

Architectures of Resistance
Negotiating Borders Through Spatial Practices

Awan, Nishat; Sioli, Angeliki; Palagi, Kristopher

Publication date

2024

Document Version

Final published version

Published in

Architectures of Resistance

Citation (APA)

Awan, N., Sioli, A., & Palagi, K. (2024). Architectures of Resistance: Negotiating Borders Through Spatial Practices. In A. Sioli, N. Awan, & K. Palagi (Eds.), *Architectures of Resistance : Negotiating Borders Through Spatial Practices* (pp. 13-27). Leuven University Press.

Important note

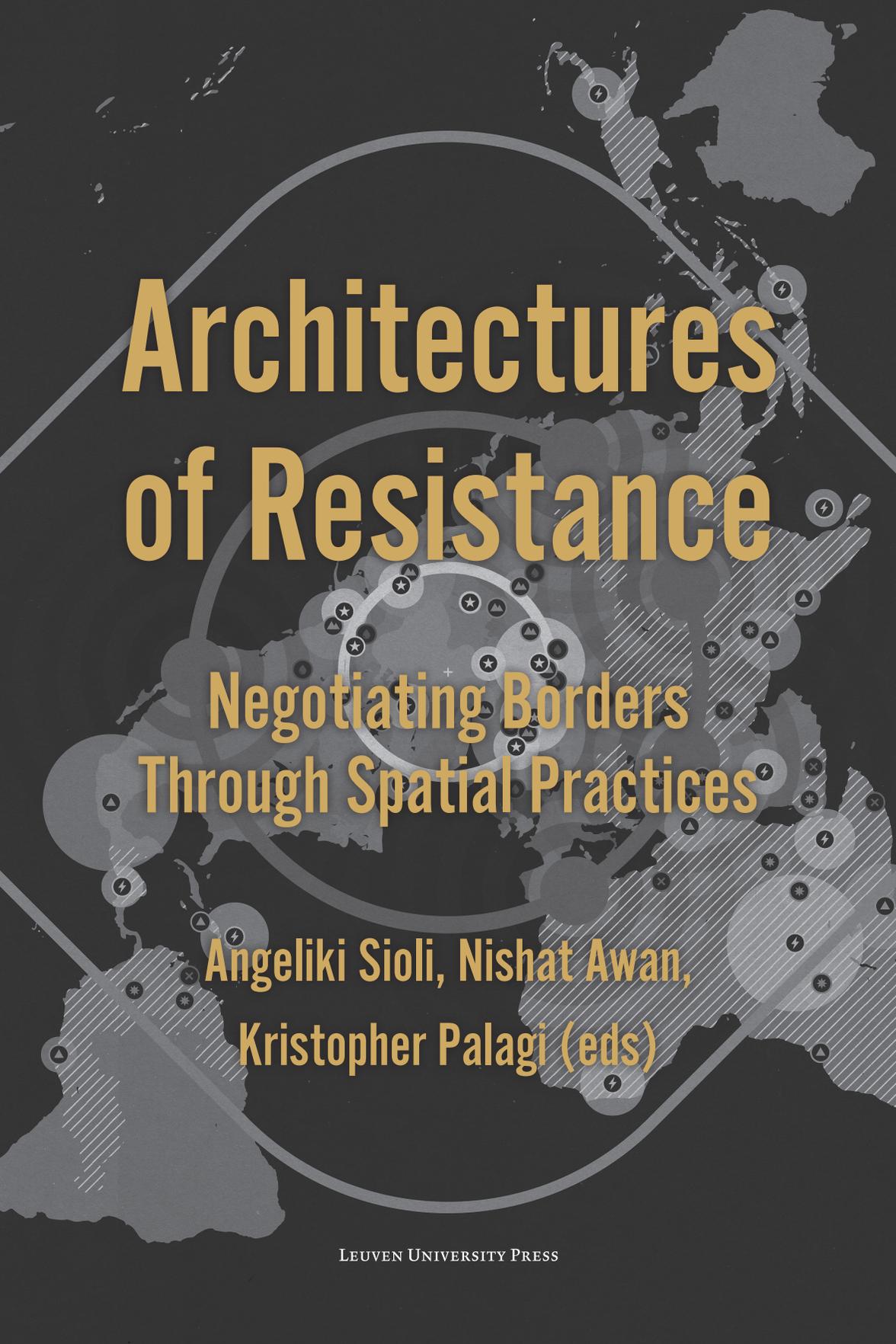
To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.



Architectures of Resistance

Negotiating Borders
Through Spatial Practices

Angeliki Sioli, Nishat Awan,
Kristopher Palagi (eds)

Published with the support of the KU Leuven Fund for Fair Open Access, TU Delft , Louisiana State University and the European Research Council.



Published in 2024 by Leuven University Press / Presses Universitaires de Louvain / Universitaire Pers Leuven. Minderbroedersstraat 4, B-3000 Leuven (Belgium).

Selection and editorial matter © 2024, Angeliki Sioli, Nishat Awan, and Kristopher Palagi
Individual chapters © 2024, The respective authors

This book is published under a Creative Commons Attribution Non-Commercial Non-Derivative 4.0 Licence. For more information, please visit <https://creativecommons.org/share-your-work/cclicenses/>



Attribution should include the following information:

Angeliki Sioli, Nishat Awan, and Kristopher Palagi, (eds), *Architectures of Resistance: Negotiating Borders through Spatial Practices*. Leuven: Leuven University Press, 2024. (CC BY-NC-ND 4.0)

Unless otherwise indicated all images are reproduced with the permission of the rightsholders acknowledged in captions. All images are expressly excluded from the CC BY-NC-ND 4.0 license covering the rest of this publication. Permission for reuse should be sought from the rights-holders.

ISBN 978 94 6270 405 3 (Paperback)

ISBN 978 94 6166 552 2 (ePDF)

<https://doi.org/10.11116/9789461665522>

D/2024/1869/28

NUR: 648

Layout: Crius Group

Cover design: Daniel Bennenworth-Gray

Cover illustration: Political Equator. Pierce Quincuncial Projection, Estudio Teddy Cruz + Fonna Forman, 2020.



ARCHITECTURES OF RESISTANCE

Negotiating Borders through Spatial Practices

Nishat Awan, Angeliki Sioli, Kristopher Palagi

*Past the guarded schoolyards, the boarded-up churches, [...] past newspapered windows
of tenements, along the violated, the prosecuted citizenry, throughout this storied,
buttressed, scavenged, policed city I call home, in which I am a guest....*

—Li-Young Lee, “The City in Which I Love You”

On March 1, 2020, Greece closed its borders, denying refugees the right to seek political asylum, a reaction to Turkey’s decision to strategically refuse its role as gatekeeper to the European Union. A few weeks later, Italy, France, Belgium, and Spain closed their borders as the global COVID-19 pandemic spread. China had already closed its borders a few weeks earlier and other countries quickly followed suit.¹ As planes were grounded, the stark reality of immobility was revealed to a global class accustomed to frictionless travel across the planet. On a more intimate scale, innumerable citizens, from New Zealand to Brazil, were confined to their homes, with some needing an official permit to simply go out for a walk or to buy food. Invisible boundaries proliferated in public space with the call to maintain a 1.5 meter distance between people to guard against the spread of the respiratory virus. As nationwide lockdowns became the norm, they revealed discrepancies between white-collar workers able to carry on working and earning from the comfort of their homes and frontline workers and laborers who were required to be present physically in their places of work. Such untenable aspects of lockdowns were perhaps more apparent in the global South, where most people rely on daily wages, as well as in those countries that chose to implement restrictions in specific neighborhoods and regions, producing internal divisions that reinforced labor, class, and wealth disparities.

In the midst of the pandemic’s first wave, the US administration announced that international students enrolled in the country’s universities for the 2020–2021 academic year would be deported. With the excuse that Skype, Zoom, Teams, and myriad other online platforms connect people digitally around the globe, the United States attempted to reinforce discriminatory policies against foreigners. The decision was rescinded just a week after its

announcement—due to the strong reaction from the academic world—but it revealed clearly how advances in digital technology are often mobilized to reinforce borders rather than diminish them, contra the false promise of globalization.² The excuse of the virus raised new administrative borders, while the more traditional barrier at the US-Mexico border remained firmly in place, built to a height of thirty feet, a dimension that has been described as “ensuring” any intruder’s death in case of a fall.

2020 and 2021 reminded us—cruelly so—that borders at whatever scale, from the geopolitical to the most intimate, are not as gentle or as figurative as our seemingly progressive societies wish or choose to believe. What might be the role of architecture, or spatial practices more broadly, within such a context? Architecture as discipline and profession is often complicit in constructing borders, as the enthusiastic participation in the competition for former president Donald Trump’s border wall so aptly demonstrated.³ Yet, architecture is also capable of resisting borders through its speculative and propositional potential, mobilized in spatial investigations and design interventions. As the short and admittedly perspectival account above shows us, borders are slippery things—they can be anything and everything—and one of the difficulties in approaching the topic of borders is that there is no one definition of the concept. This book does not seek to describe what a border is; neither does it collate the many ways that borders exclude, separate, and detain. Instead, we have chosen to discuss borders through the forms and practices of resistance we see to such acts. This is a political choice, as much as it is an academic one, and we invite the reader to delve into the many already existing excellent resources on the workings of borders.⁴

BORDERS AND THEIR REPRESENTATION

That borders are fictional entities is today an accepted fact within border studies and allied disciplines. Even those borders demarcated by physical entities, such as rivers, are understood to have *become* borders through acts of reinforcement, whether these involve patrolling the river’s edge or archiving it in the drawing of maps. The uneasy relationship between maps and borders is best demonstrated through the capricious nature of rivers, which do not stay still but shift their course, defying human attempts to mobilize them in claims to territory.⁵ Precisely because maps have the ability to congeal territory, that is to make everchanging and relational conditions appear as if they were static facts on the ground, they are crucial to the construction of borders and the realities they seek to impose. The genealogy of geographical maps can be traced to the colonial endeavor of invading, appropriating, and laying claim to

new territories. Maps were central to all three acts. Columbus's seafaring voyage of colonization was made possible through maps that could help navigate across the Atlantic Ocean. The very act of recording the land and its features was a form of appropriation that produced borders—lines that showed the edges of territorial claims.

While related to the cartographic endeavors described above, architectural mapping as a practice is very different. That is not to say that architectural mapping can deny the uneasy legacy of invasion and colonisation, but it can lay claim to a different and concurrent legacy. Since architecture at its most traditional deals with the design and construction of buildings, forms of drawing and working with buildings have been constitutive of what architectural mapping is today. Architecture embraced the axonometric drawing as a mode of visualizing buildings and objects from two different sides but with a view from nowhere.⁶ This was not the bird's eye view of the geographic map but a composite image that created a view that no one could see. If we trace architectural mapping from this point, there is no claim to represent "reality"; instead, reality is always constructed through the act of drawing, meaning that maps become propositional devices. Architectural drawings are also made with the purpose of communication, traditionally between architects, craftsmen and builders, and today between more diverse communities of practice, a claim also made for data and information visualization.⁷ Architectural maps can range from the scale of regions and territories to that of a building interior and the intimate scale of the body.⁸ This ease with and necessity of switching and combining scales and views in a seamless manner is central to the use of maps in architecture. For studying spatial and geographic phenomena, such mapping can be a powerful form of visual representation that allows the complexity gleaned from ethnographic methods of interviewing, participant observation, etc., to be reproduced visually in ways that complement and add value to research findings.⁹ Such spatial visualizations have the potential to contribute to what Tim Ingold calls a "graphic anthropology."¹⁰

Architectural mapping also has a way of synthesizing and analyzing phenomena through graphical modes, what is often understood as information visualization, but here again architectural visualizations are different. They rely not only on the quantitative but also on a qualitative approach that takes some of the political and synthesizing qualities of maps to produce an argument. An example of such an approach is the image on the front cover of our book, "The Political Equator" by Estudio Teddy Cruz and Fonna Forman. The diagram is an argument synthesized in visual language about the nature and geographical location of political conflict around the globe, as well as a call to concentrate our efforts in those parts of the world that are so heavily affected by various forms of injustice. As with most maps, it is a polemical

argument that hints at the reasons for those injustices and the relation they have to their location on the planet; but it does not contain all the answers. As with traditional maps, this requires a critical engagement with the means of its production and the political context within which it engages. The map is made by academics and practitioners based in the USA. Our book begins with a chapter that explains this image and the methodology that it encapsulates for working with border conditions. Starting here in the USA, but with a contribution that unpacks the ways in which USA, UK, and other imperialist and colonial powers have been fundamental to producing a world of divisions, acknowledges that architecture's desire to always remain apolitical is simply not tenable. Cruz and Forman trace the consequences of this observation within the context of a number of highly segregated US cities. They discuss workshops with students from different schools across the country as a form of pedagogical experiment. Using the diagram as a starting point, students proposed strategies in response to local conflicts imagining how small-scale practices can start to corrode borders.

From local contexts in the USA, we move on to the geographical area of the Levant, one of the "Political Equator's" most congested territories, which gives us a zoomed in understanding of the kinds of arguments the diagram is alluding to. Architect and educator Panos Leventis examines the Green Lines of Nicosia, Jerusalem, and Beirut. He discusses examples of street art within these border lines as moments of opposition within the imposed conditions of division. Leventis sheds light on the possible strategies and intentions behind these spontaneously and unofficially occurring practices, studying the places and the buildings on which they appear. By doing so, he identifies similarities among the Green Lines despite the differing sociopolitical conditions that created them. He argues that these similarities are related to citizens' desire to discover the urban identity of their divided cities and to negotiate or undermine the status quo.

Understanding border geographies through their representation is an underlying concern across all chapters, and in the following two contributions they are explored through literature and art practice. Architect and educator Angeliki Sioli discusses three dystopian novels where the frightening conditions of borders provoke moments of resistance. She examines *We* (1921) by Yevgeny Zamyatin, *1984* (1949) by George Orwell, and *The Not Yet* (2014) by Moira Crone, unpacking in each case the way the story's protagonist engages with the architecture of the city to challenge the established political regime. Sioli discusses the role of walls as divisions and as agents of surveillance while extracting the small acts of resistance performed by citizens and connecting these fictional examples to contemporary border practices. This chapter is followed by a visual essay by artist and architect Mohamad Hafeda, who engages

with the city of Beirut through the stories of displacement of four people. He invites each of them to sew over existing maps in ways that defy and resist official borders by representing instead their own experiences of living in borders, crossing borders, and remembering borders. The new maps made through a practice of stitching that is the making and unmaking of borders document small acts of resistance against the divisions and political uncertainties that are part of everyday life in Beirut.

Thus, if we agree that the production of borders is related to their representation, then to be able to intervene in those forms of representation is an important act in questioning the fictions upon which the power of borders is based. Sioli's and Hafeda's contributions both show that while it is very difficult to deny the geopolitical realities that underpin contemporary borders, it is also crucial to realize that borders are much more than their instantiation within nation state discourse. In our contemporary world, it is often commercial interests that are producing new borders that overlay and intensify the effects of national borders. Commercial activities such as mining and oil drilling, land reclamation projects of the sort we see in the Gulf, or the large-scale destruction and construction of buildings for economic gain are all producing new types of borders through mobilizing new forms of representation. Satellite imagery and maps produced with remote sensing technologies are being used across geomatics, architecture, engineering, and surveying. These have transformed maps from two-dimensional representations of surfaces to a concern with three or even four-dimensional volumetric space.¹¹

Critical scholarship too has turned toward volume as a way of analyzing territorial claims. Just as historical maps and atlases were implicated in the production of territory, so the demarcation of borders in three dimensions is claimed to produce novel sovereignties.¹² Some of these discussions have emerged in the literature around volumetric geographies where the political consequences of extruding the atlas have been explored in relation to sovereign claims by states and private entities. According to Frank Billé, historically in Europe there was a general agreement on the volumetric nature of land ownership, as can be discerned from the Latin maxim, *Cuius est solum, eius est usque ad coelum et ad inferos*, or "Whoever's is the soil, it is theirs all the way to Heaven and all the way to Hell."¹³ In common law, this meant that ownership of a parcel of land automatically assumed that it included everything that was above and below it, but in practice without the advent of technologies that could reach and exploit far from the ground this was not a live concern. Advances in building technology have since opened up the subterranean realm for property, as can be seen in the construction of mega basements in wealthy areas of London, as well as making the skies open to property claims, as is the case with selling "air rights" in New York that allow adjacent buildings to

cantilever above a lower building.¹⁴ Currently, sensing and mapping technologies are also transforming the deep sea and near-Earth orbit into economically lucrative locations. For example, claims to the seabed beyond each nation's Exclusive Economic Zone—an area of two hundred nautical miles from the coastline—are contested heavily by those involved in deep sea mining that would attempt to extract minerals from the seabed.

SITUATED, MATERIAL, AND RELATIONAL BORDERS

While borders have never functioned as simple lines in the sand, the above discussion demonstrates how they have complexified with the advent of new technologies, as well as through the neoliberal entanglements of commercial interests with geopolitics. Scholarship since the mid-1990s has sought to decouple the border from territory understood in purely physical terms, and therefore from an understanding of it only as a technology of separation.¹⁵ Instead, focus has shifted to the processes that produce and are productive of the border through the concept of bordering.¹⁶ This dislocation of the border has also included an acknowledgement of its dispersed nature, with attention shifting to questions of surveillance, biometrics, and the use of data in policing the border.¹⁷ Particularly, in the case of maritime borders this diffusion is used to manipulate legal jurisdictions to either evade responsibility, as has been shown in the case of the “Left-to-Die” boat in the Mediterranean, or to deliberately intercept boats in order to turn them back before they reach land and bestow rights upon their passengers.¹⁸ While such scholarship foregrounds the legal, bureaucratic, and technologized underpinnings of borders, another term, “borderescapes,” complements this work by arguing for a way of thinking about the border through a phenomenological perspective that includes the representations and experiences of migrants at the border.¹⁹ Bringing such an embodied and situated perspective to the study of borders is an important ethical concern. Gloria Anzaldúa famously described the US-Mexico border as “*una herida abierta* [an open wound] where the Third World grates against the first and bleeds.”²⁰ In this sense, borders become important sites for understanding the highly unequal conditions that many have to endure in the name of national security. Anzaldúa also reminds us that some people always carry the border within them wherever they go. While this may refer to exclusionary and discriminatory practices of all sorts, we also see the repercussions of being a border carrier in the way the dispersed border suddenly appears for racialized people who are asked to prove their right to be somewhere through identity checks. Thus, addressing borders requires a simultaneous appreciation of their situated and embodied quality, as well as a comprehension of their dispersed nature.

In concrete terms, this might mean attending to the way borders are produced through the bureaucracies and technologies of spatial control, and how they reconfigure and reproduce space, while being aware that such spaces may not exist for all. The geographies of bordering are often invisible, felt only by those who are addressed by the exclusions they perform. This means we must always be attendant to the communities that coalesce around the border and the new spatial and social practices they induce. The middle part of the book addresses different forms of border crossing and their implications for architects, urbanists, and spatial practitioners. Two chapters are concerned with refugees making their way across hostile borders and how architecture as practice can respond to this urgent condition. Architects and educators Ursula Emery-McClure, Marisa Gomez Nordyke, and Paul Holmquist suggest that the speculative and propositional nature of architectural thinking can help us respond to the hardening of borders. Their discussion of design studios engaging with the area of Rio Grande/Bravo del Norte between the United States and Mexico shows how the landscape itself has been weaponized against border crossers. Studying the building typology of the “way-station” and the notion of “asylum,” the students in each studio designed architectural interventions that could facilitate the movement of people. They did this while respecting and working with the sociocultural differences and similarities between the countries on both sides of the border. The hostile environments of many border areas are made lethal by specific practices of border securitization, such as closing off routes so people are forced to take more dangerous paths. In this context, designs that help mitigate these dangers are acts of resistance since the landscape and the seascape, often understood as actors within the construction of borders, are ambivalent. That is not to say that they are mere backdrops; rather, as relational entities they can become entangled within projects of border security, as well as in the emancipatory projects described in this book.

Just as the environment and ecology bring a relational element to borders that is often overlooked, Nishat Awan’s contribution brings the often-overlooked temporal dimension of borders. In her essay, she suggests that the very understanding of architecture might have to be rethought through experiences of displacement and the way they affect our relation to time and temporality— aspects often expunged from a discipline so heavily focused on settlement and space. Awan examines mapping as a key practice and method for an expanded remit of architecture’s engagement with the complex nature of borders. She ends with an invitation to architects, planners, and policymakers to think actively about the processes of bordering and to propose ways of supporting those displaced by the current racialized regimes of securitization that are designed to keep certain people out, turning citizens into noncitizens and criminalizing the other. What displacement and the act of crossing itself might

mean for our understanding of architecture are also concerns that can be discerned in Sofia Dona's examples of imaginary passages across borders. Dona discusses her corpus of work that focuses on the cultural, political, social, and personal parameters surrounding movements through borders. Her work is based on discovering, creating, and recording passages through highly political spatial borderlines. She performs and examines crossings that bring together elements from the different cultures placed at the opposite sides of these passages. In this way, she attempts to create connections through cultural and practical similarities. Her contribution is an insider's look into her own artistic practice that brings to the surface surprising and unexpected connections but also unifying conditions that undermine borders.

Tying together all these engagements is an understanding of the border as a relational entity that is constituted by the techniques and apparatuses of bordering as much as it is fundamental to the development of such processes—what has been described as the topological nature of borders.²¹ As Celia Lury has pointed out, topological thinking is important for the study of social and cultural phenomena, as it shows that

we no longer live in or experience “movement” as the transmission of fixed forms in space and time but rather movement—organized in terms of the topological invariants of ordering and continuity of transformation—composes the forms of social and cultural life themselves.²²

This observation is fundamental to our understanding of the way borders and the displacements they enact operate, requiring forms of methodological engagement beyond the traditional mode of cause and effect. Instead, the intensive nature of border production requires the situated and embodied perspective highlighted above. As people located within the privileged spaces of the global North, we know that borders are already working to protect our privilege and therefore inevitably affect the ways in which we might apprehend them. Being aware of such entanglements is key to any ethical engagement with borders, as reflected in architect and educator Marc Schoonderbeek's contribution, in which he calls upon us to attend to the border as a space of simultaneity. “The Border Complex” has a highly polemical tone and can be read as a manifesto. Given the nature of the book's topic, the format of a manifesto—a strong manifesto against borders—addresses a heated conversation in an equally heated way. Schoonderbeek departs from four axioms on borders and challenges the prevailing misconception that the border coincides with a line that can be replaced or substituted. He goes beyond specific borders to examine the theoretical discourse that surrounds them and suggests ways to map them, confirming and resisting social networks, juridical practices, and

political ideologies. The topological nature of borders is also present in urban geographer Eugene McCann's account of how urban policies move across borders, and the way in which such movement allows us to get to know the workings of cities while simultaneously producing the city as we know it. Examining the regulations around supervised consumption sites for drugs, McCann shows how ideas cross borders and enable possibilities to resist the established norms of urban appropriation and understanding. Through an anthropological perspective on policy mobilization, he discusses the wide range of actors involved in this work that dissolves borders. He demonstrates how policy mobility transcends topographical distances and brings ideas from elsewhere into new places, challenging the existing status quo by disrupting entrenched systems of power.

Despite the topological nature of borders, they often emerge in our consciousness as physical and material entities. The last set of contributions to be discussed here shows how such physical instantiations can be read as privileged sites for unpacking the relational qualities of borders. Aleksandar Staničić examines the landmark building of the Gevgelija border crossing on the Greek-North Macedonian border. The building has experienced numerous transformations in program and use over the years, which the article presents in detail. Moreover, Staničić discusses how these transformations reflect significant changes in the politics and practices of border crossing and how architecture becomes a form of resistance to strict political dividing lines. Nicolas Serrano's essay examines the urban planning strategy of greenways as borders in the post-World War II urban development of southern US states. He argues that although greenways gained widespread popularity with the rise of an ecological consciousness in the late 1960s and '70s, this is not the only reason they were implemented so extensively. Rather, greenways were a derivative of the idea of spatial distance integral to suburban neighborhood design, functioning as buffers between areas. Serrano argues that greenways were central to the White spatial imagination of postwar urban form and its desire for segregation along color lines. Through this observation, he urges us to resist the dominant logics of urban and landscape planning that often hide their bordering agendas behind seemingly progressive policies. Lastly, in Aya Musmar's visual essay of the Za'atri refugee camp in Jordan, we are reminded again of the need to address borders from a situated and material perspective that also considers the entanglements of social, political, and environmental relations. Through discussing the fraught act of taking photographs in a refugee camp, Musmar shows the complexity of social and spatial borders at an intimate scale. She describes her own feelings of shame while photographing refugees and their temporary living conditions that do not afford much privacy. Musmar narrates encounters with officials who control access to the camp as well as with

refugees who live there, reflecting on how she negotiated these complex interactions, which reveal the role of borders in regulating behaviors as much as they serve to protect and shield by keeping out that which is unwanted.

ARCHITECTURES OF RESISTANCE

Architectures of Resistance brings together architects, landscape architects, urban planners, human geographers, political scientists, and artists who consider borders as places of meaningful encounter between *others* (other cultures, other nations, other perspectives). Instead of approaching borders as harsh divisions or impenetrable lines, the contributors to this book look at spatial boundaries as places where social and political conditions are intensified through the overlapping of different relations and as places where new spatial practices arise. These practices are often new forms of social resistance connected to space. The book studies and analyzes these types of resistance from an architectural perspective, as they manifest amid landscapes of division. The book is built on a tripartite structure—In the Borders, Through the Borders, Beyond the Borders—working across different relations and scales of engagement with borders. Besides being an organizational principle, these three levels also indicate the fluidity of the border as an entity and reinforce the argument that borders are intensive in the way they operate. The essays presented in part 1, “*In the Borders*” study the space of the border from the perspective of the people who inhabit and interact with it. The essays in “*Through the Borders*” address spaces at both ends of the border through the experience of those who cross them. Part 3, “*Beyond the Borders*,” studies the wider geographical area surrounding borders through the people who map them and engage with them in policymaking. The book is interspersed with three photo essays, which touch on the conditions *in*, *through*, and *beyond* borders. These interventions provide a different way of addressing borders through artistic engagements and visual culture, bringing to the fore the affective nature of borders and the resistance to them enacted by ordinary people in everyday life. In one way or another, all the chapters in this book are an attempt to find the cracks in the hardened walls we have built everywhere. Whether it is the small, ordinary practices, the lines of flight found in artists’ responses, or the excavation of complex situations, these are all glimpses into other possible worlds.

NOTES

1. “What’s Happening at the Greek Borders?” Amnesty International, March 5, 2020, <https://www.amnesty.org/en/latest/news/2020/03/greece-turkey-refugees-explainer/>; Jean Peyrony, Jean Rubio, and Raffaele Viaggi, *The Effects of COVID-19 Induced Border Closures on Cross-Border Regions* (Luxemburg: Publications Office of the European Union, 2021), <https://doi/10.2776/092793>.
2. Henry Wai-chung Yeung, “Capital, State and Space: Contesting the Borderless World,” *Transactions of the Institute of British Geographers* 23, no. 3 (1998): 291–309.
3. Nishat Awan, “The Real Issue with the Barmy Design Ideas for Trump’s Border Wall,” *Conversation*, April 19, 2017, <http://theconversation.com/the-real-issue-with-the-barmy-design-ideas-for-trumps-border-wall-76338>.
4. Sandro Mezzadra and Brett Neilson, *Border as Method, or, the Multiplication of Labor* (Durham, NC: Duke University Press, 2013); Peter Adey et al., eds., *The Handbook of Displacement* (Cham: Palgrave Macmillan, 2020); Victor Konrad and Anne-Laure Amilhat Szary, *Border Culture: Theory, Imagination, Geopolitics* (London; New York: Routledge, 2022); Nadine El-Enany, *Bordering Britain: Law, Race and Empire* (Manchester: Manchester University Press, 2021).
5. Dilip da Cunha, *The Invention of Rivers: Alexander’s Eye and Ganga’s Descent* (Philadelphia: University of Pennsylvania Press, 2018).
6. Laura Kurgan, *Close Up at a Distance: Mapping, Technology, and Politics* (Brooklyn: Zone Books, 2013).
7. Maximilian Schich, “Figuring Out Art History,” *International Journal for Digital Art History*, no. 2 (2015): 41–67, <http://arxiv.org/abs/1512.03301>; Igea Troiani and Tonia Carless, “In-between’: Architectural Drawing as Interdisciplinary Spatial Discourse,” *Journal of Architecture* 20, no. 2 (2015): 268–92, <https://doi.org/10.1080/13602365.2015.1027720>.
8. Neil Spiller, ed., *Drawing Architecture, Architectural Design* (Hoboken: Wiley, 2013), 225; Peter Cook, *Drawing: The Motive Force of Architecture* (Chichester; London: Wiley, 2008); James Corner and Alex MacLean, *Taking Measures across the American Landscape*, new ed. (New Haven: Yale University Press, 2000); Katie Lloyd Thomas, “Building while Being in It: Notes on Drawing ‘Otherhow,’ ” in *Altering Practices: Feminist Politics and Poetics of Space*, ed. Doina Petrescu (London: Routledge, 2007), 89–112.
9. See for example the work of Suzanne Hall: Suzanne Hall, Julia King, and Robin Finaly, “Envisioning Migration: Drawing the Infrastructure of Stapleton Road, Bristol,” *New Diversities* 17, no. 2 (2015), http://newdiversities.mmg.mpg.de/?page_id=2186; Suzanne M. Hall, *The Migrant’s Paradox: Street Livelihoods and Marginal Citizenship in Britain* (Minneapolis: University of Minnesota Press, 2021).

10. Tim Ingold, *Redrawing Anthropology: Materials, Movements, Lines* (London: Ashgate, 2011), 2.
11. The fourth dimension in such practices emerges from the information attached to three-dimensional models that can also be used to examine and interrogate the model. A good example of this from professional architectural practice is the Building Information Model, more commonly referred to through its acronym, BIM. For more on this argument see: Nishat Awan, “The Atlas Otherwise: Navigating across [Im]Permeable Surfaces and Shaky Grounds,” in *The Routledge Handbook of Architecture, Urban Space and Politics: Ecology, Social Participation and Marginalities*, ed. Nikolina Bobic and Farzaneh Haghghi (London; New York: Routledge, 2024), 499–513.
12. Franck Billé, ed., *Voluminous States: Sovereignty, Materiality, and the Territorial Imagination* (Durham, NC: Duke University Press Books, 2020).
13. *Ibid.*, 2.
14. Roger Burrows, Stephen Graham, and Alexander Wilson, “Bunkering Down? The Geography of Elite Residential Basement Development in London,” *Urban Geography* 43, no. 9 (2021): 1–22, <https://doi.org/10.1080/02723638.2021.1934628>; Eugene J. Morris, “Air Rights Are ‘Fertile Soil,’” *Urban Lawyer* 1, no. 3 (1969): 247–67.
15. John Allen, “Topological Twists: Power’s Shifting Geographies,” *Dialogues in Human Geography* 1, no. 3 (2011): 283–98, <https://doi.org/10.1177/2043820611421546>; John Agnew, “The Territorial Trap: The Geographical Assumptions of International Relations Theory,” *Review of International Political Economy* 1, no. 1 (1994): 53–80.
16. Henk van Houtum and Ton Van Naerssen, “Bordering, Ordering and Othering,” *Tijdschrift voor Economische en Sociale Geografie* 93, no. 2 (2002): 125–36, <https://doi.org/10.1111/1467-9663.00189>; Henk van Houtum, Olivier Thomas Kramsch, and Wolfgang Zierhofer, *B/Ordering Space* (London: Ashgate, 2005).
17. Louise Amoore, “Biometric Borders: Governing Mobilities in the War on Terror,” *Political Geography* 25, no. 3 (2006): 336–51, <https://doi.org/10.1016/j.polgeo.2006.02.001>; Didier Bigo and Elspeth Guild, *Controlling Frontiers: Free Movement into and within Europe* (London: Ashgate, 2005); Holger Pötzsch, “The Emergence of iBorder: Bordering Bodies, Networks, and Machines,” *Environment and Planning D: Society and Space* 33, no. 1 (2015): 101–18, <https://doi.org/10.1068/d14050p>.
18. Lorenzo Pezzani, Charles Heller, and SITU Research, “Left-to-Die Boat,” in *Forensis: The Architecture of Public Truth*, ed. Forensic Architecture (Berlin: Sternberg Press, 2014); Alison Mountz and Nancy Hiemstra, “Spatial Strategies for Human Migration at Sea,” in *A Companion to Border Studies*, ed. Thomas M. Wilson and Hastings Donnan (Hoboken: Wiley Blackwell, 2012), 455–72.

19. Chiara Brambilla, “Exploring the Critical Potential of the Borderscapes Concept,” *Geopolitics* 20, no. 1 (2015): 14–34, <https://doi.org/10.1080/14650045.2014.884561>; Prem Kumar Rajaram and Carl Grundy-Warr, eds., *Borderscapes: Hidden Geographies and Politics at Territory’s Edge* (Minneapolis: University of Minnesota Press, 2007).
20. Gloria Anzaldúa, *Borderlands / La Frontera: The New Mestiza* (San Francisco: Spinsters, 1987), 3.
21. Topology is a branch of mathematics concerned with “the study of geometrical properties and spatial relations unaffected by the continuous change of shape or size of figures.” See *Oxford English Dictionary*, s.v. “topology,” <http://www.oed.com/>; Nishat Awan, “Introduction to Border Topologies,” *GeoHumanities* 2, no. 2 (2016): 279–83.
22. Celia Lury, “Topological Sense-Making: Walking the Mobius Strip from Cultural Topology to Topological Culture,” *Space and Culture* 16, no. 2 (2013): 129, <https://doi.org/10.1177/1206331213475780>.

REFERENCES

- Adey, Peter, Janet C. Bowstead, Katherine Brickell, Vandana Desai, Mike Dolton, Alasdair Pinkerton, and Ayesha Siddiqi, eds. *The Handbook of Displacement*. Cham: Palgrave Macmillan, 2020.
- Agnew, John. “The Territorial Trap: The Geographical Assumptions of International Relations Theory.” *Review of International Political Economy* 1, no. 1 (1994): 53–80.
- Allen, John. “Topological Twists: Power’s Shifting Geographies.” *Dialogues in Human Geography* 1, no. 3 (2011): 283–98. <https://doi.org/10.1177/2043820611421546>.
- Amnesty International. “What’s Happening at the Greek Borders?” March 5, 2020. <https://www.amnesty.org/en/latest/news/2020/03/greece-turkey-refugees-explainer/>.
- Amoore, Louise. “Biometric Borders: Governing Mobilities in the War on Terror.” *Political Geography* 25, no. 3 (2006): 336–51. <https://doi.org/10.1016/j.polgeo.2006.02.001>.
- Anzaldúa, Gloria. *Borderlands / La Frontera: The New Mestiza*. San Francisco: Spinsters; Aunt Lute Book, 1987.
- Awan, Nishat. “The Atlas Otherwise: Navigating across [Im]Permeable Surfaces and Shaky Grounds.” In *The Routledge Handbook of Architecture, Urban Space and Politics: Ecology, Social Participation and Marginalities*, edited by Nikolina Bobic and Farzaneh Haghighi, chapter 31. London: Routledge, 2024.
- Awan, Nishat. “Introduction to Border Topologies.” *GeoHumanities* 2, no. 2 (2016): 279–83.
- Awan, Nishat. “The Real Issue with the Barmy Design Ideas for Trump’s Border Wall.” *Conversation*, April 19, 2017. <http://theconversation.com/the-real-issue-with-the-barmy-design-ideas-for-trumps-border-wall-76338>.

- Bigo, Didier, and Elspeth Guild. *Controlling Frontiers: Free Movement into and within Europe*. London: Ashgate, 2005.
- Billé, Franck, ed. *Voluminous States: Sovereignty, Materiality, and the Territorial Imagination*. Durham, NC: Duke University Press Books, 2020.
- Brambilla, Chiara. "Exploring the Critical Potential of the Borderscapes Concept." *Geopolitics* 20, no. 1 (January 2015): 14–34. <https://doi.org/10.1080/14650045.2014.884561>.
- Burrows, Roger, Stephen Graham, and Alexander Wilson. "Bunkering Down? The Geography of Elite Residential Basement Development in London." *Urban Geography* 43, no. 9 (2021): 1–22. <https://doi.org/10.1080/02723638.2021.1934628>.
- Cook, Peter. *Drawing: The Motive Force of Architecture*. Chichester, UK: Wiley, 2008.
- Corner, James, and Alex MacLean. *Taking Measures across the American Landscape*. New ed. New Haven: Yale University Press, 2000.
- Cunha, da. Dilip. *The Invention of Rivers: Alexander's Eye and Ganga's Descent*. Philadelphia: University of Pennsylvania Press, 2018.
- El-Enany, Nadine. *Bordering Britain: Law, Race and Empire*. Manchester: Manchester University Press, 2021.
- Hall, Suzanne, Julia King, and Robin Finaly. "Envisioning Migration: Drawing the Infrastructure of Stapleton Road, Bristol." *New Diversities* 17, no. 2 (2015): 59–72. http://newdiversities.mmg.mpg.de/?page_id=2186.
- Hall, Suzanne M. *The Migrant's Paradox: Street Livelihoods and Marginal Citizenship in Britain*. Minneapolis: University of Minnesota Press, 2021.
- Houtum, Henk van, Olivier Thomas Kramsch, and Wolfgang Zierhofer. *B/Ordering Space*. London: Ashgate, 2005.
- Houtum, Henk van, and Ton Van Naerssen. "Bordering, Ordering and Othering." *Tijdschrift voor Economische en Sociale Geografie* 93, no. 2 (2002): 125–36. <https://doi.org/10.1111/1467-9663.00189>.
- Ingold, Tim. *Redrawing Anthropology: Materials, Movements, Lines*. London: Ashgate, 2011.
- Konrad, Victor, and Anne-Laure Amilhat Szary. *Border Culture: Theory, Imagination, Geopolitics*. London: Routledge, 2022.
- Kurgan, Laura. *Close Up at a Distance: Mapping, Technology, and Politics*. Brooklyn, NY: Zone Books, 2013.
- Lury, Celia. "Topological Sense-Making: Walking the Mobius Strip from Cultural Topology to Topological Culture." *Space and Culture* 16, no. 2 (2013): 128–32. <https://doi.org/10.1177/1206331213475780>.
- Mezzadra, Sandro, and Brett Neilson. *Border as Method, or, the Multiplication of Labor*. Durham, NC: Duke University Press, 2013.
- Morris, J. Eugene. "Air Rights Are 'Fertile Soil'." *Urban Lawyer* 1, no. 3 (1969): 247–67.
- Mountz, Alison, and Nancy Hiemstra. "Spatial Strategies for Human Migration at Sea." In *A Companion to Border Studies*, edited by Thomas M. Wilson and Hastings Donnan, 455–72. Hoboken: Wiley Blackwell, 2012.

- Peyrony, Jean, Jean Rubio, and Raffaele Viaggi. *The Effects of COVID-19 Induced Border Closures on Cross-Border Regions*. Luxembourg: Publications Office of the European Union 2021.
- Pezzani, Lorenzo, Charles Heller, and SITU Research. "Left-to-Die Boat." In *Forensis: The Architecture of Public Truth*, edited by Forensic Architecture, 637–56. Berlin: Sternberg Press, 2014.
- Pötzsch, Holger. "The Emergence of iBorder: Bordering Bodies, Networks, and Machines." *Environment and Planning D: Society and Space* 33, no. 1 (2015): 101–18. <https://doi.org/10.1068/d14050p>.
- Rajaram, Prem Kumar, and Carl Grundy-Warr, eds. *Borderscapes: Hidden Geographies and Politics at Territory's Edge*. Minneapolis: University of Minnesota Press, 2007.
- Schich, Maximilian. "Figuring Out Art History." *International Journal for Digital Art History*, no 2 (2015): 41–67. <http://arxiv.org/abs/1512.03301>.
- Spiller, Neil, ed. *Drawing Architecture, Architectural Design* 225. Hoboken: Wiley, 2013.
- Thomas, Katie Lloyd. "Building While Being in It: Notes on Drawing 'Otherhow'." In *Altering Practices: Feminist Politics and Poetics of Space*, edited by Doina Petrescu, 89–112. London: Routledge, 2007.
- Troiani, Igea, and Tonia Carless. "'In-between': Architectural Drawing as Interdisciplinary Spatial Discourse." *Journal of Architecture* 20, no. 2 (2015): 268–92. <https://doi.org/10.1080/13602365.2015.1027720>.
- Yeung, Henry Wai-chung. "Capital, State and Space: Contesting the Borderless World." *Transactions of the Institute of British Geographers* 23, no. 3 (1998): 291–309.