the world. Climate change will affect border infrastructures not only through the growing risk of disasters, displacements, and environmental migration, but through the intensified circulation of nonhuman species caused by changing climates and the traveling of pathogens such as viruses, bacteria, and parasites. Borders may be dispersed, transformed, and displaced, but as movable entities, they are likely to persist as mediators of technopolitical interventions—and to guide politics well into the future.